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START



Department of Energy

Richland Field Office

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95-PCA-001

Mr. David L. Lundstrom
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Nuclear Waste Program
State of Washington
Department of Ecology
1315 West 4th Avenue
Kennewick, Washington 99336

Mr. Douglas R. Sherwood
Hanford Project Manager
U.S. Environmental Protection Agency
712 Swift Boulevard, Suite 5
Richland, Washington 99352

Dear Messrs. Lundstrom and Sherwood:

TRANSMITTAL OF THE 200 WEST AREA ASH PIT DEMOLITION SITE CLOSURE PLAN,
REVISION 1 (T-2-2)

The enclosed 200 West Area Ash Pit Demolition Site (Ash Pit) Closure Plan, Revision 1, (T-2-2), and the 200 West Area Ash Pit Demolition Site Closure Plan Notice of Deficiency Comment Response Resolution Table are submitted by the U.S. Department of Energy (DOE), Richland Operations Office (RL) and the Westinghouse Hanford Company (WHC) for review by the State of Washington Department of Ecology (Ecology). Submittal of these documents by October 6, 1994, fulfills the agreement made by RL and Ecology during the Unit Managers' Meeting held May 24, 1994. The State Environmental Policy Act Checklist forms for the Ash Pit Closure Plan, Rev 0, November 1992 have remained unchanged and will not be included in this transmittal. The Part A will be transmitted to the U.S. Environmental Protection Agency (EPA) and Ecology once it is certified by DOE-RL.

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Copies of this transmittal will be distributed to representatives of your respective organizations as follows:

- D. L. Duncan, EPA
- F. Ma, Ecology, Kennewick
- Ecology Library, Lacey



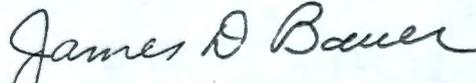
Messrs. Lundstrom and Sherwood
95-PCA-001

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Should you have any questions or require any additional information regarding this submittal, please contact Ms. E. M. Mattlin of RL on (509) 376-2385 or Mr. F. A. Ruck III of WHC on (509) 376-9876.

Sincerely,



for James E. Rasmussen, Acting Program Manager
Office of Environmental Assurance,
Permits, and Policy
DOE Richland Operations Office

EAP:EMM



William T. Dixon, Manager
Environmental Services
Westinghouse Hanford Company

Enclosure:

1. Ashpit Closure Plan
2. Ashpit Comment Response
Resolution Table

cc w/encl:

Administrative Records, WHC
B. Burke, CTUIR
D. Duncan, EPA
R. Jim, YIN
F. Ma, Ecology
D. Powaukee, NPT
S. Price, WHC
F. Ruck III, WHC

cc w/o encl:

W. Dixon, WHC
R. Pierce, WHC
R. Stanley, Ecology

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No.	Comments/Response	Concurrence
1.	<p>Deficiency. The level of detail of several chapters in this closure plan is inadequate.</p> <p>Requirement. The closure plan must contain enough detail to allow the evaluation of whether:</p> <ul style="list-style-type: none">a. the activities described in the plan satisfy the regulations, orb. the conditions assumed in the plan adequately reflect actual conditions of the unit. <p>RL/WHC Response: Comment is too general to address. The level of detail in this closure plan is similar to the level provided in other closure plans which are nearing final approval by Ecology.</p> <p>Ecology Response: Increasing the level of detail of the closure plan will reduce the amount of time and effort necessary to review and revise the document. As far as comparing the level of detail with other closure plans, thus far no closure plans have been approved and conditions can be written into the plan to address deficiencies noted by the regulators.</p> <p>Ecology/RL/WHC Resolution: A parties have agreed that with the incorporation of the resolved NOD comments and DQO discussions that the level of detail in the closure plan will be satisfactory.</p>	
2.	<p>Deficiency. Throughout the closure plan there are references to using only a mobile laboratory for sampling and analysis. It is not stated that this is an EPA accredited laboratory or if any secondary or follow-up analysis will be conducted at an accredited laboratory.</p>	

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	<p>If the EAL is not available to support sampling at the 200-W Ash Pit site, then sample analysis would have to be performed by an off-site contractor laboratory. The following schedule forecast would apply in the event:</p> <ul style="list-style-type: none">- Sampling: 1 week (no change)- Off-site analysis: 12 weeks (9 weeks longer than shown for EAL)- Data Evaluation: 12 weeks (no change) <p>Off-site analysis would add 9 weeks to the initial (investigation) phase of soil sampling. Because the EAL is now offering Analytical Level II services, rather than Level III, an additional round of confirmatory sampling will be required. The breakdown for off-site analysis (listed above) will increase the schedule in Figure 7-2 by 25 weeks.</p> <p>Ecology Response: Concur with part of revisions of the closure plan to reflect the information provided in the response. However, the increase of 25 weeks is not acceptable according to the Tri-Party Agreement (TPA). In TPA Section 9.6.2, it is stated that non-rad waste analyses have a maximum turnaround time of 50 days. Also in TPA Section 9.6, the maximum validation and transfer times are 21 and 15 days, respectively. Thus, the maximum per Sample Delivery Group (SDG) should be 86 days. Revise the text accordingly.</p> <p>Due to suspect reporting and record keeping of wastes managed at a similar TSD (218-E-8 Borrow Pit), Appendix IX analysis of 40 CFR part 264 will be required at this unit.</p> <p>Ecology/RL/WHC Resolution: The mobile laboratory will not be used for these clean closure activities. Throughout the closure plan references to using the mobile laboratory will be removed. Offsite laboratories</p>	

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3.	<p>capable of EPA analytical level III will be used for all soil samples. All parties agree that Appendix IX analysis of 40 CFR part 264 will not be required at this unit, because all parties have accepted the list of discarded explosive chemical products in chapter 4 as accurate and complete.</p> <p>Comment. The closure plan also cites many internal Westinghouse procedural manuals. It is not clear if these documents fulfill the EPA/Ecology requirement</p> <p>RL/WHC Response: Copies of requested WHC Control Manuals cited in the closure plan were furnished to an Ecology, Kennewick Unit Manager representative.</p> <p>Ecology Response: Concur. Copies of WHC's manuals referenced should be sent to the Department of Ecology's Kennewick office.</p> <p>Ecology/RL/WHC Resolution: WHC's manuals must be assigned to a specific responsible person who is willing to be accountable for updating and maintaining control documents. Therefore no unassigned control reference manuals will be issued.</p>	
4.	1-1, 13	<p>Deficiency. States that, "this event was a form of thermal treatment for <u>spent</u> or <u>abandoned</u> chemical waste." This is inconsistent with the waste description provided in Chapter 3, Process Information. Chapter 3.0 describes the waste as excess or beyond shelf life. If this is the case, then the materials are not spent waste. The contradiction must be corrected because it affects the waste designation.</p> <p>Requirement. Specify the source or process which generated the waste and the form (product versus spent/used material) in which it was</p>

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
5.	<p>1-1, 20 Deficiency. The plan does not present adequate information to determine if the waste has been properly designated. Information regarding the source of the waste (i.e., process derived from) and a distinction between wastes disposed in commercial form and those which were spent material is necessary to make such a determination.</p> <p>Requirement. See previous comment (4).</p> <p>RL/WHC Response: See comment 4. Waste characterization per WAC 173-303 is summarized in Table T4-1. The waste codes in Table T4-1 also indicate that the chemicals were not spent.</p> <p>Ecology Response: The waste codes in Table T4-1 do indicate that the material was not spent, but the table fails to provide enough information to adequately designate the waste. The sources of information provided are inappropriate for the purposes of waste designation.</p>	

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No.	Comments/Response	Concurrence
6. 2-2, 1	<p>Ecology/RL/WHC Resolution: Table T4-1 doesn't attempt to explain waste designation or to provide data to allow waste designation. Waste designation Codes are based on WAC 173-303 and are formally available in the Part A, form 3. Table T4-1 will be revised removing all waste codes and adding health-based limits.</p> <p>Deficiency. The description of the demolition site does not provide adequate detail to allow potential exposure pathways to be evaluated.</p> <p>Requirement. Provide description of depth to water table, soil characteristics, meteorological information, and waste containment, if any, used during the detonation. Because the events do not appear to have been contained, these conditions may have significantly influenced the dispersion of contaminants. Therefore, incorporate these factors into the development of an appropriate sampling and analysis plan.</p> <p>RL/WHC Response: <u>Meteorological Information:</u> Chemical detonations at this site were performed under the following weather conditions:</p> <p>Detonation Date: November, 1984</p> <ul style="list-style-type: none">• Wind speeds: less than 15 m.p.h.;• Temperature: @45° F;• No rain or snow;• No chance of electrical storms. <p>Detonation Date: June 25, 1986</p> <ul style="list-style-type: none">• Wind speed: @10 m.p.h.;• Temperature: @95° F;• Clear skies, no rain;• No chance of electrical storms.	

