

4781

**RESPONSES TO U.S. EPA AND OHIO EPA
COMMENTS CONTAMINATION AT THE FIRE
TRAINING FACILITY REMOVAL ACTION
WORK PLAN AND CLOSURE PLAN
INFORMATION AND DATA PACKAGE
SEPTEMBER 1993**

10/05/93

**DOE-FN/EPA
15
RESPONSES**

RESPONSES TO U.S. EPA AND OHIO EPA COMMENTS

**CONTAMINATION AT THE
FIRE TRAINING FACILITY
Removal Action Work Plan and
Closure Plan Information and Data Package**

Fernald Environmental Management Project

September 1993

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

NO.	COMMENT	PROPOSED DISPOSITION
	GENERAL COMMENTS	
1	<p>The document describes using a PID for screening soils as contaminated or not. The plan fails to recognize the fact that, since listed wastes were disposed of at the site, any detection via laboratory analytical methods of one of the listed wastes constitutes a hazardous waste. Thus the assumption should be that a much larger volume of hazardous and/or mixed wastes will be generated. Additionally, the plan should be revised to incorporate this fact into the removal action.</p>	<p>Sections 3.2.2.5, Soil Excavation and Characterization, and 3.3.2.3, Soil Sampling, have been revised to discuss 3 primary categories of soil that will be removed during this action (guided by the Removal Action No. 17 interim management procedures and guidelines). Those primary soil categories are 1) PCB wastes, 2) mixed-wastes, and 3) hazardous wastes. There are also two secondary categories of soil addressed in the revisions to the plan: petroleum contaminated, and LLW. These soil categories, and their relevance to the FTF action, are summarized below:</p> <p>PCB waste soils are expected to be located around piezometer 1512 where approximately 3 ppm Aroclor-1260 was observed in a soil sample.</p> <p>Mixed waste soils with concurrent petroleum contamination, are expected to be located within the skid tank pond based on the surface radiological measurements and the presence of visually obvious oily-sludge on the pond bottom.</p> <p>Mixed waste soils are also expected in the areas around the open top tank, skid tank pond, and the pond sump, which exhibited trace levels of F listed volatile organics in soil vapor (Section 2.2.3.2) that may also be present in the soil, as well as radiological surface contamination. In the event that subsequent sampling and analyses fail to detected hazardous constituents in these soils, they may be reclassified as LLW soils.</p> <p>Soils excavated from these two mixed waste areas will be segregated based on PID measurements and visual observations pending sampling and analysis.</p> <p>Hazardous waste soils are expected to be located in the magnesium burn area on the western half of the FTF site, where there is visually obvious surface discoloration and loss of vegetation.</p> <p>The PID, visual observations, and the NaI radiation detector, will be used as interim management procedures to facilitate field screening and sorting of soils for storage in on-site stockpiles pending sampling and analysis. In the event that these field screening techniques identify unanticipated soil conditions (e.g., petroleum staining outside the pond) those soils would be segregated and separately characterized. Laboratory analyses will be the basis for final identification and classification of all wastes.</p>

