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Department of Energy
Richland Field Office
P.O. Box 550
Richland, Washington 99352

JUL 9 1992

92-ERB-103
Mr. Paul T. Day
Hanford Project Manager
U.S. Environmental Protection Agency
712 Swift Boulevard, Suite 5
Richland, Washington 99352

Mr. David B. Jansen, P.E.
Hanford Project Manager
State of Washington
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Messrs. Day and Jansen:

RESPONSE TO THE ENVIRONMENTAL PROTECTION AGENCY'S (EPA) REVIEW OF THE T PLANT SOURCE AGGREGATE AREA MANAGEMENT STUDY REPORT (AAMSR) DRAFT A

This letter transmits the responses to comments received from EPA and the State of Washington Department of Ecology (Ecology) on Draft A of the T Plant AAMSR.

RL would also like to take this opportunity to respond to a letter dated June 22, 1992, from Mr. Larry Goldstein of Ecology to Mr. Alan Harris of the U.S. Department of Energy, Richland Field Office (RL), "Status of the U Plant Aggregate Area Management Study Report (M-27-02)." This letter indicated that Ecology is concerned about continued delays in obtaining the regulatory approval of the final U Plant and impact this has on the 200 Area AAMS program. Since the submittal of "redline" draft of chapters 1 and 9 for the U Plant AAMSR, we have made every attempt to expeditiously finalize U Plant to address this concern. We are still in the process of determining an optimal strategy for the final U Plant AAMSR. The strategy is to be based on the AAMS and consideration of a bare minimum technical requirement that U Plant must satisfy to effectively and efficiently support the development of the Sampling and Analysis Plan as well as current budget situation. The result of this effort will be presented to regulators at the July Past Practice Unit Managers' Meeting.

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If you have any questions regarding these matters, please contact Mr. Paul M. Pak at (509) 376-4798.

Sincerely,

Steven H. Wisness
Hanford Project Manager

ERD:PMP

Enclosure

cc w/encl:
C. Cline, Ecology
D. Lacombe, PRC
W. Staubitz, USGS
D. Teel, Ecology (2)

cc w/o encl:
M. K. Harmon, EM-442
R. E. Lerch, WHC
T. B. Veneziano, WHC

ENVIRONMENTAL ENGINEERING AND GEOTECHNOLOGY
COMMENT RECORD FORM

1. Date 2. Page 1 of 34

3. Document Title/Number T Plant Source AAMS Report, DOE/RL-91-61

4. Lead Engineer/Scientist R. K. Tranbarger 5. Organization 200/300 Environmental Engineering

6. Location/Phone/MSIN

7. Reviewer Paul Beaver 8. Organization EPA
Sign and Print Name Date

9. The document was reviewed, and the reviewer had no comments.
Reviewer _____

10. Date _____

11. I have reviewed the disposition of comments with the Lead Engineer/Scientist.
Reviewer _____

12. Date _____

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
1.	Executive Summary, page ES-4, 1st paragraph The text refers to the U Plant aggregate area, but should refer to the T Plant aggregate area.	Accepted. Text will be changed.
2.	Section 1.2.1, page 1-4, line 13 With the exception of 200-IU-6, the rationale for not including isolated operable units in the AAMS should be included.	Rejected. Section 1.0 represents generic text previously approved under interim milestone M-27-01. Rational is provided on lines 14-16 on page 1-4[1]. 1. Revised by WHC on 7/8/92.
3.	Section 1.5, page 1-12, first paragraph The text refers to the U Plant aggregate area, but should refer to the T Plant aggregate area when discussing the community relations plan.	Accepted. Text will be changed.

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4.	Section 2.1, page 2-1, first paragraph The text refers to the U Plant in the second to the last sentence. The text should instead refer to the T Plant.	Accepted. Text will be changed.
5.	Section 2.3.1.1, page 2-6, lines 8 through 16 The wastes generated from the "hot" semiworks plant and associated disposal practices should be discussed either here or in Section 2.4.	Rejected. The Semi-Works AAMS report will be referenced for additional information on waste generated and disposal practices.
6.	Section 2.3.2, page 2-7 The text should explain the way in which the single-shell tanks (SST) are operated during their active period. It appears from the type of wastes received by each tank that each tank is operated independently and not in cascade flows.	Rejected. Providing additional detail on the operation of the tank farms goes beyond the scope of the AAMS.
7.	Section 2.3.2, page 2-8, lines 12 through 14 The text should explain whether the requirements specified for interim stabilization are applicable to all tanks irrespective of the tank capacity.	Accepted. Text will be added to better explain tank isolation and stabilization for the smaller volume tanks.
8.	Section 2.3.2.1, page 2-9, line 3 The text states, "The tank is currently partially interim isolated and of sound integrity." Information on the date of partial interim isolation and integrity tests and the kind of integrity tests used should be provided. This comment is applicable wherever appropriate for other SSTs.	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.

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9.	Section 2.3.2.1, page 2-9, lines 5 through 9 Information on the kind of release (for example, spill or overflow, tank leak, pipe leak, or joint leak), the remedial action taken to control the release (if any), and the approximate lateral and vertical extent of soil contamination should be provided, or the release should be discussed as an unplanned release. This comment is applicable wherever appropriate (in other sections and AAMS reports).	Rejected. Additional information on explaining releases and implemented control actions is not within the scope of the AAMS. It should be noted that no remediation has taken place inside the tank farms except to remove or stabilize contaminated surface soils.
10.	Section 2.3.2.2, page 2-9, lines 19 through 22 The 241-T-102 SST received many kinds of wastes. A brief description of each type of waste and its origin should be included either here or in Section 2.4. This comment is applicable wherever appropriate for other SSTs.	Accepted. A description of waste stream characteristics will be provided in Section 2.4 if information is available.
11.	Section 2.3.2.3, pages 2-9, lines 41 through 44 The year during which Tank 241-T-103 was taken out of service should be provided. This comment is applicable in other sections wherever appropriate. The text states that Tank 241-T-106 is an assumed leaker. The text should explain the type of actions taken to verify the tank integrity and confirm and control the leak.	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
12.	Section 2.3.2.3, page 2-10, lines 5 and 11 The year during which the associated structures were installed and the tank interim isolated should be reported. This comment is applicable in other sections wherever appropriate. Information on the year during which the leak was detected and the action taken to control the leak and to remediate the contaminated soil should be presented.	Rejected. Additional information on explaining releases and implemented control actions is not within the scope of the AAMS. It should be noted that no remediation has taken place inside the tank farms except to remove or stabilize contaminated surface soils.