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7.	<p data-bbox="443 387 1606 483">The surface soils were dry when the detonations were performed at this site. All chemicals detonated were contained in their original, closed containers until released by explosive forces.</p> <p data-bbox="443 520 1339 552">Depth from soil surface to groundwater is 250-260 feet.</p> <p data-bbox="443 584 1472 616">The text will be revised to reflect the proceeding information.</p> <p data-bbox="443 651 1619 746">Ecology Response: Concur with the addition to the text of the information provided in the response, but the source of information must be provided.</p> <p data-bbox="443 783 1587 879">Ecology/RL/WHC Resolution: Information has been incorporated into the text and is located in Chapters 3 and 5. Source of information are WHC documents, referenced in the revised text.</p> <p data-bbox="443 914 1606 1010">Deficiency. The text states that portions of the ash pit were used for other activities. It is not evident from the discussion if these activities impacted the ash pit or not.</p> <p data-bbox="443 1042 1587 1106">Requirement. Specify if activities not associated with the demolition events were conducted in or adjacent to the demolition site.</p> <p data-bbox="443 1142 1619 1334">RL/WHC Response: The text states that the Ash Pit Demolition site is only 20' by 20' area and is situated within a huge borrow pit (with the dimension of 600 feet by 800 feet). Both the burning and soil removal activities occurred away from the detonation site. There were only two known demolition activities at the demolition pit. Please see page 2-2, line 14-15.</p> <p data-bbox="443 1370 1360 1402">Ecology Response: Concur with the addition to the text.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
8.	<p>2-2, 22 Deficiency. It is not clear how the boundary of the demolition site was determined.</p> <p>Requirement. Provide rationale for boundary determination. The boundary of the site may have to be revised if contamination from the unit is detected outside the designated area.</p> <p>RL/WHC Response: Please see page 2-2, line 20. At the time the fence was placed at the demolition site, there was still a depression in the soil from the blasting pit. If contamination from the unit is detected outside the designated area, the boundaries will be adjusted accordingly.</p> <p>Ecology Response: Concur with the adjustment of unit boundary based on sampling and analysis data. The sampling and analysis of areas outside the present arbitrary boundary must be included in the closure plan.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process sampling locations and analytical methods were agreed upon. Agreements are documented in the Sampling and Analysis Plan, located in Appendix 7C in the closure plan.</p>	
9.	<p>2-2, 27 Note. This section of the closure plan, Security Information, may require revision due to the recent and upcoming security downgrades on the Hanford Site.</p> <p>RL/WHC Response: Accepted. Text will be revised to reflect any new security changes to the Hanford Site.</p>	

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No.	Comments/Response	Concurrence
Ecology Response: Concur.		
10. 3-1, 1	<p>Deficiency. A major deficiency of the plan was information on the actual demolition event. The process information chapter does not provide a description of the event or associated actions. For example, was any post-treatment analysis conducted to verify treatment, or physical interaction with the site such as racking, shoveling, or watering down? Was waste containerized or free in pit during detonation? How were waste containers managed during and after the event? What color, how high, how wide was the explosion? Was material seen or heard hitting the ground?</p> <p>Requirement. Provide a detailed narrative of the event and associated actions. The following questions need to be addressed:</p> <ul style="list-style-type: none">a. Was the waste poured directly on the ground, allowing wastes to be forced into the ground by the explosion?b. How were the waste containers managed during and after the event?c. What were the environmental conditions at the time?d. How, or was, waste inventory verified? <p>RL/WHC Response:</p> <ul style="list-style-type: none">a. No container contents were poured onto the ground prior to detonation. The chemicals were detonated in their containers because opening the cap of the container could have initiated an explosion.b. Prior to detonation, the containers were placed in a small pit, wrapped in detonating cord (on a separated blasting cap), surrounded with a blasting agent. The charges were configured in a manner that channeled the explosive force downward.	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
	<p>There was no evidence of remaining explosives, chemicals, or containers after the detonations, with the exception of the sides of one metal container from the 1986 detonation. The partial container was completely empty and burned. The remains of the container was disposed of in a sanitary landfill.</p> <p>c. Refer to RL/WHC response to NOD #6.</p> <p>d. A checklist of the chemical inventory was prepared prior to beginning detonation activities. The potentially explosive chemicals were checked off the list as they were placed into a portable bomb containment vessel for transportation to the demolition site. Information from the checklist was used to prepare the Dangerous Waste Annual Report.</p> <p>The text will be revised accordingly in order to reflect the proceeding information.</p> <p>Ecology Response:</p> <p>a. Concur with addition of this information in text.</p> <p>b. Concur with addition of this information in text. Elaborate on the impact to waste deposition.</p> <p>Note. Disposal of the remnants of a waste container in a sanitary landfill was inappropriate, due to the fact that without analysis, it was not possible to determine if the container contained a listed waste or not. If it did, the container would have been considered a listed waste.</p> <p>c. Refer to comment on NOD No. 6.</p>	

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No.	Comments/Response	Concurrence
11.	<p>d. Quality control or verification documentation for the chemical inventory detonated at the unit does not appear to exist. Soil sampling and analysis will require enhancement to assure potential contamination is not missed. Modify text to incorporate Appendix IX of 40 CFR part 264.</p> <p>Ecology/RL/WHC Resolution: (d) The inventory has been corrected and approved by all parties. Text has been revised to reflect accepted inventory. All parties agree that Appendix IX analysis of 40 CFR part 264 will not be required at this unit.</p> <p>Deficiency. This section of the plan describes the wastes as "excess or beyond designated stock life." Page 1-1, line 11 states that "this event was a form of thermal treatment for <u>spent</u> or <u>abandoned</u> chemical waste."</p> <p>Requirement. Specify the source or process which generated the waste and the form (product versus spent/used material) in which it was disposed. Consult the Dangerous Waste Regulations, Washington Administrative Code (WAC) 173-303-070 for designation guidance.</p> <p>RL/WHC Response: See comment #4.</p> <p>Ecology Response: Concur with the revision of text to reflect the form in which the wastes were disposed.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all parties agreed that the text would be revised to state " This demolition event was a form of thermal treatment for discarded explosive chemical products."</p>	
12.	<p>3-1, 25 Deficiency. The text states that chemicals were placed at the bottom of the pit with detonation devices placed around and on top of the</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
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chemicals. There is no discussion of how, or if, the waste was containerized.

Requirement. Provide a detailed description of the number, composition, volume, and management practices of the containers associated with the wastes detonated at the site. Were the containers, or pieces of containers, removed from the site? If so, how were they managed? State exactly how the wastes were placed in the pit (i.e., poured out of containers).

Note. Placement of the detonation devices on top of the waste is of concern because it may have forced the waste into the soil due to the force of the explosion.

RL/WHC Response: See comment response #10. In response to the note, the shape of the charge was configured in a manner which initially directed the explosive force downward, but due to the confines of the earthen pit, the force reversed to an upward direction (the path of least resistance). Confining the heat and pressure of the explosive force around the chemicals increased the efficiency of destruction.

Ecology Response: See NOD No. 10 response.

Ecology/RL/WHC Resolution: Detailed descriptions of the detonation event and the placement of waste were located in Chapter 3. In Chapter 3, lines 36-40, the text has been revised to read " There was no evidence of remaining explosives, chemicals, or containers after the detonations, with the exception of the sides of one metal container from the 1986 detonation. The partial container was found empty and burned. The remains of the container were disposed in a sanitary landfill." Table 4-1 list the amounts and number of discarded explosive chemical products.

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
13.	<p>3-1, 27 Deficiency. Detonation materials are not included in the scope of sampling and analysis. These materials are now dangerous waste, because they were both derived from the treatment of dangerous waste and now are potentially mixed with dangerous wastes.</p> <p>Requirement. The explosives used to initiate the detonation (and any regulated products potentially generated from the detonation) must be incorporated into the sampling and analysis plan.</p> <p>RL/WHC Response: The chemicals used to initiate the detonation will be listed in a separate table in Chapter 4. The sampling plan will be modified to reflect the additional analytes.</p> <p>Ecology Response: Concur with the inclusion of detonation materials in list of analytes. Also include reaction and/or decomposition products as analytes. Additionally, due to suspect reporting and record keeping of wastes managed at a similar TSD (218-E-8 Borrow Pit), Appendix IX analysis of 40 CFR part 264 will be required at this unit.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process sampling locations and analytical methods were agreed upon. Agreements are documented in the Sampling and Analysis Plan, located in Appendix 7C in the closure plan. All parties agree that Appendix IX analysis of 40 CFR part 264 will not be required at this unit, because all parties have accepted the list of discarded explosive chemical products in chapter 4 as accurate and complete.</p>	
14.	3-1, 29 Comment. The text states that inspections were conducted following the detonation event.	