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

<p>2</p>	<p>The post excavation sampling provided in the work plan is insufficient to verify any cleanup. Collection of a single sample does not meet the requirements of any guidance. Thus the DOE will fail to characterize the extent of contamination present and will not verify the attainment of any cleanup level. DOE should conduct additional verification sampling to determine the amount of hazardous waste and substances left in place as well as the radiological contamination left.</p>	<p>Section 3.1, OBJECTIVES, has been revised to state "the objective for the FTF action will be clean closure pending completion of final sampling and analyses. In the event that these samples indicate the presence of F listed constituents, a revised CPID will be submitted that describes final actions to complete the closure of the FTF."</p> <p>Sections 3.2.2.5, Soil Excavation and Characterization, and 3.3.2.3, Soil Sampling, and Table 3-3, have been modified to add 10 additional soil samples, as described below, to incorporate post excavation verification. These samples will be collected in addition to the source area borings, shallow borings, and NaI detector measurements already specified.</p> <p>Two post excavation verification samples, one from the excavation base and one composite from the side-walls, will be collected from the area of probable PCB soil excavation. This area is initially identified as a 3 ft deep, 4 ft diameter excavation centered on piezometer location 1512 which indicated approximately 3 ppm of Aroclor-1260 (2,700 $\mu\text{gm/kg}$) at a depth of 2.5 ft. Additional excavation will be performed as necessary to achieve <2ppm, based on analysis of these samples.</p> <p>Post excavation verification samples will be collected following excavation of probable and potential mixed waste soils. Soil samples will be collected from 0 to 6 inches from the base of the excavation on an approximate 50 ft spacing. Based on the initial areas of excavation, identified based on the results of soil vapor and radiological surveys, this will result in 8 additional soil samples to be analyzed for the FTF contaminants of concern discussed in Section 3.3.3.1, Analyses.</p> <p>In the magnesium burn area, a composite sample from the excavation side-walls will be collected and analyzed, in addition to the currently specified sample from the base of the excavation.</p>
<p>3</p>	<p>DOE should consider the use of an on-site analytical service to conduct timely analysis of organic contaminants. Such a system would allow for better definition of the waste units during the removal action. The analysis could be conducted at a lower DQO and used during excavation or removal activities.</p>	<p>This option will be considered during final planning for the conduct of field operations. No document revisions required.</p>
<p>4</p>	<p>Although the document makes reference to the specific requirements of a RCRA closure, the information presented within the plan is not at a level of detail consistent with that required for an approvable closure plan.</p>	<p>An attachment has been added to the document that cross-references the OEPA closure plan review checklist to the document sections containing the required information and data.</p>



COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

<p>5</p>	<p>A list of all potential contaminants has not been provided within the RAWP/CPID. Although it is indicated that F003 and F005 solvents were disposed of at the site, there is no indication of which specific solvents were handled. DOE-FEMP must establish a list of all hazardous wastes which were ever handled at the Fire Training Facility and then monitor for all of these as potential contaminants.</p>	<p>Section 2.2 has been revised to indicate that there are no records documenting the specific materials handled at the FTF. Section 2.2 has been revised to reference Section 3.3.3.1 which has been modified to include a listing of specific COCs, including specific F listed materials, that have been identified through prior contaminant characterization efforts, as described in the RSE provided in Attachment 1 to the plan.</p>
<p>6</p>	<p>The assumption is made throughout the plan that contamination will be detected using field monitoring equipment. This procedure does not constitute an adequate demonstration of clean closure by RCRA standards. Additional analytical testing will be required to define the rate and extent of contamination throughout the Fire Training Facility.</p>	<p>See response to General Comments No. 1 and No. 2.</p> <p>The combination of:</p> <ul style="list-style-type: none"> 1) data from source area soil borings, perched water sampling, and radiological surveys (Attachment 1); 2) data from soil vapor surveys (Section 2.2.3 and Attachment 7); and 3) the sampling and analyses to be performed during the course of this action (as modified in response to these comments), <p>will be adequate to define 1) the rate and extent of contamination throughout the FTF, and 2) the status of the HWMU following completion of this action.</p>