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13.	Section 2.3.2.6, page 2-11, line 32 through 34 The text should explain whether the contaminated soil is removed or stabilized with clean soil or any other method. The explanation provided for the purpose of pumping is not clear. The text should be clarified.	 Rejected. Additional information on explaining releases and implemented control actions is not within the scope of the AAMS. It should be noted that no remediation has taken place inside the tank farms except to remove or stabilize contaminated surface soils. Accepted: Text will be changed to clarify the purpose of pumping.
14.	Section 2.3.2.7, page 2-12, line 7 The rationale for assuming that the tank is a leaker is not provided. The text should include an explanation.	 Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
15.	Section 2.3.2.8, page 2-12, lines 18 through 40 The text does not explain whether an assumption is made that the tank is leaking. The text should be clarified. This comment is applicable in other sections wherever appropriate. The fourth paragraph does not explain clearly whether the decrease in liquid level in Tank 241-T-108 is the result of a leak or something else. Adequate justification is not provided to conclude that the Tank 241-T-106 release was a "questionable source of the activity increase." These deficiencies should be addressed.	 Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.

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16.	Section 2.3.2.10, page 2-13, lines 23, 24 and 35 The text does not, but should, provide the rationale for the assumption that Tank 241-T-110 has the potential for hydrogen or other flammable gas generation. In line 35, the text states that the tank is partially interim isolated. As per the definition in Section 2.3.2 (page 2-8), a tank is considered interim stabilized if it contains less than 50,000 gallons of drainable interstitial liquid and less than 5,000 gallons of supernatant liquid. Tank 241-T-110 contains only 3,000 gallons of supernatant liquid and no interstitial liquid, indicating that the tank is interim isolated. The discrepancy should be addressed. This comment is applicable wherever appropriate in other sections (for example, Section 2.3.2.11).	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
17.	Section 2.3.2.11, page 2-14, line 7 Tank 241-T-111 is categorized as an assumed leaker. The text should explain whether any action was taken to determine the leak and the cause for liquid level decrease.	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
18.	Section 2.3.2.12, page 2-14, lines 25 and 27 The rationale for installing only three radiation monitoring wells for Tank 241-T-112, when six radiation monitoring wells are used for other SS Tanks, should be provided. This comment is applicable wherever appropriate (for example, Section 2.3.2.17). The text states that the tank is interim isolated. The tank contains 7,000 gallons of supernatant liquid and no interstitial liquid. According to the definition in Section 2.3.2, the tank is partially interim isolated. This discrepancy should be corrected.	Accepted. The reference for the monitoring wells will be verified. Accepted. The discrepancy will be corrected.

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19.	Section 2.3.2.15, page 2-15, line 30 The text refers to the wrong tank in line 30. Tank 241-T-203 should be substituted for Tank 241-T-111.	Accepted. This discrepancy will be corrected.
20.	Section 2.3.2.21, page 2-18, lines 26 and 35 Tank 241-TX-105 is categorized as an assumed leaker. The type of action taken to detect and control the leak is not explained, but should be. The maximum temperature reading in the tank is reported in line 35. The text should also state whether or not this temperature exceeds the applicable maximum temperature criteria or surveillance frequency limits. Also, the applicable maximum temperature criteria or surveillance frequency limits should be specified. The text should also explain the reason for not considering the tank potential for hydrogen or other flammable gas generation as is the case for similar tanks (for example, Tank 241-T-110 in Section 2.3.2.10). This comment is applicable wherever appropriate (for example, Sections 2.3.2.34, 2.3.2.35, 2.3.2.37, and 2.3.2.38).	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
21.	Section 2.3.2.23, page 2-19, lines 29 and 30 The text reports that an estimated amount of 2,500 gallons leaked from the tank. The leak may be a high-level liquid waste. The text should explain the extent of soil contamination resulting from the leak and the type of action taken to remediate the contaminated soil.	Rejected. Additional information on explaining releases and implemented control actions is not within the scope of the AAMS. It should be noted that no remediation has taken place inside the tank farms except to remove or stabilize contaminated surface soils.

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22.	Section 2.3.2.29, page 2-22, line 8 The rationale for assuming that the tank is a leaker is not provided, but should be.	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
23.	Section 2.3.2.30, page 2-22, lines 35 through 37 All the dry wells are reported to have activity. The current uses of these dry wells are not reported, but should be.	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
24.	Section 2.3.2.37, page 2-26, lines 28 through 34 The text reports an estimated 3,000 gallons of liquid waste has leaked from the tank with an activity of 700 Ci of ^{137}Cs. The type of action (if any) taken to remediate or stabilize the contaminated soil resulting from the leak should be explained.	Rejected. Additional information on explaining releases and implemented control actions is not within the scope of the AAMS. It should be noted that no remediation has taken place inside the tank farms except to remove or stabilize contaminated surface soils.
25.	Section 2.3.2.38, page 2-27, lines 13 through 19 An estimated 1,400 gallons of supernatant has leaked from Tank 241-TY-104. The text should explain the extent of soil contamination resulting from the leak and the type of remedial action taken (if any) to stabilize the contaminated soil.	Rejected. Additional information on explaining releases and implemented control actions is not within the scope of the AAMS. It should be noted that no remediation has taken place inside the tank farms except to remove or stabilize contaminated surface soils.

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26.	Section 2.3.2.39, page 2-27, lines 39 through 43 An estimated 35,000 gallons of liquid waste with an activity of 4,000 Ci of ^{137}Cs leaked from Tank 241-TY-105. Information on the extent of soil contamination and the type of action taken (if any) to stabilize the soil should be included. This comment is applicable to Section 2.3.2.40.	Rejected. Additional information on explaining releases and implemented control actions is not within the scope of the AAMS. It should be noted that no remediation has taken place inside the tank farms except to remove or stabilize contaminated surface soils.
27.	Section 2.3.2.40, page 2-28, lines 18 and 22 In line 18, the text states that Tank 241-TY-106 was stabilized in 1969 with diatomaceous earth. Then, in line 22, the text states that the tank contains 17,000 gallons of sludge. It is not clear whether the reported volume is liquid sludge or the combination of liquid sludge and diatomaceous earth. This discrepancy should be clarified.	Accepted. The discrepancy will be corrected.
28.	Section 2.3.2.41, page 2-28, line 24 Tank descriptions and construction detail are not provided, but should be.	Accepted. Additional tank description and construction detail will be provided.
29.	Section 2.3.2.42, page 2-28, line 32 Tank description, construction details, and current disposition are not provided for the Catch Tank. This comment is applicable wherever appropriate for other catch tanks.	Accepted. Additional tank description and construction detail will be provided.
30.	Section 2.3.3.2, page 2-31, lines 15 and 16 The prescribed "radionuclide disposal guide limit" is not, but should be specified.	Accepted. Additional information on the disposal guide limit will be provided if available.

