



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 investigation at the Beltsville Agricultural Research Center (BARC), which began in 1995. The purpose of the investigation was to identify and prioritize potential "areas of concern" (AOCs) where hazardous substances may have been disposed of or otherwise exposed to the environment. Since 1997, further characterization and cleanup of AOCs has been occurring on a site-by-site basis.

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. Removal actions are undertaken to reduce the immediate threat of potential exposure to hazardous substances.

Completed Activities at Surface Debris Disposal Sites

BARC 9, "Dump Off Odell Road"

ARS completed a removal action at an area identified as "Dump Off Odell Road" (BARC 9) and at several other 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 around the original area of excavation. The sites 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, 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 waste was 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 was processed at a local recycling center. Landfill disposal was required for only a small volume of EPA-regulated waste.

Cleanup of the debris sites described above 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 (59) 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.

Completed Activities at Contaminated Soil Sites

BARC 32, "Scrap Storage Area:" Site characterization was completed in March 2003 that identified PCBs and pesticides at concentrations of concern in soil at this site. A plan to remove PCB-contaminated soil was completed. In early 2004, a total of over 9000

tons of contaminated soil was excavated from the site, and transported for proper disposal. Excavated areas were backfilled with clean soil, and revegetated.

Planned Activities at Contaminated Soil Sites

BARC 31, "PCB Storage Area:" Site characterization for PCB (electrical transformer dielectric fluid) and pesticide contamination was completed in March 2003. A plan to remove contaminated soil has been prepared and submitted to EPA for approval. Soil excavation, transportation, and disposal is planned for 2005. Once soil removal is complete, this active maintenance facility will be returned to its original condition and use.

BARC 4, "Pesticide Mixing Area:" The Site Screening Process indicated soil contamination with DDT and other chemicals at this historical pesticide handling facility. The full extent of pesticide contamination above EPA screening levels will be investigated later this year, and recommendations made on removal and/or onsite treatment options.

ENTECH R23, "The Rose Garden:" The Site Screening Process indicated soil contamination with DDT at this former pesticide storage location. A number of product drums, spray applicators, and compressed gas cylinders were previously removed from this site. The full extent of soil and shallow groundwater contamination will be evaluated later this year, and removal action recommendations made. Depending on the volume of contaminated soil, treatment and/or disposal actions may be combined with the BARC 4 activity described above.

ENTECH M26, "Shooting Range:" This active small arms firing range (used by the Beltsville and BARC police departments, and the BARC Gun Club) has shown evidence of lead and other heavy metals contamination in soil. A Draft Site Characterization and Soils Stabilization Work Plan has been developed, with recommendations for (1) a thorough characterization of potentially impacted soil,

shallow groundwater, surface water, and sediment media; (2) implementing "best management practices" for continuing operations and environmental protection and personnel safety; and (3) plans for stabilization/fixation of metals-contaminated soil (in both the target berm and open range areas). Bullet traps have been installed to minimize soil contamination from current activities. Future removal actions may include the physical separation of lead fragments from impact area soils, and Phosphate-Induced Metals Stabilization treatment of soils (mixing with phosphate rock and compost) to reduce metals leachability, bioavailability, and migration in soil and water.

Removal Action Goals

All BARC removal actions, of either debris or contaminated soil, involve:

- Eliminating the potential threat of direct contact with residual contaminants;
- Collecting and analyzing "confirmation" soil samples to determine whether hazardous substances have been adequately stabilized, treated, or removed; and
- Mapping the location of removed waste, and maintaining records and documentation of transportation and disposal activities.

For More Information...

Contact Kim Kaplan, ARS Information Staff, at 301/504-1637, 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.