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

<p>7</p>	<p>The closure plan fails to include an adequate sampling and analysis plan which will enable DOE-FEMP to define the rate and extent of contamination throughout the Fire Training Facility. The sampling and analysis plan should include the following information:</p> <ul style="list-style-type: none"> - Parameters to be analyzed - Number of samples and locations - Background samples - Sample type - Sampling methods and equipment - Analytical Methods - Evidence of a QA/QC plan for Lab analyses - A statement of clean levels for soil and rinseate - A QA/QC procedure for field methods. 	<p>See responses to General Comments No. 2 and No. 6. The following information is currently provided in the FTF CPID, or will be provided in the revised CPID as indicated below:</p> <p>Parameters to be analyzed: Section 3.3.3.1, and Tables 3-7 and 3-8, specifically identify the constituents to be analyzed.</p> <p>Number of samples and locations: Table 3-3 identifies the number of samples and locations.</p> <p>Background samples: Section 3.3 Sampling and Analysis, has been revised to include a table of background levels for the FTF inorganic constituents. Background levels for organic constituents are assumed to be zero.</p> <p>Sample type: Table 3-3 identifies the sample types.</p> <p>Sampling methods and equipment: Section 3.3.2, Sampling Procedures, identifies sampling methods and equipment.</p> <p>Analytical methods: Section 3.3.3, Analytical Procedures, identifies analytical methods to be used.</p> <p>Evidence of a QA/QC plan for Lab analyses: Section 3.3.4, Quality Assurance/Quality Control, describes QA/QC requirements for field and laboratory operations.</p> <p>A statement of clean levels for soil and rinseate: Sections 4.1.1 and 4.1.2 describe clean levels for soil and rinseate respectively.</p> <p>A QA/QC procedure for field methods: Section 3.3.4, Quality Assurance/Quality Control, describes QA/QC requirements for field and laboratory operations.</p>
<p>8</p>	<p>DOE-FEMP fails to identify what the status of the HWMU will be following closure (i.e., will this be an attempt at clean closure of the Fire Training Facility?).</p>	<p>See responses to General Comments No. 2 and No. 6 regarding the objective for this action to be clean closure pending completion of final sampling and analyses. In the event that post-excavation verification samples indicate the presence of F listed constituents, a revised CPID will be submitted that describes final actions to complete the remediation of FTF soils.</p>
<p>9</p>	<p>The plan states that a period of time greater than 180 days will be required to complete closure of the unit but fails to provide an adequate justification for the additional time requested.</p>	<p>Section 5.0, SCHEDULE, has been revised to provide a detailed justification for the additional time requested.</p>

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

	SPECIFIC COMMENTS	
1	<p>Section 2.2.3.1, pg. 2-17, 1st paragraph: Additional detail should be provided as to why the "results of this survey were inconclusive." Were no data obtained or just bad data?</p>	<p>The referenced text has been revised as follows: "The samples were then analyzed by inserting the probe of a hand-held PID survey instrument into the open jar and measuring the organic vapor concentrations. Because the results of this type of screening measurement are qualitative, and may be influenced by a number of environmental factors, they do not provide a conclusive basis for assigning organic vapor concentrations to FTF soils."</p>
2	<p>Section 2.2.3.2, pg. 2-20, 2nd paragraph: The statement that, "soil gas survey suggest that horizontal migration of VOCs in the perched groundwater has not occurred to a great extent" is unfounded. It would appear from reviewing the soil gas data in Figure 2-5 and the groundwater data in Appendix A that no correlation can be drawn between soil gas data and groundwater contamination. Soil gas data at location 26 shows elevated VOC levels, yet groundwater data in the area shows no detections. Whereas, piezometer 1509 shows significant groundwater contamination and no soil gas detections were found in the area.</p>	<p>The referenced text has been revised to indicate that direct correlations between soil gas and perched water data are difficult as a result of the fact that soil gas samples were collected during 1993 and perched water was sampled in 1990. Based on the data presently available, and the relationship of soil vapor to ground water VOC contamination, the soil vapor results tend to indicate that VOCs in the perched water have remained in close proximity to the original release points.</p>
3	<p>Section 2.2.4, pg. 2-21, 1st paragraph: a) The MCL for uranium is 20 ug/l not "30 ug/l." b) The paragraph should discuss the fact that more than just uranium, thorium and daughters were sampled in the perched water. Attachment 1 shows the full Rad suite was analyzed. c) The paragraph should provide information on radionuclides other than uranium detected in the perched groundwater.</p>	<p>The referenced text has been revised to correct the MCL reference and to summarize the additional radionuclide analyses that were performed and their results.</p>
4	<p>Section 2.2.4, pg. 2-21, 2nd paragraph: The paragraph does not state whether wells 1887 and 1890 were sampled following installation. The text should describe any sampling conducted including the analytical suite.</p>	<p>The referenced text has been revised to indicate that while these locations have been sampled, the analytical results are not yet available. A table listing the requested analytes will be included.</p>