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31.	Section 2.3.3.4, page 2-31, line 34 The type of stabilization used for the crib area is not, but should be stated.	Accepted. The text will be clarified to discuss the type of stabilization used at the crib.
32.	Section 2.3.5.3.3, page 2-40, line 32 Trench 216-T-12 is 15 by 10 by 8 feet with a capacity of approximately 9,000 gallons. The text reports that the trench received approximately 1.32 x 10^6 gallons of contaminated sludge (emphasis added) for less than a month. It appears from the information that the trench received waste greater than its capacity for over 150 days. No information is provided on the excavation and disposal of any residual sludge left in place before the trench was backfilled with clean soil. This discrepancy should be addressed.	Accepted. Text will be revised, the term sludge will be replaced with slurry which more accurately describes the waste stream. Additional detail will be added explaining remediation activities, if available. Rejected. The text makes no reference to excavation and disposal, however, if the trench was excavated then the information will be included[1]. 1. Revised by WHC 7/7/92.
33.	Section 2.3.9.3, page 2-49, UPR-200-37 The proper burial trench where the cartons were disposed of should be identified here.	Accepted. Information will be provided if available[1]. 1. Revised by WHC 7/7/92.
34.	Section 2.3.9.3, page 2-48, UPR-200-W-70 A description of the contaminated material associated with the UPR-200-W-70 release should be included. If there was hazardous waste disposed of here, it should also be stated and what the makeup is.	Rejected. Additional information on UPR-200-W-70 describing the type of contaminated material is not available.

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35.	Section 2.3.10, page 2-49 The text indicates 45 unplanned releases with their locations shown in figure 2-14. It appears that figure 2-14 shows more than 45 unplanned releases. Either the text should be changed to correspond to the figure or the figure needs to be corrected.	Accepted. The correct number of unplanned releases is 47; both text and Figure 2-14 will be revised.
36.	Section 2.3.10.4, page 2-50 A portion of the contamination was removed. It may prove helpful to document the location where this contamination was sent. This comment is also applicable to UN-200-W-12.	Accepted. Information will be provided if available[1]. 1. Revised by WHC 7/7/92.
37.	Section 2.4.1, P. 2-57, line 31 Sodium ferrocyanide is noted as being used in the T plant SST's but is not listed in Table 2-9.	Rejected: The ionized forms of potassium ferrocyanide and sodium ferrocyanide are equivalent.
38.	Figure 2-10, page 2F-10a. 3 process lines end in the same vicinity and the figure does not show a diversion box. Should there be a diversion box here? If a diversion box is located at the junction, it should be noted in the figure and if there is not a diversion box located there, an explanation may be useful for further reference. This comment is applicable where three or more process lines meet.	Accepted. A diversion box will be added to the junction of the three pipelines.
39.	Section 3.3.1, P. 3-4 It is noted that surface drainage from the Horse Heaven Basin enters the Pasco Basin. As shown in Figure 3-7, the Horse Heaven Basin does not drain into the Pasco Basin.	Accepted (same as Z Plant comment 31). The text will be revised to delete the Horse Heaven Basin from the listing of basins which discharge to the Pasco Basin.
40.	Section 3.3.3, page 3-5, First paragraph, fifth sentence. This sentence does not make sense. Make appropriate changes where necessary.	Accepted. This paragraph will be revised for added clarity.

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41.	Section 3.5.2.1.1, Page 3-20, line 15 Change "Table 3-1" to "Table 3-2"	 Accepted. Text will be corrected.
42.	Section 3.5.2.1.3, page 3-22 Please confirm or deny that direct communication between Unit A and Unit E exists. If there is direct communication between the two units, the text needs to be changed to reflect this by labeling the Unit A aquifer as something other than confined. Perhaps semi-confined may be more appropriate. Also semi-confined groundwater should be replaced with semi-confined aquifer.	 Rejected (same as Z Plant comment 32). Based on conventional usage, and as defined by Freeze and Cherry (1979), confined aquifers occur between aquitards - two less-permeable stratigraphic units. Aquitards "may be permeable enough to transmit groundwater in quantities that are significant to the study of regional groundwater flow" (Freeze and Cherry 1979). Intercommunication of different aquifer units may therefore be expected to be inhibited, but not prevented by the presence of an intervening aquitard. This condition is expected to occur in the 200 West Area where the Ringold lower mud sequence aquitard separates aquifers within the Ringold Unit A and Unit E gravels. The lower Ringold unit A gravels would occur as a confined or semi-confined aquifer between the overlying Ringold lower mud sequence and the underlying Elephant Mountain member of the Saddle Mountains Basalt. Accept: Second Part. Sentences on lines 21 through 24 will be revised to eliminate the term "groundwater."

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43.	Section 3.5.2.2, page 3-23 The results of past studies on precipitation recharge found on page 3-23 do not correlate with those listed on page 3-17, last paragraph. EPA suggests correcting one or both sections or offer an explanation as to why the results differ.	Rejected: Information on Page 3-23 is considered consistent with information provided on page 3-17[1]. 1. Revised by WHC on 7/8/92
44.	Sections 3.5.2.5 and 3.5.3, page 3-25 A reference to Figure 3-41 is given here, but there is no figure by that number in the report. Either a figure needs to be added to the report or the text needs to be changed. This comment should be addressed where ever figure 3-41 is referenced throughout the text. No Section 3.5.2.4 is in the report. Is Section 3.5.2.5 mislabeled or is a section missing? It is noted that the horizontal hydraulic gradient is expected to <u>increase</u> as the 200 West mound continues to dissipate. The gradient should actually <u>decrease</u>.	Accepted. Figure 3-41 was inadvertently left out of Draft A. Accepted. Section 2.5.25 will be relabeled 3.5.2.4 Accepted. Text will be changed to reflect a decrease in the hydraulic gradient.
45.	Section 3.5.3.1.1, P. 3-31 Moisture content is described in terms of volume in the text in Section 3.5.2.1.1 and in Figures 3-39 and 3-40, but as moisture content by weight percent in the table on page 3-26. Units should be consistent in the report for comparison. We suggest converting the moisture contents listed by weight percent on page 3-26 to a volume percent if the available data are available for this data set.	Accepted. If data are available to convert moisture content to volume percent from weight percent, these conversions will be made and documented in the text.
46.	Section 3.5.3.4, page 3-27, line 35. Table 2-2 is referenced as showing a total volume of fluid discharged to each facility. Table 2-2 does not show volumes of fluids. The text should be changed to reflect this.	Accepted. Text will be changed to state Table 2-1 shows the estimated volume of liquid discharged to each facility.

