REVIEW COMMENT SHEET

Please review the attached procedure: RF/RMRS-97-135 (Number) A (Rev.) Draft (Draft) Draft IM/IRA Plan for the 886 Cluster Project (Title)

Comment Due Date: Provided 2/12/98 from CDPHE

Internal Review | Parallel Review | Verification | Validation | Revalidation

QA ____ Peer CDPHE

General (G) comments require resolution but do not require resolution acceptance. Mandatory (M) comments require resolution and resolution acceptance.
1-88000-PP-004 provides complete definitions of General and Mandatory comments.

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
	1	-	On p.1 you discuss the ISM process of defining the work, analyzing the hazards and developing the controls. This is exactly what I'm looking for in a good IM/IRA. Let's use these principles in working towards what we both want in the document. When will you do the ISM analysis? Is it later in the planning stages? How much can we do now and incorporate into the IM/IRA?	A more detailed discussion of the ISM process and its application for the project has been incorporated into sections 4.0 and 5.0. A figure illustrating the process has been incorporated into Section 5.0.	
	2	-	Note filter plenum removal is decommissioning, not deactivation. We talked about the list of upcoming deactivation activities on p 2 and agree. Please provide a more detailed description of the activities in a manner which clearly explains their nature as deactivation. For example, removal of Raschig rings is deactivation, but decon and removal of the tanks themselves is decommissioning. The brief descriptions need to be enhanced to clarify this.	The text discussion has been modified to correct the inconsistency. The descriptions were modified as suggested.	

POC/Reviewer: (Comments not signed by Reviewer/POC will be considered unofficial and not subject to resolution)

☐ No Comments

☐ This procedure revision has no impact or relevance to our discipline or organization and we waive need to concur. We acknowledge this concurrence waiver does not affect our responsibility to implement the requirements of this procedure when needed.

Edd Cray
Name | Signature

Ext./Pager/Fax | Bldg./Dept. | Date

Return to Sally Martin Lewis (Name) 6643 (Ext.) T893B (Location)

If questions on content, please call the SME:

Sally Martin Lewis (Name) 6643 (Ext.)

ADMIN RECORD
B886-A-00018

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) A (Rev.) Draft (Draft)

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
	-	2.2	The RLC summary needs to be made quantitative, describing, at a moderate level, the degrees and extent of radiological contamination within the building. We would like to see a description of the areas containing contamination (which gloveboxes, walls and or tanks for example), and the maximum levels and/or depths of contamination in the areas. What nuclides? Is the contamination deep or just surface? The decon techniques will depend upon this data. What is the holdup in the HVAC system? The various tanks? The piping? The equipment?	Area maps of the CA are posted in the building and are available. Contamination is within CA limits so all areas posted as such are <2000 dpm/100cm^2. The two posted HCAs are the Assembly hood (doghouse) and the downdraft table with attached glovebox. Contamination levels (max known) within these two areas are 4E6 dpm/100 cm^2 and 60,000 dpm/100 cm^2, respectively. Isotopes of concern are Pu, Am, and U-235. Most of the contamination is loose on surfaces or components; however, there are areas such as the 103 pit and the floor of the doghouse that have fixed contamination. We are aware of where our hold-up is within the various systems although the final NDA measurements are still classified and are not available for publication yet.	
-	-	3.0	How many dollars per year do we save in decommissioning 886. (I don't believe I need this to approve the document but I think it would make your case to justify the action stronger.)	Note - Including "cost" is inconsistent with 779 IM/IRA.	
	13	4.1	Is "reclaiming the site by recontouring and re-veg" part of the D&D project or ER? See the approach from 779. Same issue on p 27.	The bullet discussing site reclamation has been revised to state that the activity will be conducted "in cooperation with ER."	
	13	last para.	The "commitments" on decon are really non-committal. What will cause the decontamination approaches to be modified as appropriate? Based on what criteria and considerations? Explain.	Text added that states the approach will be modified based on hazard analysis.	
G		4	Section 4 has been improved greatly since we last talked. Good progress. It still needs some enhancement to get where we are going based on the ISM process mentioned in #1. Here are some suggestions:	Section 4.2, Project Execution, has been added to describe the ISM/IWCP/AHA approach. Additionally, Tables 4-1 through 4-5 have been included to illustrate the activities included in each phase	