COMMENT DISPOSITION RECORD

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

~~47~~ 8 1

<p>5</p>	<p>Section 3.1.2, pg. 3-4, bullets: This section fails to incorporate the available data concerning the FTF into its evaluation of soil disposition. Removal Action 17 addressed contaminants other than uranium. This work plan must account for the following facts: 1) radium and thorium are present at concentrations requiring containerization, 2) any detection of a listed hazardous waste in the soils makes the soil hazardous waste, thus requiring containerization, 3) soils are known that contain petroleum contaminants, thus requiring containerization, 4) soils are contaminated with PCBs above the action limit set in RA 17 thus requiring containerization. Based upon the data provided in Attachment 1, DOE must reevaluate the criteria for soil excavation and containerization. DOE should develop a more defined strategy for waste management during the RA at the FTF based upon available data and potentially collect additional data prior to excavation to support decision making.</p>	<p>The referenced bullets have been revised to include Removal Action No. 17 guidelines for thorium and radium, and this section has been expanded to summarize the Removal Action No. 17 requirements for containerization if PCB, petroleum, or hazardous contamination is present.</p> <p>Section 3.2.2.5 has also been revised to clarify the objectives for initial soil excavation relative to Removal Action No. 17 interim management procedures.</p> <p>See response to General Comment No. 1 relative to management of soils.</p>
<p>6</p>	<p>Section 3.1.2, pg. 3-5, 1st bullet: It is unclear the meaning of the "> total uranium 100 pCi/g" statement in this bullet. Mixed waste is not defined by the 100 pCi/g limit. DOE should review the definition of a mixed waste as it pertains to this removal action.</p>	<p>The referenced bullet has been revised and clarified.</p>
<p>7</p>	<p>Section 3.2.2.3, pg. 3-12, 3rd paragraph: This section fails to address the characterization of contaminants in the surface water and sludges. Prior to any treatment of the waste waters or sludges characterization data is required to determine if the treatment proposed is sufficient and effective. DOE may not use the Plant 8 VOC treatment system prior to complete characterization of the waste water. Water and sludge should be sampled prior to removal from the respective units and sample collection should be in such a way (e.g., proper QA/QC as to allow the data to be sufficient for use in other parts of the RI/FS.</p>	<p>The referenced text has been revised to indicate that sampling will be performed prior to removal and evaluated prior to treatment. The discussion of surface water sampling and analyses presented in Section 3.3.2.4 and Table 3-3 has been clarified to indicate that characterization analyses will be conducted on representative samples from the surface water prior to removal. The analyses are ASL C/D, and therefore adequate for use in the RI/FS as needed.</p> <p>No sludges will be treated.</p>

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

8	Section 3.2.2.4, pg. 3-13: DOE should consider incorporation of the metal generated as a part of this removal action into the Scrap Metal Pile Removal Action.	The referenced removal action has been considered but determined to be impractical based on schedule considerations.
9	Section 3.2.2.5, pg. 3-16, 1st paragraph: Why has DOE chosen to use the NaI detector over the shielded SPA-3 used during the STP Incinerator Soils Removal Action? The technique used during that removal action yielded very useful information. It would seem that DOE would want to continue to use that technology.	The shielded SPA-3 used in the STP action is also a NaI detector, although of a different manufacture than the detector to be used in the FTF action. A new NaI detector has been specified for the FTF because the STP SPA-3 is no longer available. The referenced text will be clarified, and will indicate that the results will be similar for the two detectors.
10	Section 3.2.2.5, pg. 3-16, 2nd paragraph: Since listed wastes have been disposed of at the FTF, the use of a PID or FID is not acceptable for screening soils as hazardous waste. As stated previously, soil containing any concentration of a listed waste is a hazardous waste. DOE should consider the use of a field GC or such for the characterization of soils prior to excavation. The use of a more quantitative instrument will better enable DOE to properly manage the hazardous waste as it is excavated.	See response to General Comment No. 1 regarding screening of soils in the field for interim management, not characterization.
11	Section 3.2.2.5, pg. 3-16, 4th paragraph: Soil is considered a LLW even if it is less than 100 pCi/g or uranium (Please review the definition of a LLW). The paragraph should probably state that soils with uranium concentrations > 100 pCi/g will be containerized as LLW. Additionally, as discussed in RA #17, soils containing specified levels of radium or thorium should also be containerized.	See response to General Comment No. 1 relative to the use of RA #17 levels. They are interim management guidelines and are not intended to identify LLW soils. Soils above the uranium, thorium, or radium levels will be placed into controlled storage as described in the RA #17 Work Plan.

