



**Department of Energy**  
Idaho Operations Office  
850 Energy Drive  
Idaho Falls, Idaho 83401-1563

October 25, 1999

Mr. Wayne Pierre, Team Leader  
Environmental Cleanup Office  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Mr. Dean Nygard, Bureau Chief  
Idaho Department of Health & Welfare  
Division of Environmental Quality  
Community Programs  
1410 N. Hilton  
Boise, Idaho 83706

**SUBJECT:** Transmittal of the Final OU 1-10 Record of Decision for Test Area North  
Operable Unit 1-10 Comprehensive Remedial Investigation/Feasibility Study at  
the Idaho National Engineering and Environmental Laboratory (OPE-ER-165-99)

Dear Mr. Pierre and Mr. Nygard:

Enclosed is the Final OU 1-10 Record of Decision for Test Area North Operable Unit 1-10. Agency comments on the Draft Final ROD have been resolved and incorporated into the final document. Comment resolution forms and a management briefing package are also enclosed. If you have any questions regarding the Final ROD please contact Mark Shaw at (208) 526-6442.

Sincerely,

A handwritten signature in cursive script, appearing to read "K. Hain for".

Kathleen E. Hain, Manager  
Environmental Restoration Program

Enclosures

cc: C. Cody, DEQ, 1410 N. Hilton, Boise, ID 83706  
M. Wilkening, EPA Region X, Idaho Ops Office, 1425 N. Orchard St., Boise, ID 83706

**PROJECT DOCUMENT REVIEW RECORD**

**DOCUMENT TITLE/DESCRIPTION:** Draft Final WAG 1 ROD

**DATE:** September 23, 1999

**REVIEWER:** IDHW

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
<b>GENERAL COMMENTS</b>				
1	General Comments		<p>New language should be inserted into the Declaration under a new section heading prior to the "Statutory Determination". The suggested section heading could be "Closure of RCRA/HWMA Sites". The suggested language is as follows:</p> <p>" Five sites addressed in the Record of Decision are part of the TAN Intermediate-Level Waste Disposal System (i.e., TSF-09 V-Tanks, TSF-18 Contaminated Tank Southeast of V-3, TSF-19 Caustic Tank, TSF-21 Initial Engine Test Valve Pit, and TSF-26 PM-2A Tanks). This tank system, which is no longer in use, currently contains both listed and characteristic hazardous wastes. The State of Idaho DEQ has determined that the Intermediate Level Waste Disposal System is subject to the requirements of the Hazardous Waste Management Act, but is not identified as a TSDF on INEEL's Part A permit application. This tank system is required to close under RCRA/HWMA closure, pursuant to 40 CFR 265, Subpart G. The RCRA/HWMA closure of this tank system is not addressed in this Record of Decision."</p>	<p>Per the 10/13/99 RPM conference call, new language was added to the Declaration under a new section heading "Closure of RCRA/HWMA Sites" prior to the "Statutory Determination" section. The language is as follows:</p> <p>"The Agencies intend to complete cleanup of the V-Tanks (TSF-09/18) and PM-2A Tanks (TSF-26) under this ROD. These tanks, along with the TSF-19 and TSF-21 tanks, are subject to closure under the State of Idaho Hazardous Waste Management Act (HWMA) authority separate from this ROD."</p>
<b>SPECIFIC COMMENTS</b>				
1	Part I – Declaration	v	<p>In the V-tanks narrative in the "Description of Selected Remedies" section, delete the following sentences in the last paragraph: "Implementation of this remedy will satisfy the substantive and administrative RCRA closure requirements. However, if a RCRA closure of the piping and associated equipment beyond the immediate area of this site is necessary, it will be addressed by a separate action." Instead, insert the following: <i>The Intermediate Level Waste Disposal System, which includes sites TSF-09, TSF-18, TSF-19, TSF-21, and TSF-26, is required to undergo RCRA/HWMA closure, pursuant to 40 CFR 265, Subpart G. Closure of this tank system is not addressed in this Record of Decision.</i></p>	<p>Per the 10/13/99 RPM conference call, new language was added to the Declaration under a new section heading "Closure of RCRA/HWMA Sites." Due to this new language, these sentences in question were deleted throughout this document.</p>

