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Administrative Record (EG&G)

**ENCLOSURE A**  
**Responsiveness Summary**  
**Final Proposed Action Memorandum, Remediation of Polychlorinated**  
**Biphenyls**

On April 3, 1995, the Department of Energy/Rocky Flats Field Office (DOE/RFFO) released the Draft Proposed Action Memorandum (PAM) - Remediation of Polychlorinated Biphenyls, Rocky Flats Environmental Technology Site (RFETS) for review and comment. The document was submitted to the Environmental Protection Agency, Region VIII (EPA), The Colorado Department of Public Health and Environment (CDPHE), and was made available to the Public. This document is DOE's response to comments that were received during the 30-day comment period. Although there were no comments from the EPA, comments were submitted by the CDPHE and the Public. The comments and responses are listed as follows:

**Comment No. 1** (CDPHE)

We suggest that the wording in the second paragraph of Section 4.0 be changed to read:

The Department of Energy/Rocky Flats Field Office (DOE/RFFO) will target areas known to have contamination levels greater than 10 ppm PCBs by weight for excavation. This should ensure remaining maximum contamination levels less than the proposed 25 ppm PCB soil cleanup standard. If any verification samples taken after the excavation exceed 25 ppm PCBs, additional material will be removed until no verification samples exceed 25 ppm PCB.

**Response to Comment No. 1**

The following text has been added to Section 4.0 for clarification:

The target of 10 ppm PCB will be used in the field to make the initial determination during excavation that cleanup levels have been achieved using the immunoassay technique. Although the 10 ppm level is a field target, the level of cleanup conducted, based on the immunoassay results, will be determined by the project manager in the field. The approach is being implemented because of minor analytical differences between the field technique and the off site laboratory analytical methods. If any verification samples taken after excavation exceed 25 ppm PCBs, additional material will be removed until no verification samples exceed 25 ppm PCB.

**Comment No. 2** (Public Comment)

Despite toxicity of PCB's, I hope this is not a diversionary mission at expense of rad, haz, esp. Pu, cleanup. Latter should have top priority.

**Response to Comment No. 2**

The remediation of polychlorinated biphenyls (PCB) is not a diversionary mission being used at the expense of cleaning up radionuclides, especially plutonium. Remediation of radionuclides is a high priority at the RFETS. The remediation of soils contaminated with PCBs is being addressed as an accelerated action to remediate highly concentrated contaminated media, involving a limited extent of contamination, which contains a risk to human health and the environment via a cost-effective and permanent solution.

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**Comment No. 3** (Public Comment)

To remove and ship out contaminated soils could be quite expensive. Alternative containment in situ should be considered and compared.

**Response to Comment No. 3**

The DOE/RFFO is proposing to remediate PCBs in accordance with the applicable or relevant and appropriate requirements of the Toxic Substances Control Act (TSCA). The DOE acknowledges that removing and shipping off-site contaminated soils can be expensive; however, this is the best choice for ultimate disposal of soils contaminated with PCBs under TSCA. TSCA limits the onsite storage time for PCB contaminated waste to one year and requires that PCBs be disposed of in either an incinerator or a chemical waste landfill that complies with TSCA. Shipping and disposing offsite is less expensive than attempting to have an onsite incinerator or onsite chemical waste landfill for the amount of soil expected to be removed. Because of the strict TSCA requirements regarding disposal of PCBs, in situ containment is not a viable alternative for the remediation of PCBs.

**Comment No. 4** (Public Comment)

Par 5 (3) mentions cleanup levels. Does this mean a cleanup level has been established or is still to be set? This is an important question. Cleanup of last trace of PCB could be an interminable operation, costing billions. What level of PCB will be tolerated to be left behind?

**Response to Comment No. 4**

In Section 4.0, Establishment of Cleanup Levels and Preliminary Remediation Goals, the DOE/RFFO is establishing a soil cleanup standard of 25 ppm PCBs by weight. As a result of Comment No. 1, the following text has been added for clarification:

The target of 10 ppm PCB will be used in the field to make the initial determination during excavation that cleanup levels have been achieved using the immunoassay technique. Although the 10 ppm level is a field target, the level of cleanup conducted, based on the immunoassay results, will be determined by the project manager in the field. This approach is being implemented because of minor analytical differences between the field technique and the off site laboratory analytical methods. If any verification samples taken after excavation exceed 25 ppm PCBs, additional material will be removed until no verification samples exceed 25 ppm PCB.

**Comment No. 5** (Public Comment)

What is the half-life of PCB contamination?

**Response to Comment No. 5**

Although PCBs do not have a half-life as typically thought of for radionuclides, these very stable compounds will partially degrade in the environment over long periods of time. An appropriate environment must also be available for the compound to degrade.

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**Comment No. 6** (Public Comment)

Where will the contaminated soil be shipped? Will it be better there than containment at RF?

**Response to Comment No. 6**

Contaminated soil will be shipped to a TSCA compliant incinerator for disposal. Negotiations have been ongoing with APTUS and Rollins Environmental Services to accept the contaminated soil or structures. No problems with shipping to either facility for disposal are expected.

In addition, refer to Response to Comment No. 3.

**Comment No. 7** (Public Comment)

Is the expense more than the value of the land recovered?

**Response to Comment No. 7**

The DOE/RFFO is required to be able to release the site in the future for other uses. The removal of PCB contaminated soils, in this limited scope of action, will provide a significant reduction in risk for a relatively small expense. The DOE/RFFO believes that this is an effective use of resources and will result in a significant increase to the future value of the site.

**General Modifications**

Section 2.0, Background Information of Areas Contaminated with PCBs at RFETS, has been modified to list the Potential Areas of Concern (PACs) "potentially" associated with this PAM. Due to the uncertainty associated with funding, weather conditions, and the new Integrating Contractor's priorities, it would not be prudent for DOE/RFFO to commit to completing all 20 PCB PACs initially listed in the Draft PAM within a six month period of time. Funding exists to initiate the removal of three PCB hot spots, several No Further Action (NFA) determinations and remediation of an electrical substation in FY 95. This modification is intended to allow work to proceed on those areas contaminated only with PCBs for which funding is allocated or which may be allocated during the time frame allowed by the PAM process.

Section 5.0, Implementation Schedule, has been modified due to the multitude of tasks involved with this action. The start and completion dates will be dependent upon weather conditions, availability of resources, and funding with the intent of completing the action within 6 months after final approval of the Proposed Action Memorandum (PAM) and Sampling and Analysis Plan (SAP).