COMMENT DISPOSITION RECORD

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

4781

<p>12</p>	<p>Section 3.2.2.5, pg. 3-16: The section fails to address the excavation and disposition of soils containing PCBs and/or petroleum contamination as discussed in RA #17.</p>	<p>See response to general comment No. 1 and Specific Comment No. 5 relative to the full RA #17 guidance for PCB and petroleum contaminated soils.</p> <p>Section 3.2.2.5 has been revised to incorporate the removal of PCB waste soils. Surface soil expected to be classified as PCB wastes (i.e., soils containing greater than 2 ppm PCB contamination) is anticipated to be found only in the vicinity of piezometer No. 1512, at the west end of the open top tank. Analysis of soil samples collected during the installation of the FTF piezometers (Attachment 1) indicated approximately 3 ppm of Aroclor-1260 (2,700 µgm/kg) in this boring at a depth of 2.5 ft. One other detection of PCB occurred in the sample from piezometer 1508, which indicated a level of approximately 0.2 ppm Aroclor-1260 (240 µgm/kg).</p> <p>Approximately 1.6 yd³ of PCB soil will be removed by excavating 3.5 ft deep in a 4 ft diameter area centered on piezometer 1512. Following this initial excavation, one soil sample will be collected from the base of the excavation and one composite soil sample will be collected from the side-walls. These samples will be analysed for PCBs to determine the need for any additional excavation to remove soil with greater than 2 ppm PCB contamination.</p>
<p>13</p>	<p>Section 3.2.2.5, pg. 3-16 and 17, last and first paragraph: Excavation should continue until all guidelines (e.g., radium, thorium PCBs, petroleum contamination, hazardous wastes) have been met.</p>	<p>See responses to general comments No. 1 and 2, and Specific Comment No. 5, relative to the objectives and management guidelines for this action.</p>
<p>14</p>	<p>Section 3.2.2.5, pg. 3-17, 3rd paragraph: One sample from beneath the magnesium burn area excavation will not be sufficient to verify cleanup. DOE should define the objective of this sampling. If cleanup verification is the actual goal, then appropriate guidance documents should be reviewed for determining the required number and types of samples.</p>	<p>See response to general comment No. 2 relative to closure objectives.</p>
<p>15</p>	<p>Section 3.2.2.5, pg. 3-20, 3rd paragraph: DOE has failed to provide a justification for the use of test pits instead of the standard boring. DOE should provide the reasoning behind this decision.</p>	<p>The referenced section and Section 3.3.2.3 have been revised to indicate that shallow soil borings will be used as the sampling method. Tables 3-2 and 3-3 have also been revised accordingly.</p>