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No.	Comments/Response	Concurrence
15.	4-1	
	<p>Requirement. Provide detailed description of the focus of inspection, environmental conditions, size, and intensity of the explosion, and any "unofficial" inspection reports or records.</p> <p>RL/WHC Response: After each detonation, the site was inspected to ensure that no explosives, chemicals, or containers remained after the shot. After the 1986 detonation, the soils in and surrounding the pit were surveyed with a organic photoionizer (with an 11.2 ev probe) to determine if there were any residual volatile organics. There were no reading above background.</p> <p>Because the 1984 detonation was at night, the area was searched with spotlights and flashlights after the detonation. The area was reinspected the following morning after daylight. No containers were found.</p> <p>The size of the detonations were not recorded and therefore the description would be nebulous.</p> <p>Ecology Response: Insert information provided in response into closure plan.</p> <p>Ecology/RL/WHC Resolution: Information has been incorporated into the text and is located in Chapter 3.</p> <p>Deficiency. This chapter provides some valuable information, but overall it is inadequate.</p> <p>Suggestion. Incorporate a column specifying the waste source (i.e., spent or in commercial form), the physical state, and action levels.</p>	

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No.	Comments/Response	Concurrence
16.	T4-1	
	<p>RL/WHC Response: Health-based cleanup thresholds will be provided in the next revision of this closure plan, for those constitutes for which appropriate toxicity information is available.</p> <p>Ecology Response: The response does not address the deficiencies noted. Because sections -700 to -760 of MTCA is expected to be incorporated into the Dangerous Waste Regulations before implementation of the closure plan, it is appropriate to incorporate MTCA standards (see draft clean closure guidance). But the information regarding the waste source and physical state will be required to be incorporated into the closure plan.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all parties agreed that to meet criteria for clean closure of the Ash Pit Demolition Site, the soil sampling and analytical results must verify that the levels of discarded explosive chemical products derived from the Ash Pit Demolition Site operations are below action levels. Agreed action levels are defined as levels above the Hanford Site soil background levels identified in <i>Hanford Site Background: Part 1, Soil Background for Nonradioactive Analytes</i> and Model Toxic Control Act (MTCA) Method B levels. Since Hanford Site soil background levels and MTCA Method B levels are the closure criteria agreed upon by all parties it reasonable that those levels would be provided in Table 4. The physical form of the discarded explosive chemical products and initiator will be indicated in Table 4-1.</p> <p>Deficiency. Several blanks exist on the second and third page of the table. This is inappropriate. The missing components of the table and the statement that "the known inventory of chemicals that were detonated is listed in Table 4-1" (4-1, 12) raises concerns regarding the accuracy of the information presented.</p>	

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No.	Comments/Response	Concurrence
17.	T4-1	
	<p>Requirement. Provide the missing information.</p>	
	<p>RL/WHC Response: The blank spaces indicate that the chemicals are part of a mixture and the total amount of those mixtures are shown at the beginning of each mixture listing. The table will be revised to clearly indicate chemical mixtures.</p>	
	<p>Ecology Response: Concur.</p>	
	<p>Deficiency. It is not apparent how the dangerous waste codes presented in Table T4-1 were determined, or if they are correct. The sources of information are not appropriate for the purpose of designating waste.</p>	
	<p>Requirement. Correct deficiencies and discrepancies of text.</p>	
	<p>RL/WHC Response: The chemicals were treated in their original containers and assumed to be either outdated or not needed. These chemicals were designated according to WAC 173-303. Any assumptions concerning waste sources were conservative (i.e., in instances where the applicability of a code was uncertain, it was assumed to be applicable). Waste characteristics were derived from known physical properties and toxicity information available for the waste constituents.</p>	
	<p>Ecology Response: Concur with response. Revise the closure plan to reflect the information provided in the response.</p>	
	<p>Ecology/RL/WHC Resolution: Information on the discarded explosive chemical products has been incorporated into the text and is located in Chapters 3 and 4.</p>	
18.	T4-1	
	<p>Deficiency. The detonation material is potentially regulated dangerous waste. However, the material and its products are not designated.</p>	

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19.	<p>T4-1</p> <p>Requirement. Correct deficiencies and discrepancies of text. Designate the material.</p> <p>RL/WHC Response: See comment response #13.</p> <p>Ecology Response: Concur.</p> <p>Deficiency. An asterisk is present on the "D" symbol in the key list following Table 4-1, typically indicating a reference to a clarifying statement, but no footnote or explanation is provided.</p> <p>Requirement. Correct deficiencies and discrepancies of text.</p> <p>RL/WHC Response: Asterisk will be removed from Table 4-1.</p> <p>Ecology Response: Concur.</p>	
20.	<p>5-1</p> <p>Deficiency. The text states that the Tri-Party Agreement (TPA) authorizes ground water to be remediated under CERCLA without intermittent RCRA monitoring. This is not correct. RCRA monitoring is required, but it may be coordinated with CERCLA monitoring.</p> <p>Requirement. Modify the text accordingly.</p> <p>RL/WHC Response: The text will be revised as follows: "The Ash Pit Demolition site is not subject to the groundwater monitoring requirements of WAC 173-303-610 (7)(a) if there is not waste left in place, as is consistent with the preferred closure strategy (Chapter 6.0) The Ash Pit Demolition site will not be operated, and has not been operated as a dangerous waste surface impoundment, waste pile, land treatment unit, or landfill as defined in WAC 173-303-645(1)(a).</p>	

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No.	Comments/Response	Concurrence
21.	<p data-bbox="438 357 1591 419">Therefore, if clean or protective closure can be attained, groundwater monitoring is not required."</p> <p data-bbox="438 457 720 480">Ecology Response:</p> <p data-bbox="438 523 1230 547">a. Give the definition of "Protective Closure."</p> <p data-bbox="438 590 1625 746">b. 200 W. APDS is regulated as a miscellaneous unit under WAC 173-303-680(4). The regulation requires that the unit must meet the postclosure care requirements of WAC 173-303-680(2), if the contaminated soils or ground water cannot be completely removed or decontaminated during closure.</p> <p data-bbox="438 788 1625 976">Ecology/RL/WHC Resolution: Text referring to Protective Closure has been removed. Clean closure is the objective of this closure plan. The criteria for clean closure is if sample analysis results indicate that the constitutes of concern are at or below action levels as defined in the closure plan. Postclosure monitoring is not required if clean closure is attained.</p> <p data-bbox="438 1018 1360 1041">Requirement. Action levels must be approved by Ecology.</p> <p data-bbox="438 1084 1461 1147">Suggestion. A table should be generated which integrates this information in Table 4-1.</p> <p data-bbox="438 1188 1577 1280">RL/WHC Response: Action levels will be prepared for inclusion in the next revision of this closure plan. Proposed action levels will be health based cleanup thresholds.</p> <p data-bbox="438 1322 1604 1414">Ecology Response: Although the term "action levels" is defined within the closure plan as "concentrations of analytes of interest that prompt an action . . . ," the term is not defined by WAC 173-303. As the</p>	

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22.	<p data-bbox="436 371 1598 563">closure plan addresses a RCRA unit, and to avoid confusion on this subject, delete the term "action level." It should be noted that a definition for "cleanup level" is provided by WAC 173-340-200 which may be utilized by reference of proposed WAC 173-303-610 (scheduled to promulgated in Dec. 1993 to amend WAC 173-303-610 to include WAC 173-340-700 through 760 except 745).</p> <p data-bbox="436 600 1583 759">Ecology/RL/WHC Resolution: Through the DQO process, action levels were defined and agreed to by all parties, as levels above the Hanford Site soil background levels identified in <i>Hanford Site Background: Part 1, Soil Background for Nonradioactive Analytes (DOE-RL 1993)</i> and Model Toxic Control Act (MTCA) (WAC 173-340) Method B levels.</p> <p data-bbox="436 794 1566 986">Deficiency. Table 7-1, referenced here, is said to take into account waste inventory, reaction products, and chemical degradation. The following sentence states that only analytes listed in Table 7-1 are traceable to the demolition site. Table 7-1 does not account for all wastes detonated at the site or potentially regulated reaction or degradation products.</p> <p data-bbox="436 1023 1583 1150">Requirement. The closure plan must account for all dangerous wastes associated with the detonation site. This includes dangerous wastes generated from the treatment of the original wastes and materials used to treat the waste (i.e., the detonation materials).</p> <p data-bbox="436 1187 1619 1378">RL/WHC Response: Text on Page 6-1, Lines 19-23 will be modified to read as follows: "The basis for determining chemical ownership is the list of analytes of interest found in Chapter 7.0, Table 7-1, <u>as qualified by the discussion in Section 7.2.2. Only those analytes identified in Section 7.2.2 and/or Table 7-1</u> are traceable to the Ash Pit Demolition Site activities."</p>	