MAY 1998

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) Rev. ____ Draft

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
		Table 4-2	Reference table 4-6 which lists the areas to be decontaminated.	New tables 4-1 through 4-5 provide information requested.	
	-	-	Work tasks in the decommissioning phase are still not well defined. List the major projects. A table like 4-6 would work well to do this. Activities such as tank removal from 103, removal of the GB in this area, removal of the split table, removal of the "experimental enclosure" in 101 would be an appropriate level of detail. Describe the levels of contamination and the issues and hazards for each activity, particularly demonstrate your understanding of the radiological hazards of the operation.	New tables 4-1 through 4-5 provide information requested.	
	16	-	Better define the piping systems which must be cut-out. What is the holdup?	See response to Comment on Section 2.2. Specifics regarding the hold-up is classified.	
	18	-	How many gloveboxes are to be removed? The description of the radiological hazards is inadequately detailed.	The number of gloveboxes to be removed is identified in Table 2-1. A description of the radiological hazard has been elaborated upon in Section 2.2.	
	19	-	Final surveys are briefly mentioned. The documents needs much more detail on this. Perhaps in another section? Where?	Text has been added to Section 4.1 stating that the Final Survey Plans will be developed and implemented following MARSSIM guidance after decontamination and dismantlement and prior to demolition.	
		Table 4-6	Table 4-6 is a great start on defining the activities. What do the question marks mean? Explain. Use this table to produce a list of the decommissioning activities.	Question marks were inadvertently included instead of bullets. This has been corrected. Activities now defined in Tables 4-1 through 4-5.	
	-	-	Describe the methods to be used to remove gloveboxes.	Method will be determined by the packaging.	
	-	-	Describe the methods to be used to remove the HVAC system while preventing any release of contamination.	Method will be determined by the packaging.	
	27	4.1.3.2	When will the demolition plan be prepared? Will it be submitted to CDPHE for review? Will there be any public involvement on its content?	The Demolition Plan will be prepared after the building has been decontaminated and radiologically released in preparation of demolition. A copy of the plan(s) will be supplied	

				to CDPHE. If the building is uncontaminated we do not anticipate publice comment is necessary.	

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) Rev. _____ Draft

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
	29	5.0	This is my major area of concern and the section in need of most enhancement. After presenting the activities in sec 4, we need to carefully and in some moderate degree of detail describe the CONTROLS. Doesn't this belong here?? Per ISM thinking we need to see how the processes will be controlled and monitored to preclude any releases and determine if any release to workers and the environment have occurred. How can we construct an adequate text section on controls? Can we list controls for each project (per the table or list in section 4) or be more generic. We need to discuss contamination controls such as using tents around glovebox removals. Are controls needed on the tank and piping removals? What kinds? How will the spread of contamination be precluded when we remove the experimental area or the split table? We need to prepare a text section describing how contaminant releases will be prevented for the activities occurring during the project. How will workers be protected and monitored? Monitoring needs to be described. Describe the types of monitoring which will be done during the project, the instruments used, the detectable levels, the minimum frequencies and, if not specific locations, the criteria used to determine monitoring.	The information requested is the subject matter of AHAs. The preliminary hazard analysis overview has been included along with a section discussing of the ISM/IWCP/AHA process to identifying controls as well as a figure illustrating the process. A table summarizing typical monitoring associated the hazards anticipated, exposure control limits, monitoring method, and frequency has been added. Sections discussing radiological, chemical, industrial area, and air monitoring has been added.	
	-	9.0	The QA section, 9.0, needs additional information: Describe training requirements and assurance for management and workers. Describe methods used by management to ensure the quality of the work. Will inspections be performed by management? By whom? How often? How will they be documented? Who will review the inspection reports? Will readiness evaluations be performed? By whom? Include a provision for CDPHE participation in the readiness reviews.	QA section has been added which mirrors that of 779. Text describing the DOE-organized management assessment has been added to Section 4.1.	

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) A (Rev.) Draft (Draft)

		10	Section 10 is reserved for the project schedule. When will a schedule be prepared and included in the DOP?	A schedule has been included.	
		-	Explain the rad protection organization for the project. I assume that rad ops and rad engineering will both be involved. Have procedures been developed which will provide for adequate communication and coordination between the two organizations? Which is in charge of determining monitoring and or work control requirements for the project?	Text describing the reporting/communication structure of radiological operations and radiological engineering specific to this project has been added to Section 11, Organization and Responsibilities.	
			NOTE: the document has been provided to Chris Gilbreath of CDPHE to review the haz materials related sections. I have not looked at these sections carefully, and so you should expect additional comments from Chris on these areas.	Ed Smith comments on the IM/IRA have been addressed separately.	