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47.	Section 3.6.1.1, page 3-28, first paragraph, line 7 The text states, "The vegetation of the 200 Areas Plateau is characterized by native shrub steppe interspersed with large areas of disturbed ground with a dominant annual grass component." The word "steppe" should be removed, as it is indicative of a biome, not a vegetative type.	Rejected. Use of work "steppe" is consistent with the classical definition and to standard site nomenclature[1]. 1. Revised by WHC on 7/8/92.
48.	Section 3.6.1.2, pages 3-29, second paragraph, fourth sentence Table 3-2 does not list threatened taxa. The text should be corrected to reflect this. Scientific names of all species should be included in this section.	Accepted. The reference to Table 3-2 will be changed to Table 3-3. Accepted (same as Z Plant comment 37). A reference for proper scientific names will be added to the text.
49.	Figure 3-8, P. 3F-8 The figure does not show the "Structural Provinces of the Columbia Plateau" as the title indicates, but rather shows the "Columbia Plateau and Surrounding Structural Provinces." Consider changing the title.	Accepted. The title will be changed.

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50.	Figure 3-14 through 3-19, pages 3F-14 through 3F-20 The legend shown does not fully represent the strata shown in figures 3-16, 3-17, 3-18, and 3-19. All Abscissas and ordinates need to labeled. Well numbers should be right side up in all figures. The cross section lines shown in Figure 3-14 do not match those shown in figures 3-16, 3-17, 3-18, and 3-19. A-A' shown in Figure 3-16 appears to be B-B' shown in 3-14, B-B' shown in 3-17 appears to be D-D' shown in 3-14, C-C' shown in 3-18 appears to be part of E-E' shown in 3-14, and D-D' shown in 3-18 appears to be part of F-F' shown in 3-14.	Accepted. Figure 3-15 will be revised to match the cross-sections (Figures 3-16, -17, -18, and -19)[1]. Accepted. The abscissas and ordinates will be labeled[1]. Rejected. The direction of print is required to avoid overlapping titles. Accepted. Cross section titles will be correctly labeled. 1. Revised by WHC on 7/8/92.
51.	Figure 3-39, page 3F-39 Labeling of axis is upside down. This needs to be right side up.	Rejected. The axes are correctly labeled for a landscape format.
52.	Section 4.1.1.2.1, page 4-4, first paragraph Natural radiological background levels detected for various instrumentation and survey techniques are presented in the text. A reference for the stated levels should be given.	Accepted. A reference will be provided for the background radiation levels.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
53.	Section 4.1.1.2.3, page 4-6, line 38 This section states that "counting errors are included with each analytical result and those entries that are less than the accompanying counting errors are denoted with a minus (-) sign." The text should describe the method used to calculate the counting errors. The numerical values of these counting errors should be presented in separate columns in Tables 4-7 and 4-8.	Rejected. The reference document from which the soil analysis data was taken did not provide a discussion of the counting error. Rejected. Due to the lack of knowledge of the counting errors, they were not tabularized in Tables 4-7 and 4-8.
54.	Section 4.1.1.5, page 4-9, lines 11 and 22 The text refers to Table 4-11 for gross gamma-ray logs for interpretation of radionuclide contamination in the vadose zone. Then the text states that the log interpretation consisted of identifying zones with anomalously high gamma-ray counts. The high gamma-ray counts including the base levels should be listed in the table. The results of analysis of vadose zone samples collected as a result of a major leak from Tank 241-T-106 should be provided in a table for review.	Rejected. Actual radiation levels were not presented in Table 4-4 because they have limited meaning without knowledge of the logging equipment, background radiation levels and other factors. Clarifying footnotes regarding remarks (e.g., elevated contamination) in Table 4-11 will be added. Also, a reference to the additional information in Appendix A will be added in the text[2]. Accepted. Results will be provided if available. (Preliminary lab results will not be used.)[1] 1. Revised by WHC on 6/26/92 2. Revised by WHC on 7/8/92