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23.	<p>6-1, 23</p> <p>Table 7-1, as qualified by the discussion in Section 7.2.2, accounts for all dangerous wastes associated with the detonation site. Regarding the detonation materials, refer to NOD # 18 comment response.</p> <p>Ecology Response: Refer analytes traceable to the Ash Pit Demolition Site activity to NOD No. 2 response. Refer waste generated from the detonation event and the detonation materials to NOD No. 13 response.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p>Note. The plan states, "if at any time an imminent hazard is posed at the Ash Pit Demolition Site, an expedited response will result to ensure worker safety."</p> <p>Requirement. Closure of the site must be conducted in a manner consistent with the closure plan. Deviation from the closure plan must be approved by Ecology.</p> <p>RL/WHC Response: The word "expedited" will be replaced with the word "emergency" in order to clarify the sentence.</p> <p>Ecology Response: Concur with the correction.</p>	
24.	<p>6-1, 31</p> <p>Deficiency. The plan states that background will be site-wide background threshold values as defined in the Hanford Site Soil Background (DOE/RL 1992a).</p>	

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25. 6-1, 34	<p>Requirement. Ecology must review and approve the Hanford Site Soil Background study (DOE/RL 1992a) before the values can be implemented for closure.</p> <p>RL/WHC Response: Ecology has reviewed and approved <u>the Hanford Site Soil Background Study</u> (DOE/RL 1992a).</p> <p>Ecology Response: Ecology did receive <u>The Hanford Site Soil Background</u> (DOE/RL 1992d). However, the document was considered incomplete. There is still a huge task ahead in order to finish the site-wide background analysis (see detail in the memo from Charles Cline, WA State Department of Ecology, to Steven Wisness, US DOE, dated May 10, 1993).</p> <p>Requirement: Ecology must review and approve the <i>Hanford Site Soil Background</i> for RCRA closures before the values can be implemented for closure..</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all parties have agreed to use Hanford Site Soil Background levels as one of the criteria for action levels. Also the Hanford Soil Background is listed as a closure performance standard in the Site-Wide Permit, Section II.K.2.</p> <p>Deficiency. The plan states that if concentrations exceed initial action levels, health-based action levels will be assessed. This is not consistent with clean closure standards. It is expected that during the next revision of the Dangerous Waste Regulations, WAC 173-303, that the Model Toxics Control Act (MTCA) will be incorporated into the closure requirements. To date no guidance or policy has been issued allowing this approach to be implemented.</p> <p>Requirement. If the concentration of waste are below (or reduced to) background levels for listed or characteristic wastes or to the</p>	

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No.	Comments/Response	Concurrence
26.	6-1, 37	<p>designation limit for state-only waste managed at the site clean closure will be achieved. If the site is closed with waste left in place post-closure requirements will be imposed.</p> <p>RL/WHC Response: In anticipating the incorporation of cleanup levels rather than environmental background levels, into the Washington State Department Waste regulations, RL contends it is appropriate to use health-based action levels.</p> <p>Ecology Response: Refer the action level to NOD No. 21 response.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all parties agreed that to meet criteria for clean closure of the Ash Pit Demolition Site, the soil sampling and analytical results must verify that the levels of discarded explosive chemical products derived from the Ash Pit Demolition Site operations are below action levels. Agreed action levels are defined as levels above the Hanford Site soil background levels identified in <i>Hanford Site Background: Part 1, Soil Background for Nonradioactive Analytes</i> and Model Toxic Control Act (MTCA) Method B levels.</p> <p>Deficiency. This paragraph discusses the proposed method to determine cleanup levels. It is said that the health-based levels will be based on equations and exposure assumptions presented in the Hanford Site Baseline Risk Assessment Methodology (DOE/RL 1992B). This is not appropriate.</p> <p>Requirement. Health-based levels are determined from the Model Toxic Control Act (MTCA). See two previous comments.</p> <p>RL/WHC Response: RL has attempted to establish a uniform health-based cleanup standard for a range of land-use eventualities (Hanford Site</p>

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No.	Comments/Response	Concurrence
27.	<p>6-1, 47 Deficiency. The plan states that health-based levels will be based on values that are current at the time of approval of this closure plan.</p> <p>Requirement. Ecology must approve all health-based levels implemented for closure.</p> <p>RL/WHC Response: Please see page 6-1, line 44-47. The term "values" in this sentence is referring to the oral reference dose and slope factors obtained for the Integrated Risk Information System (IRIS) (EPA 1991) database, these values may change as IRIS is updated.</p> <p>Ecology Response: Concur.</p>	
28.	<p>6-1, 50 Deficiency. This paragraph discusses remedial activities and coordination with CERCLA remediation if it is determined that the action levels are exceeded.</p> <p>Requirement. CERCLA coordination is acceptable if the time frame and other factors can be integrated with the RCRA closure. But closure of the unit will not be deferred to, or preempted by, the CERCLA remediation. If clean closure is not achieved, post-closure requirements will be imposed, including requirements to assure residual contamination will be addressed during CERCLA remediation.</p> <p>RL/WHC Response: Coordination is planned if clean closure is not achieved. RL would keep Ecology informed on this integration process whenever it occurred. Please clarify the statement that closure cannot be deferred until CERCLA remediation.</p> <p>Ecology Response: Refer the action level to NOD No. 21 response. If clean closure can not be achieved, postclosure requirement will be required regardless if CERCLA remediation is available or not at that</p>	

