



EPA Continues Soil Investigation at the Arsenic Mines Site located in Kent, Putnam County, New York

Community Update No. 2

Fall/Winter 2017



SITE BACKGROUND

The Arsenic Mines Site is the location of a historic mine that was operated from the mid-1800s through approximately 1918, near Pine Pond in Kent, Putnam County, New York. The mine, which has also been known as Pine Pond Mine, Silver Mine and Nimham Mountain Mines, contains arsenopyrite, a metal ore that was used in pesticides, pigments, and other industries. The mine's two entry shafts were near Mt. Ninham Road and Gypsy Trail Road. The northern, main mine shaft is located on private property and the southern mine shaft is located in Nimham Mountain State Forest.

As part of mining activities, waste rock and soil known as tailings were separated from the valuable ore, and the tailings were discarded in areas surrounding the mine, including on several residential properties. The tailings are contaminated with arsenic at levels that exceed the U. S. Environmental Protection Agency's (EPA's) health-based standards. The hills surrounding the tailings pile may have been partially regraded over the years, potentially spreading arsenic contamination.

If you have any questions or would like additional information, please contact:

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The arsenic issue was discovered in the late 1980s when a couple was hospitalized with arsenic poisoning from their well water, after the well had been unknowingly installed through the tailings pile. The EPA installed a system for water filtration and clean water storage, which was repaired in 2016. Groundwater in the area has been monitored by the Putnam County Department of Health since the 1980s, and several residences have filtration systems installed.

Limited soil testing was done by the New York State Department of Environmental Conservation (NYSDEC) and EPA in the 1980s, but since there are naturally high levels of arsenic in soil in this region, it was unclear whether the arsenic was from the tailings or was naturally occurring, and no action was taken for the soil.

RECENT EPA SAMPLING RESULTS

In August 2017, EPA conducted more robust soil sampling at several private properties surrounding the historic main mining entrance, to determine the extent of contamination from mining waste. The results show that arsenic levels as high as 1,600 times the EPA screening level are present at the mine entrance, and the most elevated arsenic levels appear to be located downhill from the mine entrance. *(over)*

If you would like information on general environmental concerns or the federal Superfund hazardous waste program, have concerns or complaints about the Superfund program, or if you seek assistance in resolving site-specific issues that were not fully addressed by the EPA, please contact:

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The sampling also revealed much lower elevated arsenic levels on several private properties. EPA is providing the results to the property owners and will be discussing the next steps, which may include a cleanup conducted by EPA.

NEXT STEPS

The August 2017 sampling event did not determine the full extent of the impact to the north and east of the mine. Therefore, additional sampling is needed to delineate the tailings piles and areas where contaminated soil could have settled over the years. This will help to determine if anyone is being exposed to contaminants from the historic mine. The sampling is tentatively planned for November or December 2017. EPA encourages all property owners who are contacted by EPA to participate in the soil sampling event. Sampling results will be analyzed by EPA and shared with the owners of the private properties that are sampled. The EPA is coordinating activities with the property owners, the Putnam County Department of Health, NYSDEC and local officials.

EPA INVESTIGATIONS AND CLEANUPS

The EPA conducts investigations, like the one at the Arsenic Mines Site, at properties where hazardous substances may have been released into the environment. Evaluation of the site is done through collecting environmental samples and searching through historical documents. If the EPA determines that a release has or is likely to occur from a current or historic facility, steps are taken to determine if an EPA cleanup is appropriate. If so, the EPA will take action to protect public health and the environment.

ARSENIC IN RESIDENTIAL SOIL

Exposure to elevated levels of arsenic in residential soils happens through contact with contaminated soil. Common activities that may increase exposure are:

- Eating without first washing hands and face.
- Eating unwashed vegetables grown in contaminated soils.
- Children playing in contaminated bare soil.
- Gardening or digging in contaminated bare soil.

SIMPLE STEPS TO REDUCE EXPOSURE TO ARSENIC IN SOILS

Following these steps can reduce your potential exposure to arsenic contamination that may be present in the surface soils:

- Wash children's hands frequently, but especially after playing outside, before they eat, and before bedtime. Adults should also wash hands frequently.
- Thoroughly wash all fruits and vegetables, especially those grown in soils in the yard.
- Place washable rugs at all entries into the home. Leave shoes at the door to prevent contaminated soil from being tracked into the home.
- Clean your home weekly to keep it as dust free as possible. Clean floors, window sills, doorframes, and baseboards with soap and water. Use a vacuum with HEPA filter for cleaning.
- Keep children away from bare soil areas; mulch bare soil areas and maintain grass cover.