



Beltsville Agricultural Research Center: Screening Investigations of Potential Areas of Concern

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In 1994 the U.S. Department of Agriculture's Agricultural Research Service's Beltsville Agricultural Research Center (BARC) was listed as a "Superfund" site under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). A Federal Facility Agreement required BARC to conduct a systematic review of all operational units on the 6,600-acre facility and review all available historical information to identify potential Areas of Concern. These potential AOCs were evaluated through a detailed process that included an aerial photographic analysis, a field reconnaissance, a thorough records search and file review, and extensive employee interviews. The information compiled throughout this process provided the basis for ARS and EPA to determine which AOCs warranted further investigation. Of the 167 potential AOCs identified, 61 were recommended for further investigation. This was done through a CERCLA defined site screening process (SSP).

Through this process data is collected and interpreted which is used to determine whether hazardous substances are present, at what levels. These results are used to determine whether the AOC must enter a formal CERCLA Remedial Investigation (RI)/Feasibility Study (FS) process where further detailed data must be collected or whether no contamination is present or at such a level that it poses not hazard to human or ecological receptors. In the latter case a determination of no further action (NFA) is recommended.

Of the original 61 sites investigated 34 AOCs have been designated "no further action" required. These AOCs were closed because the results of the SSP determined they had no significant human health or associated ecological risk concerns. Fourteen 14 AOCs remain active under the SSP, some of which may be designated for cleanup. Four AOCs are at various stages of an RI/FS process. Eight sites have been or will be remediated in the near future.

Currently, one these remote legacy sites, known as the "Rose Garden" due to its proximity to a former research plot where roses were grown, has been approved for a Non Time Critical Removal Action to be protective of the environment. The Engineering Evaluation/Cost Analysis for this site was submitted to EPA Region III in March of 2008 and the removal action levels approved in September 2008. The impacted areas are currently being cleared of vegetation and remediation activities are scheduled for mid March 2009. Two other sites that are through the RI/FS process or nearing completion are the Beaverdam (BDLF) and College Park Landfills (CPLF). The BDLF has been through a rigorous RI/FS process and a mulch biowall has been selected as the remedial solution of choice. This solution will be presented at a public meeting to be scheduled this spring. A FS for the CPLF is also due to be completed and submitted to EPA for review. This study will present capping alternatives to close the landfill properly and prevent the offsite migrations of leachate. A three year pilot study was completed Spring of 2008 and the results presented to the Maryland Department of the Environment and EPA Region III. This innovative research project has demonstrated the efficacy of a vegetative cap using native species of trees. This innovative capping method performs as well as a traditional clay cap but will cost significantly less to design and install.