



Beltsville Agricultural Research Center: Completed and Planned Removal Actions at Disposal Sites

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In 1997, the U.S. Department of Agriculture's Agricultural Research Service (ARS) completed a comprehensive environmental assessment of the entire 6,600 acre Beltsville Agricultural Research Center (BARC) facility to identify and prioritize potential "areas of concern" (AOCs) where hazardous substances may have been disposed or otherwise exposed to the environment. Since 1997, sampling characterizations, risk assessments, and removal actions, where warranted, have been carried out AOC by AOC.

A removal action is a fairly rapid response to reduce or eliminate potential hazards at waste disposal sites. Usually, this response involves the physical removal of waste materials or contaminated soil. Removal actions are undertaken to reduce the immediate threat of potential exposure to hazardous substances.

Completed Activities at Surface Debris Disposal Sites

- Dump Off Odell Road (BARC 9): ARS completed removal actions at an area designated as Dump Off Odell Road (BARC 9) and at several other nearby locations where surface disposal of waste materials had occurred.

Analysis of historical aerial photography revealed that the central area of BARC 9 was a small gravel pit during the 1930's and 1940's. Since that time, sporadic surface disposal of waste materials occurred at a number of sites centered on the original area of excavation. The site covers about 70 acres in the north-central portion of BARC.

Surface debris was scattered throughout the area, with the heaviest concentrations within and around the original gravel pit and alongside former dirt roads. Removed debris included wood and metal scrap, decaying poultry buildings, metal drums, concrete and asphalt rubble, and assorted laboratory glassware and bottles.

- Other Surface Debris Disposal Sites: Surface disposal sites were identified in several other areas at BARC. In all, surface trash and other wastes were removed at an additional 23 sites. These AOCs included a wooded area near the water tower (BARC 30); an area adjacent to the storage yard associated with Building 085 (ENTECH 7); and "Chicken Hill" (BARC 35) along Springfield Road, where chicken manure and other wastes were discarded. The vast majority of scrap wood, metal, glass, and concrete removed from all of these sites were processed at a local recycling center. Landfill disposal was required for only a small volume of EPA-regulated waste.

Cleanup of the debris sites focused on the physical removal and proper disposal of both potentially hazardous and non-hazardous solid waste. About 1,575 cubic yards of debris were removed from BARC 9, BARC 30, and ENTECH 7. Additionally, fifty-nine 55-gallon drums of non-hazardous liquids and solids were removed from ENTECH 7.

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These drums, and four or five small bottles of corrosive liquids found at BARC 9, were transported to an EPA-approved disposal facility.

Completed Activities at Contaminated Soil Sites

- Former Equipment and Scrap Storage Areas (BARC 31 and 32): Characterization data indicated the need for a Time-Critical Removal Action (TCRA, 2004) at the active and occupied BARC 32 shops area, and a Non-Time Critical Removal Action (NTCRA, 2006) at the inactive and unoccupied BARC 31 former storage area. Both removal actions were designed to address the high concentrations of PCBs, pesticides, metals, and polynuclear aromatic hydrocarbons (PAHs) found in site soils.

Comprehensive Work Plans were prepared to guide soil removal actions at each site. Erosion control measures were put in place, and Health and Safety Plans were developed to ensure that operations were conducted safely. The TCRA was conducted in the spring and summer of 2004. The NTCRA was performed in the spring and summer of 2006. Depending on PCB and other contaminant concentrations, excavated soil and debris from both sites went either to an approved thermal treatment (recycling) facility in Virginia, a Toxic Substances Control Act (TSCA)-permitted landfill in Michigan, or a non-hazardous waste landfill in Virginia.

- Experimental Wood Treatment Facility (BARC 1): Located in a fenced-in, wooded area in South Farm, this site was reportedly used for wood treatment experiments during the mid-1940s to mid-1950s. Preservatives in use included arsenic and copper. Arsenic has been confirmed at the site in concentrations exceeding 200 parts per million (ppm).
- Disposal Area (FDA 2): Located in a Central Farm woodland ravine, in the vicinity of the former Food and Drug Administration complex, this site was historically used for laboratory waste disposal. Contaminants of concern included lead and zinc in soils at the site.
- Building Ruins (ENTECH R1): Located in a wooded area north of Powder Mill Road in Central Farm, this site encompasses the foundation of a building that existed in 1938, but was not subsequently maintained. Contaminants of concern identified as a result of soil and debris (e.g., dumped ash) sampling include PCBs, lead, copper, and zinc.

Ongoing Activities at Contaminated Soil Sites

Additional soil removal actions are likely be performed for the following sites, depending on an evaluation of costs and options available:

- Pesticide Mixing Area (BARC 4 and 19): The Site Screening Process (SSP) indicated soils contaminated with pesticides and other chemicals at this historical pesticide handling facility in the North Farm area of BARC. The full extent of pesticide contamination above EPA screening levels is currently being investigated, and recommendations will be made on removal and/or treatment options.

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- The Rose Garden (ENTECH R23): The SSP indicated soils contaminated with DDT at this former pesticide storage location, in a wooded area northwest of Building 483. A number of pesticide product drums, spray applicators, and compressed gas cylinders were previously removed from this site. The full extent of soil contamination has recently been determined, and cleanup recommendations made.
- Disposal/Fill Area (EPIC 31): The SSP detected elevated levels of lead in soil at this site, located just south of the BARC Visitors Center. The site is characterized by a large mounded area in its approximate center, and was identified by aerial photography as a suspected disposal unit.
- Airport Scrap Pile (BARC 36): SSP investigations near the old Beltsville Airport have detected elevated levels of pesticide residuals at this AOC in a ravine that was used to dispose of scrap material. This site, and a neighboring pesticide mixing pad and waste oil disposal site, are undergoing further investigation to delineate the extent of contamination before a removal action can be planned.

For More Information...

Contact Kim Kaplan, ARS Information Staff, at 301-504-1637, Kim.Kaplan@ars.usda.gov, or visit the ARS Information Repository located in Room 014, Building 003, 10300 Baltimore Avenue, Beltsville, MD. The Information Repository is open to the public Monday through Friday, 8:30am to 4:30pm. The Information Repository is also available at the Prince George's County Memorial Library at 4319 Sellman Road. The library's hours of operation are Monday through Wednesday, 10 am to 9 pm; Thursday and Friday, 10 am to 6 pm; and Saturday, 10 am to 5 pm.