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55.	Section 4.1.2.2.1, page 4-10, first paragraph The text states that large quantities of liquid wastes were intentionally discharged from SSTs directly to the ground. A tank identification number should be included. Many tanks are assumed leakers but do not state whether the tanks are still in service, contain waste, or if the waste has been removed. This information needs to be stated. If data is available, where the waste came from, quantities, and chemical and radionuclide makeup should also be included. The text states that Drywells, the only means of leak detection remained stable through 1977. What has happened since 1977? If there is recent data on any tanks, where did it come from? Also, the text does not clearly explain whether the estimated volume of waste leaked is only from spills from tanks or includes the volume intentionally discharged. A spill with an estimated volume of 400,000 gallons occurred from Tank 241-T-101.	Reject paragraphs 1. 2. and 4. Providing additional detail on tank operation, leakage and monitoring is beyond the scope of the AAMS[1]. Accept. Current information will be reviewed and discussed if available[1]. 1. Revised by WHC 6/26/92
56.	Section 4.1.2.2.1, page 4-10, line 45 The text states that modeling results are provided in Table 2-3. However, the results are given in Table 2-5. Table 2-5 should be substituted for Table 2-3.	Accepted. The noted correction will be made.
57.	Section 4.1.2.2.1, page 4-11, third paragraph This paragraph lists the tanks that have potential for flammable gas generation considering only three factors: ferrocyanide problem, hydrogen gas generation, and high organic constituent content. The remaining factors as specified in the text are not used to rank the tanks according to their potential for flammable gas generation. The list generated to rank the tanks should be included in the text for each tank.	Accepted. Text will be clarified to explain the tank ranking criteria.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
58.	Section 4.1.2.2.1, page 4-11, fourth paragraph The text should specify the gamma radiation levels detected in the vadose zone wells for each tank in Table 4-14 instead of listing elevated gamma radiation levels. The background level used to determine the elevated gamma radiation levels should also be provided.	Rejected. Radiation levels for the specified wells are provided in Appendix A. Actual radiation levels were not presented in Table 4-14 because they have limited meaning without knowledge of the logging instrument and other factors.
59.	Section 4.1.2.2.1, page 4-11, line 36 2,017,000 liters (533,000 gallons) should be substituted for 1,900,000 liters (500,000 gallons) to be consistent with previous sections in the report. This comment is applicable in other sections wherever appropriate.	Accepted. The noted correction will be made.
60.	Section 4.1.2.2.1, page 4-13, Tank 241-T-201 The text states that the tank is no longer in service and there are indications of increased water levels attributed to precipitation. The text needs to state how water is getting into the tank if it is considered a non leaking tank. Also, since the tank is no longer in service, the text needs to state whether the waste is still in the tank and if it is not, where it was sent.	Rejected. Additional information on tank volumes is beyond the scope of the AAMS. Rejected. Tank status is provided in Table 2-1 and current volume is provided in Table 2-4.
61.	Section 4.1.2.2.1, page 4-14, lines 14 through 19 The estimated total quantity of liquid waste that entered the groundwater from each tank is not, but should be reported in a table.	Rejected. The estimated tank leakage volumes are presented in Section 2.3.2 text and would create unnecessary redundancy to again summarize in a table format.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
62.	Section 4.1.2.2.1, page 4-14, lines 21 through 30 A brief summary of the observations from the groundwater monitoring data should be included to assess the past and present conditions of the 241-TY Tank Farm. This comment is applicable for 241-TY Tank Farm.	Rejected. Additional information on the groundwater monitoring data is beyond the scope of the T Plant AAMS but will be addressed in the 200-West groundwater AAMS.
63.	Section 4.1.2.2.1, page 4-14, lines 33 through 34 It appears from the text that the dry wells remained stable only through 1977. No information is provided on the conditions of the dry wells after 1977. Omitted information should be provided, as well as a definition for stable activity in the dry wells. This comment is applicable in other sections wherever appropriate.	Accepted. Additional data for the period after 1977 will be provided if available.
64.	Section 4.1.2.2.1, page 4-15, lines 5 and 6 The past and recent data for Tank 241-TX-105 should be provided. The action taken to control the leak should be stated. This comment is applicable for Tanks 241-TX-110, -112, -113, -114, -115, -116, and -117, and wherever appropriate for the 241-TY Tank Farm.	Rejected. Information on tank isolation, integrity, monitoring and testing are summarized from the latest available reference (Hanlon 1992). Providing additional detail on isolation, integrity and testing is not within the scope of the AAMS.
65.	Section 4.1.2.2.1, page 4-16, line 22 The text states that Tank 241-TX-118 contained up to 3 moles of ferrocyanide on February 24, 1992. In an earlier section (Section 2.3.2.34), it is reported that the tank contained less than 1 kg mole of ferrocyanide. The reference source is the same for both statements. This discrepancy should be clarified. This comment is also applicable to Tanks 241-TY-101 and -104.	Accepted. The noted inconsistency will be corrected.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
66.	Section 4.1.2.3, page 4-18, line 44 Inventory data, radiological survey results, borehole geophysical data and dry wells monitoring data for cribs and drains should be included elsewhere and referenced in the section for review.	Rejected. Inventory data is provided in Section 2.0 and sampling results are presented in Section 4.0 in accordance with the report outline.
67.	Section 4.1.2.3.1, page 4-19, line 5 The data to support the discussion for the extent of contamination at the cribs should be included. The text should clearly state that the cited monitoring wells are dry wells.	Rejected. All available information on the excerpt of contamination has been included. The text will clarify the cited monitoring wells are dry wells.
68.	Section 4.1.2.3.2, page 4-19, lines 20 through 26 The text refers to Well W10-3 for radiation monitoring. But this well is not cited in Table 4-11. The discrepancy between the text and the table should be resolved. The text states that the data from Well W10-3 indicate that breakthrough to groundwater could have occurred at the 216-T-7TF Crib and Tile Field. The statement should be supported with data from the reference source used. Also, the text should explain the way in which the data from the well indicate that breakthrough to groundwater could have occurred.	Accepted. The discrepancy will be corrected. Rejected. The statement was provided for information only, and providing the reference should be sufficient. The event will be explained in the 200W Groundwater AAMS[1]. 1. Revised by WHC 7/7/92