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No.	Comments/Response	Concurrence
29.	6-2, 10 Requirement. Simply cite the regulations or incorporate the entire section. Ecology/RL/WHC Resolution: Through the DQO process all parties have agreed to develop a phase two investigation if the soil analysis results were determine to be above action levels. Text referring to the contrary has been removed. RL/WHC Response: Reference has been changed to WAC 173-303-610 (2)(a). Ecology Response: Concur with the correction.	
30.	6-2, 36 Deficiency. The plan states that the following actions will be/or have been taken. It is not clear which actions were conducted prior to preparation and approval of the closure plan. Requirement. Actions conducted prior to submittal of the closure plan must be distinguished in order to evaluate the adequacy. RL/WHC Response: Any action that has been already completed will be noted in the text. Ecology Response: Concur with the correction. Ecology/RL/WHC Resolution: Text has been revised to note completion dates of past activities.	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
31.	<p>6-2, 43 Deficiency. This bullet states that the Hanford Site Baseline Risk Assessment Methodology implements WAC 173-304 (MTCA).</p> <p>Requirement. See comment 24.</p> <p>RL/WHC Response: See comment responses # 24 and # 26.</p> <p>Ecology Response: See NOD Nos. 24 and 26 responses.</p> <p>Ecology/RL/WHC Resolution: Reference to Hanford Site Baseline Risk Assessment Methodology has been removed from text.</p>	
32.	<p>6-3, 20 Deficiency. The plan states that the samples will be analyzed in an on-site mobile laboratory capable of performing to EPA Analytical level III standards.</p> <p>Requirement. See comment 2.</p> <p>RL/WHC Response: See comment response #2.</p> <p>Ecology Response: See NOD No. 2 response.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples.</p>	
33.	<p>6-3, 29 Deficiency. Table 7-1, referenced here, provides a list of target analytes that is inadequate because it does not address by-product and degradation products.</p> <p>Requirement. Modify text accordingly. See comment 22.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
34.	<p data-bbox="451 363 1157 397">RL/WHC Response: See comment response #22.</p> <p data-bbox="451 427 1157 461">Ecology Response: See NOD No. 22 response.</p> <p data-bbox="451 491 1564 624">Ecology/RL/WHC Resolution: Through the DQO process constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p data-bbox="451 655 1627 759">Deficiency. This section of the plan addressed contamination at the demolition site above the action levels only in the near-surface soils. It is not appropriate to address only near-surface contamination.</p> <p data-bbox="451 790 1627 951">Requirement. Removal of deeper residual contamination may be coordinated with CERCLA remediation but investigation and planning can not be deferred. If such an approach were implemented a plan would have to be developed to assure that RCRA closure standards would be met by the final remediation.</p> <p data-bbox="451 981 1627 1078">Note. Action levels described here are not consistent with other areas of the text. Health-based levels should not be used to define action levels at this point.</p> <p data-bbox="451 1109 1157 1142">RL/WHC Response: See comment response #48.</p> <p data-bbox="451 1173 1598 1246">Ecology Response: Refer the action level to NOD No. 21 response. See also NOD Nos. 47 and 48 responses.</p> <p data-bbox="451 1276 1627 1414">Ecology/RL/WHC Resolution: Reference to "near-surface" contamination has been removed from text. If levels of constituents of concern are above action levels then a phase two investigation will be developed by all parties concerned.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
35.	<p>7-1, 28 Deficiency. The plan specifies that samples will be analyzed by an on-site mobile laboratory capable of performing to EPA analytical level III standards.</p> <p>Requirement. Explain analytical level III services as it applies to this closure. Specify if the mobile laboratory meets level III requirements. See comment 2.</p> <p>RL/WHC Response: See comment response #2.</p> <p>Ecology Response: See NOD No. 2 response.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples.</p>	
36.	<p>7-1, 32 Deficiency. The text states that portable field-screening instruments will provide adequate information for devising and implementing appropriate remedial actions.</p> <p>Requirement. Specify if more elaborate sampling and analysis will be conducted if constituents are found at significant concentrations.</p> <p>RL/WHC Response: Text is misquoted. Text reads "... the data obtained from soil sampling and analysis (possibly supplemented by data obtained with portable field screening instrumentation) will provide adequate information for devising and implementing appropriate remedial action."</p> <p>Confirmatory sampling (i.e., more elaborate sampling) is proposed to support a regulatory determination of clean closure. There is no technical need or justification for conducting "more elaborate sampling and analysis" to support a remedial action.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
37.	<p>7-2, 27 Ecology Response: The purpose of the plan is to close the demolition site rather than remediate it. In order to clean close the unit, the contaminated soil or ground water should either be removed or decontaminated, otherwise the postclosure care is required. The soil sampling and analysis should emphasize this.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all parties have agreed to develop a phase two investigation if the soil analysis results were determine to be above action levels. Text referring to the contrary has been removed.</p> <p>Deficiency. This paragraph discusses the possibility for the generation of by-products from the detonation event.</p> <p>Requirement. Incorporate regulated products into the analyte list.</p> <p>RL/WHC Response: See comment response #22.</p> <p>Ecology Response: See NOD No. 23 response.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements. Table 4-2 list detonation materials.</p>	
38.	<p>7-2, 34 Deficiency. This paragraph discusses the potential dispersion of waste from the detonation event. This factor will influence the determination of the boundary.</p> <p>Requirement. Modify text to reflect this consideration.</p>	

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39.	<p>7-2, 47 Deficiency. This section refers to the waste inventory list. The waste inventory list is inadequate.</p> <p>Requirement. It must account for all dangerous wastes detonated or generated from the detonation at the site.</p> <p>RL/WHC Response: See comment response #18. Ecology Response: See NOD No. 13 response.</p> <p>Ecology/RL/WHC Resolution: The inventory has been approved by all parties. Text has been revised to reflect accepted inventory</p>	
40.	<p>7-3, 5 Requirement. See comments 38 and 39.</p> <p>RL/WHC Response: See comment responses #22 and #48.</p> <p>Ecology Response: See NOD Nos. 13 and 47 responses.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
41.	<p>7-3, 11 Note. It is stated that the concentrations of any dangerous waste constituents that may remain in the soil after closure would probably exist at very low concentrations.</p> <p>Requirement. Specify whether the mobile laboratory will, or will not, be able to detect such concentrations.</p> <p>RL/WHC Response: Taken out of context; terms such as "low" or "very low" do not have quantitative significance. The intent of the cited statement in context, as indicated in the sentence that follows in the text, is to justify a conservative approach to initial sampling and analysis (as opposed to, for example, doing level I field screening initially). Method detection limits are identified on Pages 7-8 and 7-9.</p> <p>Ecology Response:</p> <p>a. If initial samples at level II (EAL) indicate a "no action," confirmatory level III analyses will have to be done to verify this alternative.</p> <p>b. For every fifth sample, a split has to be taken and sent off for level III analyses. This will help in determining validity of level II analyses as well as give some ICP/AA metals analyses.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Also through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	

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42.	<p>7-3, 15 Requirement. See comment 38 and 39.</p> <p>RL/WHC Response: See comment responses #22 and #48.</p> <p>Ecology Response: See NOD Nos. 13 and 47 responses.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
43.	<p>7-3, 18 Deficiency. Portable field screening instruments are considered level I, not level I or II.</p> <p>Requirement. Modify the text to reflect this consideration.</p> <p>RL/WHC Response: Accepted. See comment response #2.</p> <p>Ecology Response: Concur with the correction.</p> <p>Ecology/RL/WHC Resolution: Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Reference to the use of portable field screening instruments will be removed.</p>	
44.	<p>7-3, 43 Deficiency. It is not clear why Methyl Ethyl Ketone was the only compound selected from the Toxic Characteristics List.</p> <p>Requirement. Provide a thorough discussion of this determination.</p> <p>RL/WHC Response: Text should read "... two target compound list (TCL) compounds: benzene and toluene." Benzene and toluene are the only TCL compounds among the analytes of interest listed in Table 7-1. MEK was</p>	

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45.	<p>7-4, 1</p> <p>inserted in the text in place of benzene and toluene as the consequence of an editing error.</p> <p>Ecology Response: Revise text accordingly to correct errors.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p>Deficiency. There is concern for on-site calibration of instruments. Is it conceivable that the instruments may be less sensitive because of local contamination?</p> <p>Requirement. Provide a discussion to demonstrate that this concern has or will be addressed.</p> <p>RL/WHC Response: The citation discusses preparation or acquisition of solutions that would be used as calibration standards (i.e., for equipment such as gas chromatograph, and GC/MS devices). These types of devices are virtually always calibrated on site, because most of them are fixed equipment. Calibration will be managed and controlled per EAL technical and operating procedures. All proposed EAL analytical procedures, will be submitted to Ecology for review and approval in advance of sampling. These types of devices are virtually always calibrated in place, insofar as they generally are fixed equipment.</p> <p>Ecology Response: Concur.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
46.	<p>laboratories capable of EPA analytical level III will be used for all soil samples.</p> <p>7-4, 28 Deficiency. Table 7-1, cited here, is incomplete. Several metals are present in combined form as indicated by the list provided in chapter 4. Pure metals are not expected to be found at the site.</p> <p>Requirement. Incorporate sampling and analysis for all regulated compounds detonated or generated at the site.</p> <p>RL/WHC Response: Rationale for all modifications and/or deletions to the analytes of interest list are provided on page 7-4, line 38, continuing to page 7-5, line 37.</p> <p>Ecology Response: Concur with the explanations. However, it is required to do metals analysis using SW-846 method nos. 6010, 7421, 7471, 7740, and 7060 at investigative phase. If any metal is found, the same tests will have to be done at the confirmatory phase to prove clean closure.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements. Table 7-1 has been removed from the text.</p>	
47.	<p>7-5, 45 Requirement. The sampling design must be evaluated by a statistician prior to conducting any work to determine if the sampling and analysis are adequate to determine the extent of contamination.</p> <p>In addition to random sampling, add a provision for bias sampling in areas of visual contamination, down wind, and deeper in pit areas.</p>	

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demolition events occurred at the times when winds exceeded 35 mph). Participants at the demolition events believe that wind condition never actually exceeded 10-15 mph, although written records of weather conditions were not kept. RL and WHC believes that contingencies in the existing plan are sufficient to identify distortions in contaminant distribution due to wind dispersal without modifications to the proposed arrangement for initial sampling.