POC/Reviewer: (Comments not signed by the Reviewer/POC will be considered as unofficial comments)

EDD KRAY (Name) — Edd Kray (Signature) — 4/23/98 (Date)

Resolutions Accepted

GK (Initials) — 4/23/98 (Date)

REVIEW COMMENT SHEET

Please review the attached procedure: RF/RMRS-97-135 (Number) A (Rev.) Draft (Draft) Draft IM/IRA Plan for the 886 Cluster Project (Title)

Comment Due Date: Provided 2/23/98 from CDPHE

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QA ____ Peer CDPHE

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ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
	7	Para. 2	The fifth sentence in this paragraph indicates that the contaminants of concern identified in the RLCP are radiological, asbestos, PCBs, lead and other metals. The IM/IRA should indicate that the source of these metals is the building paint as described in the RLCP. The IM/IRA should also discuss whether the concentrations of metals dictate removal of the paint and management of such removed paint as a hazardous waste or if the metals are only an occupational exposure threat to the D&D personnel, as discussed in the WSRIC D&D guidance document to be developed by John Schmuck of RMRS.	The text will be modified consistent with the comment.	
		6-1	This table combines the categories of hazardous and TSCA. Each of these categories should be separate and estimates of waste generation for each category should be included in the table. If there is a potential for TSCA waste to be generated that is also regulated as a hazardous waste, then a combined category would be appropriate.	The text and table will be modified consistent with the comment.	

POC/Reviewer: (Comments not signed by Reviewer/POC will be considered unofficial and not subject to resolution)

☐ No Comments

☐ This procedure revision has no impact or relevance to our discipline or organization and we waive need to concur. We acknowledge this concurrence waiver does not affect our responsibility to implement the requirements of this procedure when needed.

Ed Smith (Name) _____ (Signature)

____ (Ext./Pager/Fax) _____ (Bldg./Dept.) _____ (Date)

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REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) A (Rev.) Draft (Draft)

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
	-	6.1.2 and 6.1.3	These sections indicate that low-level mixed waste and hazardous waste are expected to be generated during D&D. Please clarify whether these categories are paint related waste or other LLM and whether other LLM and hazardous wastes are expected to be generated during D&D since the IM/IRA does not address any other types of hazardous or LLM waste.	LLM and/or hazardous wastes could be generated where lead-based paint is removed from the underlying substrate, where lead pipes are removed and segregated from the demolition waste stream or where sludges are removed from sumps or traps in drain lines. Although unlikely, it is possible that other, unexpected LLM or hazardous wastes could be generated.	
-	-	-	The IM/IRA indicates that hazardous and low-level mixed wastes will be generated. It seems most likely that the paints in Building 886 would only present a waste generation problem if sand blasting, scabbling, etc. of the walls or other painted surfaces is necessary. Otherwise, it seems unlikely that building debris or other painted objects removed during the D&D process would fail the TCLP when the entire waste form is considered. If this assumption is correct, much of the text relating to hazardous waste generation could be eliminated. Please clarify in the IM/IRA whether paint removal is required and whether concentrations of metals within such paints will designate items that are removed during the D&D as a hazardous or mixed waste.	The text relating to hazardous waste generation and management is included to provide a regulatory framework in the decision document for managing these materials should the need arise.	

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) Rev. ____ Draft

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
		6.4	This section indicates that remediation wastes will be managed in temporary units and that the establishment of TUs may require permit exemption because it is anticipated that the tanks or containers will be used for longer than 90-days. While it is allowable for remediation waste to be managed in a TU, a Class II permit modification will be required (6 CCR 1007-3, section 264.553(f)(2) unless all of the information that would otherwise be required in such a permit modification are included in the IM/IRA, per paragraph 17 of RFCA. Additionally, the time frame for operation of a TU is not limited to 90-days as indicated in the IM/IRA text. Rather, operation of a TU may be allowed for up to a one year period with an optional extension for an additional year, on a case-by-case basis. The text should include the following information that would otherwise be included in a Class II permit modification per 6 CCR 1007-3, section 553(c): a. The length of time such unit will be in operation; b. Type of unit (i.e., tank or container); c. Volumes of remediation wastes to be managed; d. Physical and chemical characteristics of the remediation wastes to be managed in the unit; e. Potential releases from the unit; f. Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and g. Potential for exposure of humans and environmental receptors if releases were to occur from the unit.	a. The one year time limit in 264.553(c) is an administrative requirement and is not ARAR. The project schedule will substitute for this administrative requirement. b. This has not been specified. For flexibility, either type of unit may be employed, as needed. c. This cannot be known until the material is generated. d. This cannot be known until the material is generated. Likely materials could include scabbled lead-based paint, lead pipe and sludges. Consistent with the text, the materials will be stored in competent containers or tanks. e. Given the remediation wastes expected, the duration of storage, and the types of units (tanks or containers) releases are not anticipated. f. Consistent with e., there are no hydrogeological or other relevant environmental conditions that may influence the migration of potential releases. g. Consistent with e., exposure of humans and environmental receptors in not expected.	