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2		vi Area V section	<p>A bullet should be included that discusses the Snake Avenue component of the remedy. The proposed removal of all, or portions of, Snake avenue in the vicinity of the TSF-06 contamination was agreed to by the Agencies. A discussion can be found on page Part II 8-5, but should be mentioned in the Declaration also.</p> <p>Also, the first bullet should be reworded. The intent of "...and additional contaminants in the PM-2A Tanks" is not really concise. Please explain how this fits into the context of the sentence, or delete.</p>	<p>A bullet was added that states the road will be removed and the road base would be surveyed and sampled to identify areas greater than the FRG.</p> <p>Text was changed as follows: "... exceeding the FRG and sample for contaminants that were identified in the PM-2A Tanks. . ."</p>
3	Part II – Decision Summary 7.1.4	II 7-6 ninth bullet	<p>It has been understood that the risk analysis that will be performed will be based on an analysis of the contaminants, if any, found in soils from beneath the V-tanks. The connection between the risk analysis that will be performed, and the analysis for additional contaminants in the V-tanks content waste, is not understood. There have already been several rounds of sampling and subsequent analyses of the V-tanks wastes. Please explain.</p> <p>The US DOE is required to close the Intermediate Level Waste Disposal System pursuant to 40 CFR 265, Subpart G. Therefore, final dispositioning of contaminated soils resulting from releases from the V-tanks must also be in accordance with closure requirements.</p>	<p>As agreed to during the 9/23/99 teleconference, the word soil was added to this bullet between post-remediation and sampling.</p> <p>Comment noted.</p>
	7.1.4	II 7-7 third complete paragraph	<p>Please indicate in this discussion that the treated residue will be shipped back to the INEEL for storage pending final disposal at an approved disposal site (which may be on-site or off-site).</p>	<p>Text was changed to reflect comment.</p>
4	Part II	7-3, Table 7-3	<p>Under "Use and Management of Containers", the 40 CFR citation should be "40 CFR 264.171-178). Also, under "Alternative Treatment Standards for Contaminated Soil", the "CERCLA Off-Site Policy" (40 CFR 300.440) needs to be cited. Also, please add "Miscellaneous Units" for the V-tanks as worded in Table 7-6 in the PM-2A Tanks section.</p>	<p>Comment incorporated. "CERCLA off-Site Policy" was added to all ARAR tables with "Alternative Treatment Standards for Contaminated Soil."</p> <p>Per the 10/06/99 WAG 1 conference call, "Miscellaneous Units" was not added as an ARAR for the V-tanks because on-Site treatment is not anticipated.</p>

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5	Part II, 8.1.4	8-5	See Specific Comment #1. The comment pertaining to the first bullet is applicable here also. The third paragraph (or an abbreviated form of) after the bullets should be included in the Declaration.	Per the 10/13/99 RPM conference call, new language was added to the Declaration under a new section heading "Closure of RCRA/HWMA Sites." Due to this new language, these sentences in question were deleted throughout this document.
6	Part II, 8.2.2.1	8-13	IDHW/DEQ draft ROD comment #26 requested an additional explanation as to why there was not a concern due to risk to burrowing organisms during the institutional control period ( <i>Alternative 1: Limited Action</i> does not require a biobarrier to be in place). The comment resolution was that the comment was incorporated and the section was revised accordingly. This revision is not apparent upon review of Section 8.2.2.1. Please explain	We apologize for not sufficiently addressing the comment in the Draft ROD comment resolution. The object of inhibiting plant growth and burrowing animals was not identified as an RAO in the OU 1-10 RI/FS and is not a requirement of any alternative. However, it is an advantage to Alternative 2b, (note: 2a does not address either). WAG 10 will evaluate ecological risk on a population level and determine ecological RAOs where necessary.
7	Part II, Table 8-6	8-18	The ARARs cited under the "RCRA -Standards for Owners and Operators for Hazardous Waste Treatment Storage and Disposal Units" category should be cited as 40 CFR 264.14 and 40 CFR 264.15, and not "268..." as cited here.	Comment incorporated. The citations were corrected to 40 CFR 264.14 and 40 CFR 264.15.
8	Part II, 9.1.1.2	9-4	The comment resolution for IDHW/DEQ draft ROD comment #28 does not concur with the ROD text. First, the comment resolution still does not really address the comment, and second, the resolution states that screening was accomplished without an estimation of Hazard Quotient. However, the first sentence of section 9.1.1.2 states that the Burn Pits were identified as having an ecorisk (HQ) of greater than the threshold level of 1. Please explain.	We apologize for not sufficiently addressing the comment in the Draft ROD comment resolution. To address the previous comment, a new Section 6.2.5 was added to explain the WAG 10 involvement. Second, the ecological risk was not quantitatively evaluated, the hazard quotient numbers given are based on preliminary screening. Further evaluation will be performed by WAG 10.
9	Part II, Table 9-5	9-26	The format of this table needs to be revised. The IDAPA citations have not consistently been listed first, followed by the 40 CFR citation in parentheses. Please refer again to IDHW/DEQ draft ROD comment #31.	Comment incorporated. The table was corrected to list the IDAPA citations first, followed by the 40 CFR citation in parentheses.