Regarding Ecology's expressed interest in extending sampling deeper in pit areas: It is unlikely that contaminants were driven into the ground by the demolition activities. It is far likelier that chemical reaction products and any unreacted residues were released into the air (the unconfined direction in terms of the forces and pressure involved). Because contamination (if any) would have been a surface condition initially, the existence of sub-surface contamination (if any) would have been brought about by factors such as solution and leaching. RL and WHC believes that contingencies in the existing plan are sufficient to identify residual sub-surface contamination. If the uppermost 2 ft of the soil column is shown not to contain contaminant concentrations at or near to action levels, then RL and WHC does not agree there is a legitimate concern that higher concentration of contaminates traceable to the subject activities could exist at greater depths. It is not a reasonable expectation that contaminants could somehow be driven 12 ft into the ground as the result of the activities described in the closure plan.

Extensive research has been conducted at the Hanford Site regarding moisture evapotranspiration of soil moisture and infiltration (recharge) through the vadose zone. It has generally been determined, with some exceptions for isolated locations where the near-surface soils are extremely coarse, that wetting fronts generally do not penetrate to depths exceeding about 4 feet. Sampling to a depth of 12 feet would

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48.	<p data-bbox="457 386 1649 516">Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p data-bbox="457 548 1649 711">7-6, 1 Deficiency. Due to the heterogenous nature of the waste detonated at the site, and the fact that materials may have been driven to considerable depths from the explosion, contaminants are not likely to be evenly distributed. One surface sample from the approximate center of the pit is not adequate.</p> <p data-bbox="457 743 1649 808">Requirement. Sampling will have to be conducted not only at the surface but also at substantial depth under the site. See previous comment.</p> <p data-bbox="457 841 1170 873">RL/WHC Response: See comment response #48.</p> <p data-bbox="457 906 1649 1003">Ecology Response: The RL/WHC response to NOD number 48 is "see comment response #48." This is not an adequate response. See also NOD No. 47 response.</p> <p data-bbox="457 1036 1649 1169">Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Number of samples and sample locations were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
49.	<p data-bbox="457 1201 1649 1266">7-6, 11 Deficiency. It is stated that surface sampling will be conducted at two locations. This is inadequate.</p> <p data-bbox="457 1299 1649 1396">Requirement. At each sampling location, sampling and analysis for organics should be conducted at a minimum for both the top layer and the next underlying layer.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
50.	<p>7-6, 26 Deficiency. The text states that the soil sampling will occur to a depth of eighteen inches below grade at six inch intervals. This is not adequate.</p> <p>Requirement. At each sampling location, sampling and analysis for organics should be conducted for both the top layer and the next underlying layer and the depth of analysis must be substantially deeper. Provide explanation of how soil removed prior to sampling will be managed.</p>	

RL/WHC Response: As indicated in Lines 36-39 of the same page, the purpose of the two surface samples is to evaluate the adequacy of the proposed arrangement. If residual contaminants are not identifiable in the two surface (0-6 in.) samples to be taken as identified on line 11, then RL and WHC do not propose to sample and analyze this interval at the other locations. The two locations were selected to be near the geometric center of the site where the highest concentrations of residual contamination (if any) would be expected to be occur.

Ecology Response: According to RL/WHC's response to question No. 74, the detonation pit at the site is not physically identifiable now, which means the depression has been refilled by outside materials. Thus, sampling in the soil from 0-6 in. may not even reach the true bottom of the demolition site. Revise the sampling scheme to accommodate a solution.

Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.

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No.	Comments/Response	Concurrence
52.	7-7, 10	
	<p>such levels. For example, are specific action levels established from background measurements, detection limits, etc.</p> <p>RL/WHC Response: The citation does not state that quantitation limits would be implemented as action levels. RL and WHC do not propose quantitation limits as action levels in any case. Regarding action levels, refer to NOD # 21 comment response.</p> <p>Ecology Response: Refer action level to NOD No. 21 response.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process, action levels were defined and agreed to by all parties, as levels above the Hanford Site soil background levels identified in <i>Hanford Site Background: Part 1, Soil Background for Nonradioactive Analytes (DOE-RL 1993)</i> and Model Toxic Control Act (MTCA) (WAC 173-340) Method B levels.</p> <p>Deficiency. Action levels must be determined prior to sampling. The text should mention when action levels will be proposed and contaminant levels will be compared against proposed action levels. More information is needed on the site background threshold values. At present, the Hanford Soil Background Study is going on, and Ecology has yet to receive and review the finalized values for various organics and inorganics of concern.</p> <p>Requirement. Revise text accordingly. See comment 24.</p> <p>RL/WHC Response: Regarding action levels, refer to NOD # 21 comment response. Regarding the Hanford Site-wide soil background study, refer to NOD # 24 comment response.</p> <p>Ecology Response: Refer action level to NOD No. 21 response and Hanford Site-wide soil background to NOD No. 24.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
53.	<p>7-7, 17 Ecology/RL/WHC Resolution: Through the DQO process, action levels were defined and agreed to by all parties, as levels above the Hanford Site soil background levels identified in <i>Hanford Site Background: Part 1, Soil Background for Nonradioactive Analytes (DOE-RL 1993)</i> and Model Toxic Control Act (MTCA) (WAC 173-340) Method B levels.</p> <p>Deficiency. Preparatory procedures lack detail and sample preparation is neglected.</p> <p>Requirement. Revise text accordingly.</p> <p>RL/WHC Response: All proposed EAL analytical methods, including information on sample preparation, will be submitted to Ecology for review and approval in advance of sampling. The requested information is not available at this time.</p> <p>Ecology Response: Reject. Information requested must be provided. Incorporate into closure before submitting revision 2.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples.</p>	
54.	<p>7-7, 19 Deficiency. Initial characterization analysis must be performed by EPA level III criteria (SW-846) which can only be performed by an EPA certified stationary laboratory. The mobile lab provides only level II analyses. Therefore, the mobile lab should only be used to aid in determining sampling locations and plume mapping during remediation.</p> <p>Requirement. Modify text accordingly.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
55.	<p>7-7, 41</p> <p>Deficiency. Supercritical fluid extraction (SFE) is not appropriate due to the fact that it has yet to receive EPA approval.</p> <p>Requirement. Revise the text to reflect the use of approved methods of sampling and analysis.</p> <p>RL/WHC Response: Ecology's concern is noted. All proposed EAL analytical methods, including SFE, will be submitted to Ecology for review and approval in advance of sampling.</p> <p>Ecology Response: Analytical methods must be submitted with closure plan. The closure plan can not be approved unless this information is reviewed in the context of the closure plan.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
56.	<p>7-7, 44</p> <p>Deficiency. X-ray fluorescence is not an approved method for metals characterization. It is only to be used as an in-field method to determine sampling locations or areas of contamination.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
57.	7-7, 49	
	<p>Requirement. Revise the text to reflect the use of approved methods of sampling and analysis.</p> <p>RL/WHC Response: Ecology's concern is noted. All proposed EAL analytical methods, including XRF, will be submitted to Ecology for review and approval in advance of sampling. Additionally, the text of Revision 1 will describe the EAL as an analytical level II laboratory (see NOD #2 comment response), and will propose XRF as an analytical level II application.</p> <p>Ecology Response: Analytical methods must be submitted with the closure plan. The closure plan can not be approved unless this information is reviewed in the context of the closure plan.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p>Deficiency. The discussion of the configuration of the analytical series does not address potential impacts on analytical results from variations in the configuration (i.e., burn off organics before analyzing for them)</p> <p>Requirements. Address the influence of the configuration of the series on the analytical results.</p> <p>RL/WHC Response: Accepted. "...in series." should read"...in parallel."</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
58.	7-8, 4	<p>Ecology Response: Since a gas chromatograph unit can only do one test at each specific time, give a more detailed explanation about the "parallel" staff.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p>Deficiency. Procedures for calibration of analytical equipment is said to be based on mobile lab and published EPA procedures. The concern is that combining the procedures could allow for manipulation of performance or not be consistent with EPA requirements.</p> <p>Requirement. Provide supporting evidence that these procedures will be consistent with EPA requirements.</p> <p>RL/WHC Response: Ecology's concern is noted. All proposed EAL analytical methods will be submitted to Ecology for review and approval in advance of sampling.</p> <p>Ecology Response: Analytical procedures must be submitted with closure plan. The closure plan can not be approved unless this information is reviewed in the context of the closure plan.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Through the DQO process all sampling and analytical</p>

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59.	<p>7-8, 31 Deficiency. Utilizing unapproved methods may lead to unacceptable data.</p> <p>Requirement. Do not rely solely on this procedure.</p> <p>RL/WHC Response: Ecology's concern is noted. All proposed EAL analytical methods, including SFE, will be submitted to Ecology for review and approval in advance of sampling.</p> <p>Ecology Response: Analytical procedures must be submitted with closure plan. The closure plan can not be approved unless this information is reviewed in the context of the closure plan.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
60.	<p>7-8, 34 Requirement. See comment 57.</p> <p>RL/WHC Response: See comment response #57.</p> <p>Ecology Response: See NOD No. 57 response.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and</p>	

