

NPL Site Narrative for Mound Plant (USDOE)

MOUND PLANT (USDOE) Miamisburg, Ohio

Conditions at proposal (July 14, 1989): The Mound Plant encompasses 306 acres within the southern city limits of Miamisburg, Montgomery County, Ohio. Mound is bounded by an urbanized area to the north and east, rural/farmland to the south, and a railroad right-of-way to the west. Mound has operated since 1948 in support of U.S. weapons and energy programs, with an emphasis on small explosive components and nuclear technology. First operated by the Atomic Energy Commission, it is operated now by the U.S. Department of Energy (USDOE). The facility employs 2,200 people, most of whom reside in the nearby Miamisburg and Dayton areas.

Mound consists of two elevated areas divided by a small valley which runs in a northeast-southwest direction through the site. The major waste areas are on the south slope and valley of the northwest elevated area and include a landfill in which solvents, paints, and photoprocessing and plating bath solutions were deposited; several leach beds used to dispose of solutions containing radionuclides and/or explosive/pyrotechnic materials; and an area in which a solution contaminated with plutonium was spilled. The landfill operated from 1948 into the mid-1970s, and one or more of the leach beds operated at least 15 years. The operating life and the quantity of wastes deposited are unknown for the majority of the other waste areas.

The Buried Valley Aquifer (BVA) underlies a portion of the valley area of the plant and is made up of relatively permeable outwash sand and gravel deposits. Miamisburg municipal wells are within 3 miles of the site and serve an estimated 17,000 people. There is some evidence indicating that tritium, plutonium, and volatile organic compounds contaminate ground water, and that plutonium contaminates surface water. A system of ditches, canals, and ponds carries surface water from the facility to the Great Miami River approximately 1 mile downstream. The river is used for recreational activities.

Mound has a permit to discharge to surface water under the National Pollutant Discharge Elimination System. Mound acquired Interim Status under Subtitle C of the Resource Conservation and Recovery Act when USDOE filed Part A of a permit application.

Mound has been evaluated under Phase I (which involves record searches and preliminary assessments) of the USDOE Comprehensive Environmental Assessment and Response Program. Phase II studies to confirm contamination are underway.

Status (November 21, 1989): EPA and USDOE are negotiating an Interagency Agreement under CERCLA Section 120 for oversight of activities at the Mound Plant.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be

found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.