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

16	Table 3-3, pg. 3-30: DOE has failed to justify the sampling scheme proposed herein. a) Why is the perched ground water not being sampled for inorganics or PCB? Inorganics have been detected in the perched ground water exceeding MCLs. PCBs have been detected in soils exceeding the FEMP action level.	a. Table 3-3 has been corrected to include the analytes PCBs and TCLP metals as presented in Table 3-8. b. The full HSL list of metals was investigated during prior sampling of perched water at the FTF. MCLs were only exceeded for certain metals which is the basis for their analysis in future samples. Tables 3-7 and 3-8 have been revised to indicate that a "total" analysis will be performed for the identified list of metals.
17	Table 3-6, pg. 3-39: a) Decon should be conducted on all equipment prior to it leaving the RA area. The equipment will be used to excavate listed hazardous wastes and thus must be properly decontaminated to prevent the spread of hazardous waste to other areas of the FEMP. b) The table and text fail to provide a definition or reference for the definition of the various levels of decon.	a. The text has been clarified to indicate that the decontamination levels presented here are to be applied prior to sampling. A reference has been added for the decontamination of equipment prior to its removal from the sampling site control zone as addressed in the Health and Safety Plan contained in Attachment 3 of this document. b. A specific reference to the FEMP SCQ definitions will be incorporated in Table 3-6.
18	Section 3.3.3.1, pg. 3-40, thorium bullet: Why is Th-228 not analyzed? Th-228 was detected during previous sampling events (see Attachment 1). DOE should include Th-228.	The referenced text has been revised to indicate that Thorium-228 is included as one of the three isotopes quantified in the Thorium isotopic analyses.
19	Section 3.3.3.1, pg. 3-41, Non-Rad An.: Sampling during the FTF RA should include analyses for dioxins. Dioxins have been detected during the sampling of fire training facilities at the DOE Mount Plant.	Dioxins have been added to the list of COCs presented in Section 3.3.3.1, and Tables 3-7 and 3-8.
20	Section 3.3.3.1, pg. 3-41, Soil test pits: Table 3-6 suggests that only VOCs and Semi VOCs will be analyzed for in the test pits. This section suggests metals will be also sampled. The work plan should be revised as appropriate.	The text has been revised to indicate that metals will be analyzed in the shallow soil borings.
21	Section 3.3.3.1, pg. 3-41, 4th paragraph: The text should discuss which contaminants have been eliminated from the HSL Extended List. See previous comment concerning HSL inorganics versus TCLP metals.	The referenced text, and tables 3-3, 3-7 and 3-8 have been revised to indicate the specific list of inorganic COCs to be analyzed. Also refer to response to Specific Comment No. 16.

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

<p>22</p>	<p>Table 3-7, pg. 3-42: a) Why are sludges only sampled for radionuclides? It is most likely these materials will be hazardous wastes and must be sampled appropriately. b) Tables 3-7 and 3-8 should be reviewed to ensure consistency with Table 3-3. Table 3-3 includes no Herbicide/Pesticide sampling.</p>	<p>a. The media column of this table has been corrected to indicate the performance of organic and inorganic analysis of sludges.</p> <p>b. Herbicides/Pesticides have been deleted from Table 3-7.</p>
<p>23</p>	<p>Section 3.4.5.3, pg. 3-52: a) As stated previously, the document is lacking in its consideration of the additional criteria within RA 17 for containerization of soils. DOE must review the criteria for radium, thorium PCBs, and petroleum contamination and revise the document to address these contaminant waste streams. b) The assumptions that DOE used for estimating volumes of waste are not well presented. It would seem from review of the data within this document that any radiologically contaminated soil requiring excavation will most likely be a mixed waste due to the presence of a listed waste. DOE should review the waste estimations with the fact in mind, that any detection of a listed waste within the soil results in the soil being a mixed waste.</p>	<p>a. See response to General Comment No. 1 and specific comment No. 5.</p> <p>b. The waste classification and volume assumptions have clarified. The text in Section 3.2.2.5 has been revised to indicate that the presence of any listed hazardous wastes, based on laboratory analyses, will result in a classification of hazardous or mixed as applicable.</p>
<p>24</p>	<p>Section 3.4.5.4, pg. 3-53, 4th paragraph: It is the reviewers understanding that in order to free release an object/material all surfaces had to be scanable. As a result of this requirement, porous media such as concrete could not be free-released. DOE should provide more detail on the criteria for free-release of such materials and how they will be met during this removal action.</p>	<p>The referenced text has been revised to indicate that following scabbling to remove the surface layer containing potential hazardous constituents, the remaining non-hazardous concrete rubble, which cannot be free released, will be stockpiled on-site in a demolition dumpster and undergo sampling and analysis in accordance with guidance provided in the Removal Action No. 17 and No. 9 work plans.</p>
<p>25</p>	<p>Table 3-10, pg. 3-56: The table fails to include any ARAR or TBC relevant to the free-release of materials. Page 3-26 of RA #17 WP lists the following as ARARs for release of materials: 40 CFR 268.45, 40 CFR 192, NRC Reg. Guide 1.86, and DOE Order 5400.5. These should be included in the table and addressed within the work plan.</p>	<p>The indicated ARARs have been incorporated into Table 3-11.</p>