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No.	Comments/Response	Concurrence
61.	<p>7-8, 44 Deficiency. Detection limits for target RCRA metals are said to be 20 micrograms per gram. Do these detection limits meet the Dangerous Waste requirements of background levels for characteristic and listed wastes and designation limits for state only wastes?</p> <p>Requirement. Compare the detection limits with the WAC 173-303 regulatory levels.</p> <p>RL/WHC Response: The one metal analyte of interest identified in Table 7-1 is chromium. The Hanford Site-wide background value (i.e., the 95/95 threshold value) for total chromium is 28 mg/kg (determined by ICP, per CLP specification). The maximum measured value was 320 mg/kg (Hoover et al. 1993). No site-wide background data have been determined for total chromium by XRF. (Results obtained by the two methods are not directly comparable.) The designation limit concentration for total chromium in soil proposed by Ecology (in letter from Roger Stanley to R. D. Izatt (1-10-92) re. "Soil Cleanup/Remediation Policy for Hanford") was 100 ppm. (DOE/RL 1992a).</p> <p>Ecology Response: Concur with the explanation.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
62.	<p>7-8, 51 Requirement. See previous comment.</p> <p>RL/WHC Response: See comment response #62.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
63.	7-9, 8	
	<p data-bbox="422 366 1587 464">Ecology Response: The RL/WHC response to NOD number 62 is "see comment response #62." This is not an adequate response. See also NOD No. 61 response.</p> <p data-bbox="422 498 1608 628">Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p data-bbox="422 660 1608 820">Deficiency. The on-site mobile laboratory's capabilities are not equivalent to analytical level III. Verification analysis must be performed by EPA level III criteria (SW-846), which can only be performed by an EPA accredited laboratory. The mobile lab provides only level II analyses.</p> <p data-bbox="422 854 1577 951">Requirement. Unless accredited, the mobile lab should only be used to aid in determining sampling locations and plume mapping during site initial characterization.</p> <p data-bbox="422 986 1297 1017">RL/WHC Response: Accepted. See comment response #2.</p> <p data-bbox="422 1052 1115 1083">Ecology Response: See NOD No. 2 response.</p> <p data-bbox="422 1117 1587 1342">Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
64.	<p>7-10, 1 Requirement. On-site mobile laboratory calibration procedures must be fully compliant with EPA requirements.</p> <p>RL/WHC Response: Accepted. See comment response #2.</p> <p>Ecology Response: Concur.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples.</p>	
65.	<p>7-9, 10 Deficiency. Calibration of instruments only once a day, or shift, may introduce significant error. Calibration may be effected by varying environmental conditions throughout the day, such as a change in temperature or humidity.</p> <p>Requirement. Calibration schedules must respond to fluctuations in ambient environmental conditions.</p> <p>RL/WHC Response: The specific nature of this concern is unclear. The citation on page 7-9, line 10 does not address the subject of calibration. The reviewer's intent may have been to cite page 7-10, line 12. The intent of RL and WHC on the issue of calibration is to conform to the statements appearing on page 7-10, lines 1-6, and Section 7A-6 of the QAPjP. The sentence on page 7-10, lines 12-14 will be eliminated from Revision 1 to avoid any potential conflict or the appearance of conflict between these statements.</p> <p>Ecology Response: Concur.</p>	

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No.	Comments/Response	Concurrence
66.	<p>7-11, 35 Requirement. All clean closure sample data should be compiled and submitted in Contract Laboratory Procedure (CLP) format. Consult SW-846, Chapter 1, for guidance on the forms which are appropriate.</p> <p>RL/WHC Response: The text already cites SW-846, Chapter 1 for guidance on documentation (see lines 45-46). CLP format is not a requirement of WAC 173-303.</p> <p>Ecology Response: It is true that WAC 173-303 does not require the CLP format. But, since the RCRA unit is located within a CERCLA operable unit, the CLP format will be required in the remedial action by CERCLA. It is advised, therefore, that the test results should be not less than 10% CLP deliverable SW-846.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
67.	<p>7-12, 34 Deficiency. WAC 173-303-610 is not included in the citations consulted for the development of soil cleanup action levels.</p> <p>Requirement. To be considered clean closure, soil contamination must be less than or equal to background or designation limit for state only wastes. If soil contamination concentrations are greater than those just stated, they would be considered a modified landfill closure. This</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
68.	<p>7-13, 12 Deficiency. The determination of sampling locations by using random algorithm for initial characterization as specified in section 7.2.3 is acceptable. But the location of sampling points for calculation of the volume of contaminated soil demands a systematic protocol. Sampling plans with well defined grid spacing, locations, etc., might vary depending on the results obtained in the inial characterization.</p> <p>Requirement. The sampling plan will require approval prior to implementation.</p> <p>RL/WHC Response: Accepted.</p> <p>Ecology Response: Concur.</p>	

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No.	Comments/Response	Concurrence
69.	<p>7-13, 29 Deficiency. The proposed two feet vertical depth for sampling is inadequate.</p> <p>Requirement. Significantly increase the proposed sampling depth. Consider twelve foot depth.</p> <p>RL/WHC Response: See comment response #48.</p> <p>Ecology Response: See NOD No. 47 response.</p> <p>Ecology/RL/WHC Resolution: Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
70.	<p>7-14, 12 Note. The application of water during removal to control dust needs careful examination and will depend on the contaminant of concern. There is a good chance that contaminants can migrate with water downward during the process. This is especially so since excavation is limited. Other dust control devices may have to be applied depending on the nature of the contaminants.</p> <p>RL/WHC Response: Accepted. (No change to text at this time.)</p> <p>Ecology Response: Concur.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
71.	<p>7-15, 15 Deficiency. Regulatory requirements require that verification sample analysis be done at level III or IV. A mobile laboratory does not qualify.</p> <p>Requirement. Verification analyses must be done by EPA approved methodology, SW-846, some of which can only be done in a stationary laboratory.</p> <p>RL/WHC Response: Accepted. See comment response #2.</p> <p>Ecology Response: Concur.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples.</p>	
72.	<p>7-16, 14 Deficiency. A closure plan can be amended prior to final closure but only with approval from the lead regulatory agency which is Ecology in this case. This requirement was ambiguously presented in the closure plan.</p> <p>Requirement. Revise the text.</p> <p>RL/WHC Response: See page 7-16, line 17-20 for clarification.</p> <p>Ecology Response: Concur.</p> <p>Ecology/RL/WHC Resolution: No change.</p>	
73.	<p>F7-1 Requirement. Provide a direction arrow.</p> <p>RL/WHC Response: Accepted.</p>	

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No.	Comments/Response	Concurrence
74.	F7-1	<p>Ecology Response: Concur.</p> <p>Ecology/RL/WHC Resolution: Old Figure 7-1 depicting a proposed sampling grid will be removed since it has been nullified by the approved Sampling and Analysis Plan.</p> <p>Requirement. Show the location of the detonation pit.</p> <p>RL/WHC Response: Presently, there is no physically identifiable detonation pit at the site. However, the depression was still evident at the time the fenced boundary was established. Figure F7-1 represents precise coordinates of surveyed monuments that were placed approximately 10 feet out from the present 20 by 20 foot fence boundary. The reason the site was surveyed and the monuments located 10 feet outside the fence boundary was to ensure a wide, complete, and surveyed sampling area. The 20 by 20 foot fence site boundary can be approximated and overlain on top of this figure.</p> <p>Ecology Response: The location of the detonation site must be shown on the figure.</p> <p>Ecology/RL/WHC Resolution: Old Figure 7-1 depicting a proposed sampling grid will be removed since new sampling locations are provided by the approved Sampling and Analysis Plan. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>
75.	F7-1	<p>Deficiency. Sampling locations are not biased to include downwind areas.</p>

