Maryland Department of the Environment

FACTS ABOUT:

CHEMICAL METALS INDUSTRIES, INC.

Site Location

The Chemical Metals Industries, Inc. Site (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 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

In 1997, soil samples collected from the Site by Roy F. Weston, Inc. identified elevated 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 the 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. Results of groundwater samples from the wells identified significant levels of VOCs and metals. MDE also collected air samples from locations on or adjacent to the Site. Results of these samples identified VOCs inside the building occupying 2103 Annapolis Road. Further air testing identified VOCs in the air inside a building adjacent to 2001 Annapolis Road.

In late 2005, MDE conducted a more detailed investigation of the groundwater and soil vapor beneath the homes separating the 2103 and 2001 parcels. Results indicated groundwater contamination from the parcel was migrating beneath many of the intervening

homes.

Soil gas and indoor-air testing conducted by MDE between June 2007 and August 2008 in six of the twenty row houses identified vapor intrusion in each of the tested homes. In June 2007, MDE directed its contractor to collect indoor air samples from the basement and first floor living spaces of four properties on Annapolis Road.

In October 2008, MDE and its contractor surveyed the residences where indoor air sample results exceeded acceptable risk standards to determine a vapor mitigation strategy. In June 2009, vapor mitigation systems were installed in three homes on Annapolis Road.

In July 2009, EPA's contractor Tetra Tech, Inc, collected 20 subsurface soil samples just above the water table on the 2001 parcel to determine if the soil vapor was contaminated by vapors emanating from the contaminated groundwater beneath. Results of the chemical analyses of those soil samples did not identify VOCs or metals above screening levels.

In July 2010, MDE's contractor installed regenerative blowers at 2009, 2011, and 2013 Annapolis Road to remediate the contaminated indoor air from vapor intrusion of the VOC groundwater plume beneath the 2000 block of Annapolis Road.

In October 2010, MDE's contractor conducted a partial removal of 281 tons of hazardous soil from the 2103 parcel. Soil in the back of the Site near the hot spot (MW 02B) sloping upwards toward the footprint of the back of the building were removed and capped with asphalt.

In December 2010 MDE's contractor conducted two rounds of in-situ chemical injections to oxidize and break down the chlorinated solvents that remain on the parcel at 2001 Annapolis Road. Results from the chemical analysis of groundwater samples collected in March 2011 and again in December 2011 revealed little effect on the contaminated groundwater beneath the Site.

In March 2014, EPA completed an Environmental Characterization Report to further delineate VOC contamination on the open lot at 2001 Annapolis Road. Membrane Interface Probe borings, subsurface soil and groundwater sampling identified elevated levels of VOCs across the Site and likely migrating off site towards Gwynn's Falls.

Current Status

MDE is exploring other remedial technologies to address the VOC groundwater plume.