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) Rev. _____ Draft

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
	-	6.5	The IM/IRA should specify the types of wastes, if any, that may remain in idle equipment that is deferred to D&D. According to "Appendix 1A - Idle Equipment with Non-Hazardous Materials Inventory", only the drill press in Room 111 (DOE ID 00044276-00) and Tank 00040 located outside of Building 880 have been deferred to D&D. The referenced inventory indicates that all other idle equipment has been drained and is empty. Table 2-1 should confirm that all idle equipment in Building 886 and support facilities have been drained and emptied, with the exception of two items identified above. If there are inconsistencies between Table 2-1 and the referenced inventory, those discrepancies should be resolved.	The equipment listed in Table 2-1 was identified during the RLC and is correct.	
	-	-	Because Building 886 does not contain any permitted or interim status units, the closure requirements for those types of units are not an ARAR for this action. As such, reference to the permitted and interim status closure standards should be deleted from Table 7-1.	Table 7-1 is intended to cover the "universe" of ARARs that may be applicable or relevant and appropriate to D&D. The text provides a more detailed evaluation of the ARARs specific to B886.	
	-	-	The IM/IRA does not make any mention of the possibility that universal wastes will be generated during the D&D of the 886 cluster. Assuming that universal wastes (i.e., aerosol cans, mercury thermostats, recalled FIFRA pesticides, and hazardous waste batteries) will not be generated, the requirements for management of universal waste are not an ARAR for this action, and reference to those requirements should be deleted from Table 7-1.	As noted immediately above, Table 7-1 is intended to reflect the universe of ARARs.	

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) A (Rev.) Draft (Draft)

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE
	-	-	The IM/IRA does not make mention of the possibility that used oil will be generated during D&D. Either delete the requirements for used oil from the ARARs table if such wastes will not be generated or provide a narrative as to the source of these wastes in section 6.1.	As noted immediately above, Table 7-1 is intended to reflect the universe of ARARs.	
	-	7.2.2.2 and 7.2.2.3	These sections provide information related to waste treatment and debris treatment and indicate that the information provided is being submitted for a permit waiver pursuant to paragraph 17 of RFCA. Additional detail is required for these sections if, in fact, a permit waiver is going to be pursued. Paragraph 17.b states "DOE shall include in the submittal identification of the standards, requirements, criteria, or limitations which would have had to have been met to obtain each such permit. Simply stating that treatment would be accomplished in competent tanks or containers is not sufficient to satisfy the requirements of RFCA paragraph 17.b. Additionally, RFCA paragraph 17.c requires an explanation of how the response action proposed will meet the standards, requirements, criteria, or limitations identified in RFCA paragraph 17.b. This information must also be provided in the IM/IRA. If treatment activities are to be included, then the IM/IRA must also include how the treatment unit will be closed as well as any other applicable information at 6 CCR 1007-3, subpart G that would otherwise be included in a closure plan.	Section 7.2.2.2 and 7.2.2.3 are intended to create a general authority to conduct these activities, if needed and appropriate, as part of the 886 D&D. Additional specifics will be provided if it is necessary to employ these authorities.	

REVIEW COMMENT SHEET (continued)

Review comments for document: RF/RMRS-97-135 (Number) A (Rev.) Draft (Draft)

		7.2.2.4	The second sentence in this section states that remediation wastewaters that contain listed RCRA hazardous waste or exhibit a RCRA characteristic will not be subject to compliance with RCRA hazardous waste codes and these requirements would not be ARAR because.... First, this seems inconsistent with Table 7-1, which identifies the hazardous waste identification requirements as an ARAR. Secondly, all hazardous wastes that are generated as a result of a CERCLA action must be properly characterized pursuant to 6 CCR 1007-3, Part 261. The fact that the waste will be treated in a CERCLA treatment unit has no bearing on the applicability of 6 CCR 1007-3, Part 261. I recommend deleting the referenced sentence.	The comment is correct. The sentence will be modified to read: "(r)emediation wastewaters that contain listed RCRA hazardous wastes or exhibit a RCRA characteristic will not be subject to RCRA ARARs while being stored in the CWTF headworks or during treatment, because the wastewaters ...".	

POC/Reviewer: (Comments not signed by the Reviewer/POC will be considered as unofficial comments)

EDO KRAY (Name) — Edo Kray (Signature) — 4/23/96 (Date)

Resolutions Accepted

GK (Initials) — 4/23/96 (Date)