

Facts About...

Chemical Metals Industries, Inc. Site (MD-082) (State Master List Site)

Site Location

The Chemical Metals Industries, Inc. Site ("the Site") consists of two parcels located at 2103 and 2001 Annapolis Road, in the Westport section of Baltimore City. The two parcels are separated from one another by twenty row homes and a railroad right of way. The 2103 parcel is currently owned by the State of Maryland, which used it as a field office up until 2002. The 2001 parcel is currently owned by the City of Baltimore and is vacant. The surrounding area is a mixture of residential, industrial and commercial properties.

Site History

Chemical Metals, Inc. operated a metals reclamation business at the Site. The business had a history of bad housekeeping practices and, in 1980, the Waste Management Administration discovered hazardous materials illegally stored in drums, aboveground storage tanks and an operations building. In 1981, the U.S. Environmental Protection Agency oversaw the disposal of the hazardous materials, abandonment/removal of the aboveground storage tanks and decontamination of the operations building. Surface contamination was removed and the Site was capped.

Environmental Investigations and Actions

In 1997, soil samples collected from the Site by Roy F. Weston, Inc. identified high levels of lead and volatile organic compounds ("VOCs") in the shallow soil beneath the asphalt cap at 2103 Annapolis Road. The contaminants were confined between the cap and a clay layer located approximately 2.5 feet below ground surface.

In April 2002, the Maryland Department of the Environment ("MDE") installed six monitoring wells at the Site to replace previous wells that had been destroyed. As part of the well replacement, groundwater samples were collected and analyzed to evaluate water quality at the Site. Results of this sampling identified significant levels of VOCs and metals remaining in the groundwater at the Site. During the same investigation, MDE also collected air samples from locations on or adjacent to the Site. Results of these samples indicated the presence of VOCs inside the building occupying 2103 Annapolis Road. Further air testing at the Site in November 2003 confirmed this finding and indicated the presence of VOCs in the air inside a building adjacent to 2001 Annapolis Road.

In November and December 2005, MDE conducted a more detailed investigation of the groundwater and soil vapor beneath the homes separating the 2103 and 2001 parcels. Results of this investigation showed that groundwater contamination from the parcels was migrating beneath many of the intervening homes.

Soil-gas and indoor-air testing conducted for MDE between June 2007 and August 2008 in six of the twenty row houses indicates vapor intrusion has occurred in each of the tested houses. Outdoor air testing conducted as part of these activities did not identify any contaminant levels of concern.



In June 2007 MDE directed its contractor to collect indoor air samples from the basement and first floor living space of four properties on Annapolis Road. A written summary and explanation of the June and August 2007 sub-slab vapor and indoor air sampling results were sent to the property owners in November 2007. To better quantify potential health risks, MDE requested the owners' permission to collect two additional indoor air samples from each property during cold-weather conditions.

In October 2008, MDE and its contractor surveyed the residences where indoor air sample results exceeded acceptable risk standards to determine the most appropriate vapor mitigation strategy. Once MDE received the conceptual design for three homes, it first contacted the property owners to request access for installing the systems. Once approval was received from the property owners, MDE began contacting the residents in February and March 2009 to schedule dates for installing the systems. MDE completed the design for the vapor mitigation systems in two of the three houses in October 2009 and began installing the systems in March 2010. The design for the vapor mitigation system at the third house was completed in April 2010 and installation is expected to occur within three months.

Current Status

MDE is working with U.S. EPA to fully delineate the nature and extent of the groundwater, soil vapor and indoor air contamination identified by the November-December 2005 investigation. For the 2103 Annapolis Road site, MDE's contractor prepared a Limited Remedial Investigation/Feasibility Study for 2103 Annapolis Road (Westport Field Office). The report selected In-Situ Chemical Oxidation Injection as the preferred alternative for groundwater remediation at the site. The injections began at the 2103 Annapolis Road site in May 2009. After reviewing the results from these injections, MDE conducted additional soil sampling. The information from these two activities suggests additional injections and limited subsurface soil removal may be needed to complete the remediation at the Westport Field Office. In addition to installing vapor mitigation systems in the affected homes on Annapolis Road, MDE also is monitoring the U.S. EPA's efforts to address the 2001 Annapolis Road site.

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