

ARSENIC CONTAMINATION FOUND IN PENNSYLVANIA FLY ASH SPILL

February 2, 2005

A sample of the fly ash spilled in Forward Township from an adjacent hillside reveals elevated levels of arsenic, as well as the presence of lead, cadmium, mercury and other contaminants. The sample was analyzed by GLA Laboratories in King of Prussia, Pennsylvania; the laboratory is state-certified. Forward Township is twenty miles south of Pittsburgh.

The sample measured arsenic at 170 parts per million, or more than fourteen times the level of cleanup recommended for arsenic contaminated soils in Pennsylvania. Arsenic occurs naturally in the environment, but typically at about one tenth or less of the level measured at the Forward Township site. Chronic exposure to arsenic is a known to cause cancer in humans. Acute exposures are linked to other health effects such as upper respiratory distress, gastrointestinal distress, heart and blood vessel damage, fever, and nerve injury. The available data is too limited to draw conclusions about the level of risk to the residents of Forward Township. But given arsenic's potency, Superfund cleanup under federal and state law generally requires soil contaminated with arsenic to be cleaned up at least to background levels.

The sample analysis reveals measurable levels of other toxic metals like cadmium, lead, and mercury. While these levels appear to fall below the standard for cleanup of hazardous waste sites, they suggest the need for additional sampling at the site. The sample also revealed a pH level of nearly 10.0, which is highly alkaline.

The high levels of arsenic in the sample are only part of the concern. Because the site has not been stabilized or contained, the fly ash and leachate continues to flow into a creek that leads to the Monongahela River. Residents report that in portions of the creek, fly ash is nearly five feet deep, and that the neighborhood is threatened by an additional landslide from fly ash remaining on the nearby hillside. Meanwhile, lacking any guidance from the Pennsylvania Department of Environmental Protection, the township has apparently removed some of the fly ash and deposited it on a nearby playground. Arsenic is particularly dangerous to young children, so the material on the playground should be removed as soon as possible.

Residents of Forward Township have complained of sore throats, headaches, and coughing, while some have experienced chest discomfort, high fevers and difficulty breathing. Two children with asthma have had trouble breathing, and one has visited the emergency room twice already.

On behalf of the citizens of Forward Township, Clean Water Action and the Environmental Integrity Project are asking the USEPA and Pennsylvania's Department of Environmental Protection to:

- 1) Take immediate steps to stabilize the site, and stop the flow of fly ash toward residential properties or the Monongahela River;
- 2) Report on the results of any samples taken to date of the fly ash, and of the discharge of ash-laden wastewater into the creek and river, and take additional samples as required;
- 3) Use the authorities both the federal and state agencies have been given to conduct an emergency removal of the contaminated soil;
- 4) Meet with the residents within twenty-four hours to advise them on what steps should be taken to protect their health and the safety of their property;
- 5) Determine whether the contamination of the Forward Township site requires full cleanup under federal and state Superfund laws.

The results of the Forward Township sample are available online at <http://www.environmentalintegrity.org/pub279.cfm>. For information about the health risks of arsenic exposure, see the "Toxicological Profile of Arsenic," published by the federal Agency for Toxic Substances Disease Registry, available online at <http://www.atsdr.cdc.gov/toxprofiles/tp2.html>.