COMMENT DISPOSITION RECORD

~~47~~ 81

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: Ohio EPA

26	<p>Section 4.1.1, pg. 4-1: a) How does DOE propose to compare TCLP metals from soils with total metals from soils for a decision on clean? The background soil study used HSL (total) metals analyses to develop the UTLs yet TCLP metals is proposed herein. The data from these two sets will not be comparable. b) DOE may not simple address the 100 pCi/g action limit and ignore the other action limits set within RA #17. DOE must address the action limits for radium, thorium PCBs and petroleum contaminants.</p>	<p>a. Table 3-7 and 3-8 have been revised to indicate that the TCLP list of metals will be performed as total analyses, thereby allowing a direct comparison.</p> <p>b. See response to General Comment No. 1 and specific comment No.5.</p>
27	<p>Table 4-1, pg. 4-3: The organics section of this table requires significant revision: Chloroform MCL=0.1 mg/l 1,2 DCA DAL=0.07 mg/l 1,2 DCE MCL=0.07 mg/l PCE MCL=0.005 mg/l DAL=0.075 mg/l Pentachloroph.MCL=0.001 mg/l DAL=0.015 mg/l Toluene MCL=1.0 mg/l Additionally, why isn't TCE included since it has been detected and is a listed waste? Other constituents such as Semi Vols and PCBs should be considered also, especially if they are listed wastes.</p>	<p>The indicated correct values have been incorporated into Table 4-1 which was also revised to incorporate all hazardous contaminants of concern.</p>
28	<p>Table 5-1, pg. 5-2: DOE has not provided sufficient information to justify the "Schedule Hold Interval" proposed in the schedule. Ohio EPA can see no reason for not initiating the removal action upon approval of the work plan. The Schedule Hold Interval is unacceptable.</p>	<p>Revised text has been incorporated into Section 5.0 that describes the basis for the schedule and potential hold interval. Based on experience gained during past soil remediation activities at the FEMP, surface water removal and soil excavation will not be effective if conducted during periods of extended heavy precipitation.</p>
29	<p>Attachment 1, Section 2.1, pg. 2: The section referenced Figure 1 but no such figure exists within the attachment. The figure should be included.</p>	<p>Figure 1 is located at the end of Attachment 1.</p>
30	<p>Attachment 1, Table B.1: It is unacceptable to have data outstanding for three years. Samples for Tc-99 and Sr-90 were collected 5/3/90 and as of printing this work plan were not available. DOE should track, acquire, and incorporate this data prior to submission of the revision.</p>	<p>A summary of these data has been incorporated into Section 2.2.4 of the RAWP/CPID. The analytical results for Tc-99 and Sr-90 were all less than detection limits.</p>