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
69.	Section 4.1.2.3.5, page 4-20. lines 1 through 5 The background levels of radioactivity should be specified. The text states, "In 1959 radioactive contamination was detected in Well W15-4 from 10 ft. below the ground surface to the water table, 186 ft. beneath the ground surface." Data should be included to support the statement. Also, the text should explain the contaminant levels in the well after 1959.	 Rejected. Providing additional data on background radioactivity levels is beyond the scope of the AAMS. Rejected. Providing the data is beyond the scope of the AAMS. The referenced document should be sufficient[1]. Accepted. A discussion of current radiation levels in Well W15-4 will be added if the information is available[1]. 1. Revised by WHC 7/7/92
70.	Section 4.1.2.3.6, page 4-20, lines 8 through 22 The type of chemical additives used to settle the ^{137}Cs should be specified from the referenced source. Information on the volume of contaminated soil removed during remedial action and the final disposal of this soil should be included. A definition for surface stabilization should be provided elsewhere.	 Accepted. The type of chemical used will be specified, if the information is available. Accepted. The volume of contaminated soil removed and its final disposal will be specified, if the information is available. Accepted. The reference to surface stabilization will be moved and discussed in Section 2.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
71.	Section 4.1.2.3.7, page 4-21, line 1 through 6 After stabilization and surface remediation in 1975 at this crib, the crib showed 2,000 to 50,000 dis/min general contamination in October 1989. The reason for the radiation levels even after surface remediation should be explained. Any data collected during surface stabilization in May 1990 should be discussed. A definition for surface stabilization should be provided elsewhere.	 Accepted. Additional information on the measured radiation level will be provided, if available. Accepted. The reference to surface stabilization will be moved to Section 2.0.
72.	Section 4.1.2.3.9, page 4-21, lines 27 through 35 This section does not, but should address the nature and extent of contamination at the 216-T-29 Crib. A definition for "this waste" should be included. The 216-T-29 Crib received a substantial amount of highly acidic condensate runoff (1.96×10^4 gallons) from the 291-T sand filter (Section 2.3.3.9). Acidic solutions would tend to enhance radionuclide migration through the soil column. The text should explain whether the discharge of acidic waste through this crib is a potential pathway for contaminants migration from nearby waste management units.	 Rejected. All available information on the extent of contamination has been provided[1]. Rejected. Providing the information is beyond the scope of the AAMS[1]. 1. Revised by WHC 7/7/92
73.	Section 4.1.2.3.11, page 4-21, line 45 The text states that the 216-T-32 crib is monitored by "Wells W10-56,... and -76." But, in Table 4-11, gross gamma logging results are not provided for Well W10-76. This deficiency should be addressed. Similar inconsistency is found between the text and Table 4-11 with regard to the number of wells used for radiation monitoring at each WMU. Correct an consistent information should be provided in the report.	 Accepted. Inconsistency noted between Table 4-11 and the text will be corrected for all waste management units.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
74.	Section 4.1.2.3.14, page 4-22, lines 30 through 36 The text should discuss the elevated gamma response from 5 to 30 meters at well W11-18 as indicated in Table 4-11. The text states that breakthrough to groundwater has not occurred at this WMU, but Table 4-12 indicates that this WMU had the potential for contaminant migration to groundwater. This discrepancy should be addressed.	Accepted. Inconsistency noted between Table 4-11 and the text will be corrected for all waste management units. Accepted. Inconsistencies with Table 4-12 and the text will be corrected for all waste management units.
75.	Section 4.1.2.4.1, page 4-23, line 7 Data from Table 4-12 indicate that the 216-T-2 Reverse Well had the potential for contaminant migration to groundwater. The nature and extent of contamination based on waste volume discharged at this WMU is not discussed and should be. This comment is applicable wherever appropriate (in other sections and AAMS reports).	Rejected. Inventory data for 216-T-2 is provided in Table 2-3. All available information on the extent of contamination has been provided in the document.
76.	Section 4.1.2.4.2, page 4-23, line 19 Elevated gamma response between 3 and 37 meter depth is found at the W11-7 Well. Radiation data from this well are not discussed, but should be.	Rejected. A discussion of the geophysics logging is provided in Section 4.1.1.5.
77.	Section 4.1.2.5.1, page 4-23, line 28 A discussion of the nature and extent of contamination should be included based on information in Section 2.3.5.1.1, waste inventory, and Tables 4-11 and 4-12. This comment is also applicable to Pond 216-T-4B.	Rejected. Insufficient information exists to characterize the nature and extent of contamination. Additional information needs to be collected based on the data gaps identified in Section 8.0 to identify the nature and extent of contamination.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
78.	Section 4.1.2.5.4, page 4-23, line 41 The nature and extent of contamination is not discussed. The text should either discuss the extent of contamination in this section or cite information provided in Section 2.3.5.1.4 and associated tables. This comment is also applicable for Section 4.1.2.5.5.	Rejected. Insufficient information exists to characterize the nature and extent of contamination. Additional information needs to be collected based on the data gaps identified in Section 8.0 to identify the nature and extent of contamination.
79.	Section 4.1.2.5.7, page 4-24, line 14 This section should address the extent of contamination from the disposal of 7.6×10^5 pounds of inorganic compounds (see Section 2.3.5.3.1) at this WMU.	Rejected. Insufficient information exists to characterize the nature and extent of contamination. Additional information needs to be collected based on the data gaps identified in Section 8.0 to identify the nature and extent of contamination.
80.	Section 4.1.2.5.8, page 4-24, line 23 The amount of waste received at Trenches 216-T-9, 216-T-10, and 216-T-11 is not documented elsewhere in the report and should be included.	Accepted. A statement will be provided in Section 2.0 stating no reference on the amount of waste volume received was found for the noted sites.
81.	Section 4.1.2.5.9, page 4-24, line 36 The text should discuss the potential migration to unconfined aquifer based on waste volume received at the 216-T-26 Trench. The text states that Well W11-26 monitors the trench, but Table 4-11 indicates that there is no monitoring well for this trench. This discrepancy should be resolved.	Rejected. A discussion of the potential migration to groundwater is discussed in Section 4.1.1.5. Accepted. Inconsistency noted between Table 4-11 and the text will be corrected for all waste management units.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
82.	Section 4.1.2.5.14, page 4-25, line 37 The nature and extent of contamination at the Trench 216-T-25 should either be discussed here or a citation for the information provided elsewhere.	Rejected. Insufficient information exists to characterize the nature and extent of contamination. Additional information needs to be collected based on the data gaps identified in Section 8.0 to identify the nature and extent of contamination.
83.	Section 4.1.2.6.1, page 4-25, line 44 Information regarding known and suspected contamination related to the 2607-W1 Septic Tank and Drain Field should either be provided or a citation for the section containing the information should be included.	Accepted. A statement will be provided in Section 2.0 stating no information is available on the known or suspected contamination.
84.	Section 4.1.2.8.1, page 4-27, line 39 The known and suspected contamination at the 207-T Retention Basin which is the result of unloading incidents and burial of the basin sludge in holes near the basin should either be discussed here or a citation for the information provided elsewhere.	Rejected. The available inventory data for the 201-T Basin has been provided in Section 2.3.8. All available sampling data has been provided in Section 4.1.2.8.1.
85.	Section 4.2, page 4-29, third paragraph The text discusses the EPA guidance available for performing human health risk assessments (EPA 1989a, 1991). However, ecological risk assessment guidance should also be cited in this paragraph (EPA 1989b, c). The text cites EPA Region 10 risk assessment guidance, but the citation is not listed in Section 10.0 References. The reference list should be corrected.	Accepted. The noted reference will be included and appropriately cited in Section 10.
86.	Section 4.2.2, page 4-31, line 8 This section discusses transport and exposure pathways but does not address surface water. Surface water pathways are discussed in text in Section 4.2.3, page 4-37, line 22 and again on page 4-38, lines 6 and 7. Surface water should be addressed in this section as both a transport and exposure pathway.	Accepted. Discussion of surface water pathways will be added to Section 4.2.2.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
87.	Section 4.2.2.1.2, P. 4-35 The first paragraph notes that recharge from precipitation in the 200 Areas may range between 0-10 cm/yr depending on the soil type and surface cover. No mention is made as to what range of soil types and surface covers overlie the waste units in the Z plant area, nor what is the best estimate of recharge for various types of waste units in Z plant. It is our understanding that the surfaces of waste units are generally kept clear of vegetation and are often times covered with gravel. If this is true at Z plant, it should be noted that recharge likely is near the higher end of the 0-10 cm/yr range.	Accepted (same as Z Plant comment 46). The text will be revised to note the upper limit (10 cm/yr) is based on a numerized model prediction only. A lower recharge for the T Plant AAMS is more likely.
	This section largely repeats information provided in Section 3.5.2.2. As a description of the conceptual model, this section should provide an interpretation and draw preliminary conclusions based on the data provided in previous sections, not simply rehash available data or general concepts.	Accepted (same as Z Plant comment 46). Information needed to make conclusions generally was not located. Will discuss this as a data gap in Section 8.
88.	Section 4.2.4, page 4-39, third bullet The screening criteria used for selecting contaminants of concern should not be limited to those contaminants that are known or suspected carcinogens, or that have an EPA noncarcinogenic toxicity factor. Toxic, noncarcinogenic contaminants do exist; an example is lead. The screening criteria should follow EPA Region 10 guidance (EPA 1991).	Accepted. The screening criteria will be revised to follow the noted reference.
89.	Section 4.2.4.2, page 4-40, first paragraph The text references table 2-10 which does not exist. This needs to be corrected.	Accepted. Table 2-10 was inadvertently left out of Draft A.
90.	Section 4.2.4.5.1, page 4-44, second paragraph The text cites "EPA 1991b." However, this citation is not listed in Section 10.0 References. The list of references should be corrected.	Accepted. The noted reference will be appropriately cited in Section 10.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
91.	Section 4.2.4.5.1, page 4-44, third paragraph The text discusses the various EPA guidance available for performing human risk assessments (EPA 1989a, 1991). However, ecological risk assessment guidance should also be cited in this paragraph (EPA 1989b, c). The text cites EPA Region 10 risk assessment guidance, but the citation is not listed in Section 10.0 References. The reference list should be corrected.	Accepted (same as Z Plant comment 150). The noted reference will be included and appropriately cited in Section 10.
92.	Section 4.2.4.5.2, page 4-45, first paragraph The text discusses the carcinogenic and noncarcinogenic health effects associated with chemicals anticipated at the aggregate area. The text should indicate that these health effects may be associated with either human or animal data. The text cites the HEAST (Health Effects Assessment Summary Tables) as "EPA 1991b." However, the citation is not in the list of references. The list of references should be corrected.	Accepted. The text will be clarified to indicate the noted health effects.
93.	Figure 4-3, page 4F-3 The arrow leading from biota to human for ingestion should be deleted.	Accepted. The noted corrections will be made.
94.	Tables 4-7 and 4-8, pages 4T-7a and 4T-8a The title of each table should reflect that the information listed is for radionuclides only.	Accepted. The noted Table titles will be changed to reference radionuclides only.
95.	Table 4-16, page 4T-16a The title of this table states the flow rate at "1.6 E + -6 L/mo". The actual volumetric flow rate is 1.6 E +6 or 1.6 E-6 and should be cited.	Accepted. The noted corrections will be made.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
96.	Table 4-22, page 4T-22a The acronym "MEPAS" should be defined. The pH should be given in the column headings for the second and third columns that present soil-water distribution coefficients.	 Accepted The acronym for "MEPAS" will be defined. Rejected. The pH for the soil water distribution coefficients are appropriately footnoted in Table 4-22.
97.	Section 5.1, page 5-2, second paragraph; and page 5-3, second paragraph The citation "EPA 1989b" is incorrect. The correct citation is "EPA 1989." It is confusing to present only worker exposure pathways without a previous discussion of the occupational scenario. It is appropriate at the bottom of page 5-2 to include a brief statement regarding the occupational scenario. For example, it should be stated that the T Plant Aggregate Area is currently an industrial area.	 Accepted. The noted correction will be made. Accepted (same as Z Plant comment 55). Additional text will be added to clarify the risk-based screening approach.
98.	Section 5.3, pages 5-8, first paragraph, lines 28 to 30 The text refers to criteria used in the HRS scoring. Certain criteria have changed since the finalization of the HRS on December 14, 1990, and the text should note that scoring was done using the old system.	 Accepted (same as Z Plant comment 56). The text will be revised to note this fact.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
99.	Section 5.3, page 5-8, second paragraph, lines 36 to 40 The text states the following: The HRS ranking system evaluates sites based on their relative risk, taking into account the population at risk, the hazard potential of the substance at the facility, the potential for contamination of the environment, the potential risk of fire and explosion, and the potential for injury associated with humans or animals that come into contact with the waste management unit inventory. The term "hazard potential" should be more accurately described as "hazardous waste constituent toxicity and quantity." The phrase "potential for injury" should be more accurately stated as "potential for exposure."	Accepted (same as Z Plant comment 57). The noted corrections will be made.
100.	Section 5.3, page 5-9, first paragraph, lines 6 and 7 The text states that, "the mHRS takes into account concentration, half-life, and other chemical specific parameters that are not considered by the HRS." The present HRS does take these factors into account. The text should clarify that the previous HRS did not consider these factors.	Accepted (same as Z Plant comment 58). The text will be changed to clarify the noted statement.
101.	Table 5-1, page 5T-1a The levels of radiation for certain unplanned releases, as described in the text on page 5-4, should be presented in the table.	Accepted. The noted unplanned releases will be summarized in Table 5-1.
102.	Section 8.1.2, page 8-5, third paragraph The evaluation of existing data appears to begin here rather than on page 8-8. The appropriate text should be moved.	Accepted. Reference to this material will be made in the discussion of representative, alternative in Section 8.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
103.	Section 8.1.3, page 8-8, first paragraph The text incorrectly cites "EPA (1987)" for data quality information. The citation should be corrected to read "EPA (1987a)."	Accepted. The noted corrections will be made.
104.	Section 8.1.3, page 8-9, line 44 This section states that "the best indication of the validity of the data is the reproducibility of the results, and this indicates that validity (completeness) is one of the less significant problems with the data." This discussion of completeness should be clarified. The existing data gathered in the T Plant Aggregate Area may be complete based on the intended level of validation. However, it appears that the data is not complete if the intended use of the data is for risk assessment purposes. For data to be considered complete for risk assessment purposes, it must meet contract laboratory program (CLP) validation protocols. Also, the existing data may not be representative of the contaminant release at the T Plant Aggregate Area since "The survey or sampling has been done at a location different from the waste management unit or release . . ." (Section 8.1.2, page 8-5, line 35).	Accepted. Statement will be qualified to indicate that completeness is not a major problem to its use for site characterizations, although it would be for use in a formal risk assessment.
105.	Section 8.1.5, page 8-11, second bullet The text states that the preliminary site conceptual model is discussed in Section 8.1.3. However, the correct section is 8.1.4. The text should be corrected.	Accepted. The noted correction will be made.
106.	Section 8.2.1, page 8-14, second paragraph The citations given for 1) volumes 1 and 2 of the Superfund risk assessment guidance and 2) EPA Region 10 risk assessment guidance do not match Section 10.0 References. The text in this section and the reference section should be corrected. The last sentence repeats previous information stated in the paragraph and should be deleted.	Accepted. The noted corrections will be made

