United States Department of Agriculture

Agricultural Research Service

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

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In 1997, the U.S. Department of Agriculture's Agricultural Research Service completed a comprehensive environmental assessment of the 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 then, BARC has carried out removal actions—digging up the contaminated soil and removing it—at a number of AOCs.

Surface Debris Disposal Sites
Many AOCs were sites where debris from building construction and demolition was found including unsightly piles of waste materials consisting mostly of concrete, glass, and metallic wastes.

Dump Off Odell Road (BARC 9)
ARS removed surface debris the AOC designated Dump off Odell Road (BARC 9) and at several other nearby locations.

Analysis of historical aerial photography had indicated 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 around the original area of gravel excavation. The site covered about 70 acres in the north-central portion of BARC.

Surface debris was scattered throughout the area, with the heaviest concentrations in 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 trash and other waste were removed at an additional 23 sites. These AOCs included a wooded area near the water tower (BARC 30); an area adjacent to a 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 was processed at a local recycling center.

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

Contaminated Soil Removal Actions
A removal action is a fairly rapid response to reduce or eliminate an immediate threat of potential exposure to hazardous substances. Usually, this response involves the physical removal of waste materials or contaminated soil. To date, removal actions have been completed at 6 AOCs, with several additional removal actions planned for the near future. All of the actions were coordinated with EPA to ensure that the cleanups were completed efficiently and with oroper attention to health and safety requirements.

Former Equipment and Scrap Storage Areas (BARC 31 and 32)
A removal action at the active and occupied shops area (BARC 32) took place in 2004 and at the inactive and unoccupied former storage area (BARC 31) in 2006. 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. 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 used included arsenic and copper. Arsenic was confirmed at the site in concentrations exceeding 200 parts per million. A small quantity of contaminated soil was excavated and removed from the site in 2007.

Disposal Area (FDA 2)
Located in a Central Farm woodland ravine near 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. Several hundred cubic yards of contaminated soil was excavated and removed from the site in 2007. Then the site was regraded and landscaped.

Building Ruins (ENTECH R1)
Located in a wooded area north of Powder Mill Road on the Central Farm, this site includes the concrete foundation of a building that existed in 1938, but was not subsequently maintained. Contaminants of concern in soil and debris (e.g., dumped ash) sampling included PCBs, lead, copper, and zinc. Several hundred cubic yards of contaminated soil was excavated and removed from the site in 2007.

The Rose Garden (ENTECH R23)
Soil contaminated with DDT at this former pesticide storage location was found 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. Several hundred yards of soil with DDT residues were removed from about a half acre site in 2008, landscaped, and returned to use.

Ongoing Activities at Contaminated Soil Sites
Additional soil removal actions are likely be done for the following sites, depending on an evaluation of risks..

Pesticide Mixing Area (BARC 4 and 19)
Soil contaminated with pesticides and other chemicals has been found at the pesticide handling facility AOCs (BARC 4 and 19) in the North Farm area. The full extent of pesticide contamination above EPA screening levels is currently being investigated, and then recommendations will be made for removal and/or treatment options.

Airport Scrap Pile (BARC 36)
Elevated levels of pesticide residues have detected near the old Beltsville Airport (BARC 36) in a ravine that was used to dispose of scrap material. This site, and a nearby pesticide mixing pad and waste oil disposal site (BARC 14/37), are being sampled to delineate the extent of contamination. Then a review of cleanup options will be done.

For More Information:
Contact Kim Kaplan, ARS Information Staff, 301-504-1637, Kim.Kaplan@ars.usda.gov, or visit the ARS Information Repository located in Room 121, Building 003, 10300 Baltimore Avenue, Beltsville, MD. The Information Repository is open to the public Monday through Friday, 8:30 am to 4:30 pm.

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 and Tuesday, 1 pm to 9 pm; Wednesday through Friday, 10 am to 6 pm; and Saturday, 10 am to 5 pm.

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