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
76.	F7-1	
	<p data-bbox="394 314 1504 375">Requirement. Sampling must be done to characterize all potentially contaminated areas.</p> <p data-bbox="394 412 1105 448">RL/WHC Response: See comment response #48.</p> <p data-bbox="394 478 1255 514">Ecology Response: See NOD Nos. 47 and 48 responses.</p> <p data-bbox="394 545 1586 740">Ecology/RL/WHC Resolution: Old Figure 7-1 depicting a proposed sampling grid will be removed since it has been nullified by the Sampling and Analysis Plan. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns, analytical methods and sampling locations were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p data-bbox="394 776 1565 874">Deficiency. Surface sampling in the middle of the site (probably the pit) is not adequate. The contamination of wastes in the center of the site is suspected to be the greatest and deepest.</p> <p data-bbox="394 910 1385 967">Requirement. Modify the sampling plan and figure to address deficiencies.</p> <p data-bbox="394 1002 1099 1037">RL/WHC Response: See comment response #48.</p> <p data-bbox="394 1068 1255 1104">Ecology Response: See NOD Nos. 47 and 48 responses.</p> <p data-bbox="394 1134 1582 1330">Ecology/RL/WHC Resolution: Old Figure 7-1 depicting a proposed sampling grid will be removed since it has been nullified by the Sampling and Analysis Plan Agreements. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	

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No.	Comments/Response	Concurrence
77.	<p>T7-1 Deficiency. This table is inadequate.</p> <p>Requirement. Regulated decomposition and reaction products must be included in the list of target analytes. Appropriate methodologies, action levels, and detection limits need to be listed.</p> <p>RL/WHC Response: Regarding <u>decomposition and reaction products</u>: Recognized decomposition and reaction products are identified and discussed on Pages 7-4 and 7-5. Recognized products that may be constituents of potential regulatory concern are listed in the Table. (Also refer to NOD # 22 comment response.)</p> <p>Regarding <u>methodologies</u>: Methodologies for initial sampling and analysis in the EAL are identified in the table to the extent that RL/WHC is able to do so at this time (in advance of issuance of EAL procedure manuals). Formal EAL analytical procedures are in preparation. Copies of all EAL analytical procedures will be submitted to Ecology for review and approval in advance of sampling. Anticipated relationships between EAL procedures and published EPA methods (and other methods) are discussed in Section 7.2.4.</p> <p>Regarding <u>action levels</u>: A table listing proposed action levels for the analytes of interest identified in Table 7-1 will be prepared for inclusion in Section 6.0 of Revision 1.</p> <p>Regarding <u>detection limits</u>: Practical quantitation limits (PQLs) are listed in Table 7A-1 of the QAPjP. The same analytes are listed in Tables 7-1 and 7A-1. An explanatory note will be attached to Table 7-1 indicating where the PQL information is provided.</p> <p>Ecology Response:</p>	

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No.	Comments/Response	Concurrence
78.	<p data-bbox="410 309 1514 371">a. Refer to NOD No. 22 response for the issue of decomposition and reaction products.</p> <p data-bbox="410 406 1152 443">b. Give the specific method no. from SW-846.</p> <p data-bbox="410 474 1234 511">c. Refer the action level to NOD No. 21 response.</p> <p data-bbox="410 540 1545 636">d. PQLs are different for different materials at different laboratories. Thus, relate them to each analyte and the laboratories which will be used to test them.</p> <p data-bbox="410 671 1595 871">Ecology/RL/WHC Resolution: Table 7-1 depicting a proposed Analytes of Interest will be removed since it has been nullified by the Sampling and Analysis Plan Agreements. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p> <p data-bbox="410 902 1411 964">Deficiency. This is not an adequate explanation of potential integration of RCRA with CERCLA.</p> <p data-bbox="410 1002 1591 1171">Requirement. If such an approach is to be considered, a much more elaborate discussion must be provided. Yearly inspection of the site until CERCLA remediation is not adequate. Methods to integrate sampling and analysis requirements, minimize the migration of wastes, and security of the site until remediation would have to be developed.</p> <p data-bbox="410 1202 1556 1361">RL/WHC Response: Yearly inspection is a minimal base line. Actual inspection intervals will not be determined until after sample results are received and evaluated. If it is determined that post-closure documentation is necessary than a detailed and specific plan will be developed.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
79.	<p data-bbox="407 319 1583 480">Ecology Response: Whether there is integration between RCRA and CERCLA or not, 200 W. APDS must meet the postclosure care requirements of WAC 173-303-680(2) if the contaminated soils or ground water cannot be completely removed or decontaminated during closure. See also NOD No. 20 response.</p> <p data-bbox="407 515 1566 576">Ecology/RL/WHC Resolution: As long as the Ash Pit Demolition Site is a TSD unit the requirements of RCRA will be addressed.</p> <p data-bbox="254 610 1591 641">Appendix Comment. A general comment about the Appendix is that it is inadequate.</p> <p data-bbox="407 675 1583 768">Suggestion. Provide information about process knowledge, spill/occurrence reports, and the detonation event (i.e., a description of the actual event and environmental conditions).</p> <p data-bbox="407 802 1598 964">RL/WHC Response: The requested information has not been provided in any previous QAPjP prepared by RL and WHC. Process knowledge information has already been provided in Chapter 3 of the closure plan. There were no spill/occurrence to report and the detonation event is described in other locations in the closure plan.</p> <p data-bbox="407 999 1598 1226">Ecology Response: The information required is for the purpose of understanding of this specific document. It is incomparable to whatever has been done elsewhere. Without thorough explanation, it would be very difficult to fully assess the impact done to the environment by the demolition event. For example, without the evidence of legitimate documentation, simply changing the waste inventory for the site when questions were raised by the regulators is not acceptable.</p> <p data-bbox="407 1261 1598 1323">Ecology/RL/WHC Resolution: The inventory has been agreed to and approved by all parties. Text has been revised to reflect accepted inventory.</p>	

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
80.	<p>7A-1, 25 Deficiency. Detail process knowledge and the detonation event has been revised and is located in Chapters 3 and 4.</p> <p>The objective of the investigation is to determine the extent of contamination at the site. Surface sampling is specified as the objective of the investigation. This is not correct.</p> <p>Requirement. Revise the text accordingly.</p> <p>RL/WHC Response: Accepted. Lines 25-27 will be revised to read: "The principal objective of initial (investigative) sampling will be to identify the presence and extent of dangerous waste constituents in surface soils at the site relative to levels of potential regulatory concern."</p> <p>Ecology Response: Concur with the addition of the principal objective of initial (investigative) sampling. However, the depth of surface soil should be given. Refer the requirement on initial sampling depth to NOD No. 47 response.</p> <p>Ecology/R1/WHC Resolution: Text in 7A-1, lines 26-29 was revised to read: "The principal objective of phase one investigative sampling is to facilitate a RCRA clean closure of the site by verifying that the concentrations of all detonation activity contaminants are at or below action levels." Specific sampling and analysis agreements can be found in the Sampling Analysis Plan.</p>	
81.	<p>7A-1, 43 Requirement. If remediation is required, confirmatory samples are required and must be done in an EPA approved laboratory at level III analysis.</p> <p>RL/WHC Response: Accepted. See comment response #2.</p>	

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	<p>Ecology Response: See NOD No. 2 response.</p> <p>Ecology/RL/WHC Resolution: Throughout the closure plan references to using the mobile onsite laboratory will be removed. Offsite laboratories capable of EPA analytical level III will be used for all soil samples. Through the DQO process all sampling and analytical concerns were resolved. Constituents of concerns and analytical methods were identified and agreed to by all parties. See the Sampling and Analysis Plan (SAP) for specific agreements.</p>	
82.	<p>7A-2, 4 Suggestion. EPA-QZMS-005/80, "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," should also be referenced.</p> <p>RL/WHC Response: Accepted.</p> <p>Ecology Response: Concur.</p>	
83.	<p>7A-10,17 Deficiency. The reference provided for validation procedures, "Data Validation Procedures for Chemical Analysis (WHC-SD-EN-SPP-002)," is a validation procedure for Contract Laboratory Program (CLP) sample data, not analyses performed under SW-846. The correct reference should be: Sample Management and Administration (WHC-CM-5-3).</p> <p>Requirement. Revise the text accordingly.</p> <p>RL/WHC Response: Accepted.</p> <p>Ecology Response: Concur.</p> <p>Ecology/RL/WHC Resolution: <u>Date Validation Procedures for Chemical Analyses</u> (WHC-SD-EN-SPP-002) is a document that provides procedures to WHC staff and subcontractors tasked</p>	

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200 WEST AREA ASH PIT DEMOLITION SITE CLOSURE PLAN REVISION 1
NOTICE OF DEFICIENCY COMMENT RESPONSE RESOLUTION TABLE

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<u>No.</u>	<u>Comments/Response</u>	<u>Concurrence</u>
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	<p>with the validation of chemical analytical data produced as the result of Hanford Site environmental investigations. This document is a supplement to the <u>Sample Management and Administration</u> document (WHC-CM-5-3) which includes validation procedures for sample data performed under SW-846.</p>	
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