COMMENT DISPOSITION RECORD

4781

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: USEPA

NO.	COMMENT	PROPOSED DISPOSITION
SPECIFIC COMMENTS		
1	Section 2.1.2, Page 2-4. The text states that the sump is located south-southwest of the skid tank and measures 8 feet in diameter, suggesting a cylindrical shape. Figures 1-2, 2-2, 2-4, 2-5, 3-1, and 3-2 show the sump as having a rectangular shape and located southeast of the skid tank. These discrepancies should be resolved.	Figures 1-2, 2-2, 2-4, 2-5, 3-1, and 3-2 have been revised to indicate the sumps circular shape, and Section 2.1.2, Page 2-4 text has been revised to indicate the sump is located to the southeast from the skid tank.
2	Section 3.2.2.3, Page 3-12. This section discusses surface water removal and treatment, and the possibility of encountering an oily surface layer. This section should also discuss the method of treatment or disposal of the oily layer, if encountered.	Section 3.2.2.3, Page 3-12 has been revised to indicate in the event that an oily layer is encountered, it will be sampled and characterized. Final disposition of this material will be in accordance with FEMP waste management procedures based upon results of this final characterization. A footnote has also been added to Table 3-3 to indicate the additional separate analysis of oily surface water in the event it is present.
3	Section 3.2.2.3, Page 3-12, and Section 3.2.2.4, Page 3-14. Both sections indicate that liquid will be removed from the sump. However, Section 2.1.2, page 2-4, indicates that the sump has been filled with soil to within 2 feet of ground surface, but does not mention the presence of any standing water. This discrepancy should be resolved, and a method of soil removal should be indicated in the text.	Section 3.2.2.3, page 3-12, paragraph 1, has been revised as follows: "Prior to demolition activities or soil removal, liquids will be removed from the open top tank, the skid tank pond, and the horizontal pressure vessel end piece. In the event that rain water has accumulated in the skid tank sump, a shallow depression in the soil located southeast from the pond (Section 2.1.2), it will also be pumped. Section 2.1.2, page 2-4, paragraph 4, has been revised to include the following sentence. "This shallow depression occasionally contains temporary standing water after periods of heavy rainfall."
4	Section 3.2.2.4, Page 3-13. This section discusses the removal of two hot spots in the block building, The text should also indicate what tool(s) will be required to remove the hot spots.	Section 3.2.2.4, Page 3-13 has been revised to indicate the two hot spots will be removed by chipping away the surface layer of concrete with a manual or electrically powered chipping tool. (Revision is at page 3-14)
5	Section 3.2.2.4, Page 3-15. This section describes the horizontal pressure vessel removal. The text should also describe the method or tool(s) required to remove the hot spots on the outside of the vessel.	Section 3.2.2.4, page 3-15 has been revised to indicate the hot spots (approximately 2 square foot in total area) will be removed by removing the surface layer of metal with a manual or electrically powered grinding tool. (Revision is at page 3-16)
6	Table 3-1, Page 3-25. The entry for the Contamination Reduction Zone monitoring frequency indicates the instrument, not the frequency. The table should be revised to include the frequency of monitoring in the Contamination Reduction Zone.	The entry in Table 3-1 for frequency of monitoring in the Contamination Reduction Zone has been revised to read "At the beginning of the day; prior to lunch; at the end of the shift."

COMMENT DISPOSITION RECORD

Document: Fire Training Facility RAWP/CPID - Draft
 Reviewer: USEPA

7	Section 3.3.4.1, Page 3-44. The text describing preservation blanks and container blanks does not clearly define the difference between the two types of blanks. The text should be modified to clarify the difference between preservative and container blanks and describe the purpose for each.	Section 3.3.4.1, page 3-44 has been revised to indicate that container blanks are performed by submitting an unpreserved container to the lab to determine the quality and integrity of containers used in matrix sampling. Preservative blanks are performed by submitting deionized water and preservative in an appropriate container to determine the quality of sample preservatives. (Revision is at page 3-50)
8	Section 3.4.4, Page 3-49. The text states that decontamination wastes will be treated in a manner consistent with the item being decontaminated. Actually, decontamination wastes should be treated in a manner consistent with the waste being sampled. The text should be revised to indicate that the disposition of decontamination wastes will be consistent with the sampled waste.	Section 3.4.4, page 3-49, second bullet. Sentence has been rewritten to read "Decontamination wastes will be treated in a manner consistent with the contaminants potentially present on the item being decontaminated. (Revision is at page 3-54)
9	Section 3.4.5.4, Page 3-52. The text states that all demolition waste is expected to be free of contamination with the exception of the open top tank, skid tank, skid tank pedestals, several spots on the horizontal pressure vessel, and sections of the block building. Section 3.4.4, page 3-48, states that until determined otherwise through sampling and analysis, all soils, liquids, tanks, and demolition waste will be treated as radiologically contaminated, and, in addition, all soils and liquids will be treated as chemical contaminated. Although the U.S. Department of Energy (DOE) expects most demolition waste to be contaminant free, DOE must follow the procedures outlined in Section 3.4.4 and sample the demolition waste.	Section 3.4.5.4, page 3-52 has been revised to indicate that concrete rubble will be stockpiled on-site in a demolition dumpster and will undergo sampling and analysis prior to disposition in accordance with guidance provided in the Removal Action No. 17 and No. 9 work plans. (Revision is at page 3-59)
10	Section 4.1.1, Page 4-1. This section refers to Section 3.1.2 as the Fernald Environmental Management Project (FEMP) soil background study. Section 3.1.2 discusses other related removal actions. The text should correctly refer to the location of the FEMP soil background study.	Section 4.1.1, page 4-1 has been revised to indicate the soil background study reference as FERMCO 1993.