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<b>GENERAL COMMENTS</b>				
1	General Comments		Regarding the ARAR tables, please add the Region 10 Institutional Control Guidance as a TCB.	Comment incorporated. The final institutional control policy was added as a To-Be-Considered in all ARAR tables.
2	General Comments		In an earlier discussion the need for a concise summary that meets the needs of the new EPA ROD guidance was noted. However, this summary was not found during the review. Is this still to be incorporated?	Per the 9/23/99 teleconference and subsequent e-mail, the data certification checklist has been included at the end of the Declaration, in a new section, "ROD Data Certification Checklist" with referenced sections or pages given in parentheses.
<b>SPECIFIC COMMENTS</b>				
1		iii	Include some language about the disposition of any future sites. A brief discussion about how these sites will be addressed is needed. This helps allay concerns about any sites that have yet to be discovered or are "co-located sites".	Comment incorporated. The second paragraph from Section 10 was inserted as a new third paragraph in the Statement of Basis and Purpose.
<b>Part II</b>				
2	3	3-1	The community relation plan should also be mentioned as one of the major activities. Even though it is not specific to this WAG, it is an important piece of the community relations plan. Also, any fact sheets that were distributed for this OU should be noted in this section.	New text was added to the first paragraph which mentions the community relation plan. Fact sheets are mentioned in the second paragraph and new text was added to the tenth paragraph in Section 3.
3	7.1.2.1	7-3	It is not clear what treatment would occur on site. The AMWT facility is not considered on site. Please explain what facility one anticipates using.	The text was revised from on-site to "within the boundaries of the INEEL."
4	7.1.3.1	7-5	It is EPA recollection that the decision has been made that in situ stabilization does NOT meet ARARs.	Comment noted, per EPA e-mail the followings text was added: "Both variations of Alternative 3 would protect human health and the environment. However, the IDHW has determined, after the release of the proposed plan, that the V-Tanks are part of a tank system and are subject to State of Idaho Hazardous Waste Management Act closure requirements. Based on this information, In Situ Stabilization does not meet ARARs since this technology will not meet the LDR ARARs."

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5	7.1.4	7-7 last paragraph	EPA recommends the following rewrite; "... noted that if implementation of the selected remedy have not been achieved within 5 years from the signature of this ROD the agencies will reevaluate ..."	Comment Incorporated.
6.	7.2.1	7-10 first two paragraphs	The first paragraph implies that there is free liquid in the tank. The next paragraph correctly notes that there is no free liquid in the tank. EPA recommends revising the first paragraph.	The text in the first paragraph was changed to state that the total volume of waste is ... Liquid and sludge reference was deleted.
7	7.2.2.2, 7.2.4	7-16, 7-20	If data indicates that treatment in the form of stabilization is not required why discuss it? If it is needed it should be costed in the remedial action.	Comment noted. The inclusion of language regarding treatment of tank contents is included in the event that treatment is required, although not currently anticipated. The costs for treatment were not included in the cost estimate because treatment is not anticipated.
8	Table 7-5	7-21	If O & M doesn't apply to this action why list it?	Comment noted. O&M is listed in all ROD cost tables for consistency and also to show that O&M costs were considered.
9	Table 7-6	7-25	RCRA Subpart X is listed as an ARAR. What treatment system does DOE envision using that requires this as an ARAR?	Per 9/22/99 teleconference, this ARAR is cited in the event that treatment will be required to stabilize the PM-2A Tank contents.
10	8.1.2.2	8-3	This section should include some discussion about the excavation of Snake Ave.	Comment noted. The bullets in the Declaration and in Section 8.1.4 were revised to include removal of Snake Avenue and sampling of the road base.
11	8.2.4	8-15, 1 <sup>st</sup> bullet	Please correct the typo that indicates the PM-2A tanks are the associated with this site.	Comment incorporated. This first bullet was deleted and the first bullet for TSF-07 on Page vi was inserted as the corrected first bullet.
12	Table 8-6	8-18	Note that the COCs at this site are radionuclides. RCRA does not regulate rad. Please remove RCRA citations in this table.	These ARARs were added per the IDHW comments on the Draft ROD. These ARARs are not restrictive and are considered to be R&A since hazardous waste was disposed at this site.
13	9.1	9-1	EPA recommends a discussion of the extent of contamination be included in this section. For example, note the area of contamination for each burn pit.	Text was added to provide surficial boundary dimensions.