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
107.	Section 8.2.2.5, page 8-19, line 41 This section uses an example of a CLP analysis detecting an analyze at a level higher than specified by regulations. It should be noted that some of the analytical methods can be modified by special analytical services to achieve required detection limits.	Accepted. A discussion of the modified analytical procedures will be discussed.
108.	Section 8.2.2.5, page 8-19, line 28 This section should describe quality assurance and quality control samples (for example, field blanks, field duplicate, matrix spike and matrix spike duplicate, etc.) to be collected to measure precision and accuracy.	Rejected. This information will be discussed in a field sampling quality assurance plan prepared at a later date.
109.	Section 8.3.3.4, P. 8-26 The conceptual model described in Section 4.2.1 notes the importance of recharge from precipitation as a potentially important driving force of contaminant migration to ground water and notes that the soil hydraulic properties and distribution coefficients also have an important influence controlling the migration rate to ground water. The available data described in Section 3.5.2 notes that the estimates of recharge at Hanford vary widely and that site-specific data to describe the soil hydraulic characteristics and distribution coefficients are in short supply. Estimates of recharge and measured soil hydraulic characteristics and distribution coefficients, as data types, are critical for determining the potential migration of contaminants to ground water, however, neither of these data types are specifically identified as data needs in Section 8.2.2 or as data gaps in Section 8.2.3, nor are they included in the data collection program described in Section 8.3.	Rejected. Migration of contaminants to ground water is an issue for investigations driven by the groundwater AAMS, not for the source AAMS like T-Plant. Parameters required for modeling these phenomena are discussed as data gaps in the 200W GW AAMS.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
110.	Table 8-4, Sheets 4 of 5 and 5 of 5, pages 8T-4d and 8T-4e	
	These pages of Table 8-4 present data quality objectives for the listed inorganic and organic compounds. Units for the practical quantitation limit (PQL) column is indicated as pCi/g for nonradioactive analyses for both soil and water media. The correct units should be reported.	Accepted. Subheadings on appropriate units will be added.
	The source and rationale for selection of the stated PQLs should be indicated.	Accepted. The source and rational for selecting PQL will be discussed.
	Method 8240 is listed for methyl isobutyl ketone (MIBK) analysis. This method is not used for analysis of MIBK. Method 8015 should be used and referenced for this analysis. This table also lists analysis of kerosene by Method 8015. Modified Method 8015 is used to identify kerosene.	Accepted. The correct analyses methods will be cited.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
111.	Table 8-6, page 8T-6a A rationale for proposing perched zone monitoring wells at some of the WMUs is not provided in the accompanying text, but should be.	Accepted. A discussion will be provided for the rational of proposing perched zone monitoring wells.
	Investigation methods are not proposed in a systematic way at certain WMUs to characterize the nature and extent of contamination. The investigation methods should be selected on the basis of the existing data and additional data collected during source investigation. For example, only surface radiation survey and subsurface spectral geophysics are planned at the 241-T-361 settling tank. This inactive tank currently holds 28,000 gallons of sludge that is generated during the storage of contaminated liquid from T Plant processes (Section 2.3.2.41). Surface and underground contamination warning signs are posted at the site. No information is available on any intentional or unplanned release. No sampling data are available for the contents of this tank (see Section 4.1.2.2.2). The type of waste received and the method of operation at this tank are unknown. Hence, the investigation methods should include tank contents sampling, soil gas survey around tank, and surface and subsurface soil sampling.	Rejected. The recommended course of investigation for the 241-T-361 settling tank assumes the sludge in the tank will be removed by the Defense Waste Management Program. A review of available information indicates the 241-T-361 is of sound integrity and has never had any unplanned releases. As a result the geophysical survey was selected to verify the absence of subsurface contamination.
	Another example are the 241-TY-302B and -302C Catch Tanks. An estimated volume of 1,000 gallons of metal waste supernatant has leaked from the 241-TY-302B Catch Tank. It is unknown which nonradioactive substances are present. Some portions of the contaminated soil are removed, and other portions are covered. The method for using surface radiation survey and wipe samples alone to characterize the site contamination from past waste disposal practices is not clear.	Rejected. The investigation of the 241-TY-302B and -302C Catch tanks have been recommended to remain with the Single-Shell and Double-Shell Tank Programs and will not be addressed by the AAMS.

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
111.	(continued): Similarly, two unplanned releases occurred at the 241-TY-302C Catch Tank. The area is covered with black top. The quantity of waste released in one incident is unknown. In another incident, 5,000 gallons of mixed metal waste and rainwater was released at the site, contaminating the soil. The method for using the proposed surface radiation survey and wipe sampling alone to characterize the site is not clear.	
112.	Section 9.0, pages 9-2, lines 19 and 20 The text refers to Figure 9-1 for decision-making paths. Figure 9-1 is missing and should be included. A definition for FRS is not provided and should be.	Accepted. Figure 9-1 will be included. Accepted. Will spell out "Final remedy selection" (FRS)[1]. 1. Revised by WHC 7/7/92

Item	Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	Disposition (Provide brief justification if NOT accepted.)
113.	Section 9.2.1.1, page 9-8, first paragraph In line 33, "216-T-4-2 Ditch" should be substituted for "216-T-4 Ditch" to be consistent with earlier sections (see Sections 2.3.5.1.5 and 4.1.2.5.5). The 216-T-4-2 Ditch is recommended for investigation along the interim remedial measure pathway after June 1995. This WMU is the source of groundwater contamination as a result of continuous discharge of 19,000 gallons per day. Surface contamination levels of 20,000 ct/min are reported. One of the conditions for considering this WMU for ERA is that further degradation of the medium may occur if a response action is not expeditiously initiated. The text should explain the reason for not selecting this WMU for an ERA. Or, at least, the text should explain any interim remedial measure taken to control the potential exposure to nearby human population, biota, or the food chain from hazardous substances and radioactive or mixed waste contamination.	 Accepted. The correct name is 216-T-4-2 Ditch. Inconsistencies between the noted sections will be corrected. Rejected. The 216-T-4-2 Ditch was evaluated along the ERA path but is an active facility which is scheduled to be closed by 6/95. Based on this knowledge it was reasoned that an ERA could not be effectively implemented prior to the scheduled closure of the 241-T-4-2 Ditch.
114.	Section 10.0, page 10-3 References should be included for EPA (1989b,c and 1991).	 Accepted. The noted reference will be included.
115.	Plate 4 The arrow leading from biota to human for ingestion should be deleted.	 Accepted. The noted correction will be made.

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Subject: RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S REVIEW OF THE T PLANT SOURCE AGGREGATE AREA MANAGEMENT STUDY REPORT DRAFT A

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		G. D. Carpenter	B2-16	
		C. K. DiSibio	B3-03	
		R. E. Lerch, Assignee	B2-35	
		P. J. Mackey	B3-15	
		H. E. McGuire, Level 1	B3-63	
		R. K. Tranbarger	H4-55	
		T. B. Veneziano	B2-35	
		T. M. Wintczak	L4-92	
		C. D. Wittreich	H4-55	
		R. D. Wojtasek	L4-92	
		EDMC	H4-22	

The enclosures are the same as outgoing letter 9254955D. tmp, 6-5211