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14	9.1.2.3	9-5, parag. 1&3	The discussion is not consistent. In the first paragraph it is stated that no treatment is required. In the third paragraph it is stated that Alt. 3b may reduce toxicity and mobility through treatment, if required. Why would this not be the same for 3a?	The fourth paragraph, third and fourth sentence was modified as follows: "Both variations of Alternative 3 would not reduce toxicity, mobility, or volume of the contaminants through treatment unless treatment to meet waste acceptance criteria is required."
15	9.1.4.3	9-7, 3 <sup>rd</sup> parag.	This paragraph states that 10' of soil will be placed on the burn pits. This has been discussed numerous time and a 10' cap is probably not necessary. If this cap height is being used for costing purposes it should be clearly stated. What is needed is a stand off cap that will be less permeable than the underlying soil and is sloped for drainage.	The paragraph in question was modified as comment recommended.
16	Table 12-1	12-12, TSF-28	Please check and insure that this site requires ICs.	The Track 2 Decision Statement determined the site needed further evaluation; however, a verbal agreement between the Agencies during the preparation of the RI/FS classified the site as "No Further Action" in the RI/FS and Proposed Plans. Further sample data is needed to document this determination and to perform a risk assessment to quantify the site risk.
17	13	13-1	Note the start date for the five year review is the start of the first remedial action not the completion. Also, the discussion of the how to deal with new sites is absent from this version of the ROD. It needs to be included somewhere, if not here.	Comment incorporated. First sentence of third paragraph revised. Discussion of how to address new sites is in Section 10.
18	Part III	1-1, second paragraph	Please provide the dates of the three public meetings: for example-"formal statements at three public meetings, held on Sept. 23, Sept. 25 and Oct. 1, 1998."	Comment incorporated. The dates for the formal statements at three public meetings were included (February 23, 24, and 26 1998).
19		1-2, last bullet	The discussion of the alternative for the diesel spill site in Part II does not correspond to this discussion. Please make it clear in the discussion in Part II that this is being implemented with a phased approach.	The word "phased" was removed from the last sentence of the bullet. The remedial action for the fuel leak will not use phased implementation.

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20		2-5	Question 6. RAO's provide a general description of what the cleanup will accomplish, e.g. restoration of the groundwater. PRGs are the more specific statements of the desired endpoint concentrations or risk levels, for each exposure route, that are believed to provide adequate protection of human health and the environment. PRGs are refined into final contaminant specific cleanup levels. This response appears to be discussing clean up levels.	Comment incorporated. The response was revised to accurately describe RAOs and the FRGs that were established to meet the RAOs.
21		2-12, 1 <sup>st</sup> full paragraph	This paragraph states that Bldg 616 will be investigated under CERCLA within 5 years. Given the issues that have come up regarding this site, EPA recommends that the text remain silent about under what regulations this action will occur.	Comment incorporated. The words "Under CERCLA within 5 years" was removed from the paragraph.
22	2.3.1.2	2-24	Please revise the discussion of ARAR waivers. The issue is not that they are difficult to obtain. This implies that we just did not want to put forth the effort to obtain a waiver. The issue is that there are specific requirements that must be met and concurrence of the State is required in order for a waiver to be obtained. Also, the remedy must still be protective.	Comment incorporated. The response was revised as suggested.
23	Appendix A		Do not use this format in the future. If one addresses comments one by one there is no need to address concerns as a group.	Comment noted. It was agreed in earlier discussions that the actual comments should be included as an Appendix to the ROD.
24	IDHW Cost Table	2	<b>New "IDHW" Cost Tables</b> This table includes costs for offsite treatment of the PCB contaminated PPE. It is EPA recollection that in a previous discussion the decision was made that this waste could be buried at the ICDF based on the TSCA "megarule". Please explain why off-site disposal is necessary.	It is not yet known whether the IDW will be accepted into the ICDF. Cost for disposition of IDW was estimated assuming that 10% of the total volume will require off-Site treatment prior to disposal.
25	RD/RA Cost Table	8	<b>New "Economy of Scale" Cost Tables</b>  The first three subsets note costs for RA reports for the sites. Combining these subsets indicates that the cost for a RA report for this site is approx. \$300,000. This appears to be a very large cost for an RA report. In comparison, WAG 7-08's RA report costs approximately \$5,000. Please review these costs.	Per the 9/22/99 teleconference, it was clarified that the first two subsets are for the Remedial Action Report (one for TSF-03, -09, -18, -26, and WRRTF-01 and another for TSF-06, -07, and WRRTF-13). The third subset is for the first WAG 1 5-year review. Costs for this first 5-year review are conservative and estimate costs for the planning and development of future 5-year reviews. Line item title of third subset changed for clarity.

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26	Last table	9	The last subset on this table appears to indicate a cost of \$540,000 for a 5 year review. Note that EPA and possibly the State are responsible for writing the 5 year review documents. The 5 year review is just a condensation of the previous years O&M results and should not result in additional work for DOE. Please review these costs.	Per the 9/22/99 teleconference, the \$540,000 cost indicates the cost to prepare data for the 5-year reviews for the next 100 years, after the first five year review. The line item title was revised of this subset was changed for clarity.