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

JUN 2 5 1992

92-ERB-090

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 STATE OF WASHINGTON DEPARTMENT OF ECOLOGY'S (ECOLOGY) REVIEW OF THE S PLANT SOURCE AGGREGATE AREA MANAGEMENT STUDY REPORT (AAMSR) DRAFT A

This letter transmits the responses to comments received from Ecology and the U.S. Environmental Protection Agency on Draft A of the S Plant AAMSR. If you have any questions, please contact Mr. A. C. Harris at (509) 376-4339.

Sincerely,

Steven H. Wisness
Hanford Project Manager

ERD:ACH

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 6/10/92 2. Page 1
3. Document Title/Number
S Plant Source AAMS, DOE/RL-91-60, Draft A
4. Lead Engineer/Scientist C. D. Wittreich 5. Organization 200/300 Environmental Engineering
6. Location/Phone/MSIN 450 Hills/6-1862/H4-55
7. Reviewer 8. Organization
Billie Mauss ECOLOGY
Sign and Print Name Date
9. Location/Phone/MSIN
10 The document was reviewed, and the reviewer had no comments.

Reviewer _____ 11. Date _____

12 I have reviewed the disposition of comments with the Lead Engineer/Scientist.

Reviewer _____ 13. Date _____

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
G1.	There is no indication of whether limited field characterization activities were conducted to meet the objective to "conduct limited new site characterization work if data or interpretation uncertainty could be reduced by the work" (Section 1.3, page 1-10). For example, some of the unplanned releases are evaluated as low priority sites on the basis of hazard ranking scores (HRS). Limited field characterization data taken at these unplanned release locations might have helped to support decisions for expedited, interim, or limited actions.	Accept. (Ecology: U Plant G1) Limited Field Investigations are being conducted in support of the AAMS including spectral borehole and groundwater monitoring. Spectral borehole logging results will not be available to support source AAMSR but will be reported in separate topical reports and will be used to support future work plans. Preliminary groundwater data will be used to support GW AAMSR and final results will be reported in a topical report. No characterization work was conducted to evaluate data uncertainties since no data were found that could be enhanced by additional field investigations within a time frame to support the AAMS.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
G2.	The criteria and rationale for the recommendations made in Section 9.0 meed to be further developed. A more logical progression of data, analysis of data (including limitations and data needs) and final recommendations would provide better support for the recommendations.	Accept. (Ecology: U Plant G2) Section 9.0 will be modified to include additional rationale.
G3.	No schedules are provided for the submittal of the work plans for the prioritized operable units. Also, there is no commitment nor schedules for conducting treatability studies for the recommended technologies.	Accept. (Ecology: U Plant G3) The scheduling issue will be addressed in the executive summary. However, schedules will not be developed until all AAMS have been prepared.
G4.	The report focuses primarily on human exposure and resulting health effects. The AAMS must include additional information on ecological exposure and potential effects as specified in EPA (1989b, c)/	Accept. (Ecology: U Plant G5) No ecologic risk studies specific to waste management units or the Aggregate Area are available for assessing relative ecologic risks. Section 4 and 8 will be revised to clarify this data gap.
G5.	There is little information provided in this report describing the interaction among various RL programs. The integration of RCRA, CERCLA, and D&D activities is critical to ensure a timely program management.	Accept. (Ecology: U Plant G6) The strategy for integrating the various RL programs is being formalized. The extent to which this strategy has been developed at this time will be discussed.
G6.	The report often is written in the future tense, and leaves unanswered many specific questions concerning how, when, and by whom decisions will be made.	Accept. (Ecology: U Plant G7) The tense in Section 1.0 and 9.0 has been revised to clarify whether work has been done or will be done. See Comment G3 for issues related to scheduling.
G7.	The chemical waste inventory summary is incomplete. Many organic and inorganic chemicals were used in the process and were ultimately disposed of in the cribs, ponds, trenches, and ditches on site. Data are lacking for these chemical wastes.	Accept. All inventory information that is available has been provided in the document. It is recognized that the inventory is not complete. Additional statements will be added to clarify this and lead the reader to the contaminants of concern table which is more complete.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
G8.	The source description for each waste management unit is not sufficient for understanding the characteristics of wastes disposed of at these units. Additional information the composition of wastes received at the waste management units should be included.	Reject. It is recognized that the information is limited. The uncertainty associated with past process operations and plant configuration control limit the usefulness of this information.
G9.	In the recommendations section of the report, a summary table should provide the following information: • Redefined waste management units group • Recommended action • Redefined operable unit category • Interface with other programs such as the Radiation Area Remedial Action program (RARA) and RCRA • Waste management units not grouped • Waste management units that are covered under other programs such as RARA, RCRA, defense waste management and Hanford surplus facilities programs, single- and double-shell tank programs, and other aggregate area management studies • Investigation priority	Accept. Table 9-1 will be revised to include an operable unit listing. The remarks column will provide indication of operable unit redefinition. Table 9-3 will be added to provide summary list of deferred units. Existing Table 9-1 already provides recommended action, interface with other programs. Investigation priority will be established after completion of the AAMS.
G10.	The rationale for removing the groundwater investigation from the scope of the S Plant operable units should be provided. Also, the problem of perched water contamination in the S Plant Aggregate Area Management Study should be discussed. How is it going to be handled?	Accept. Justification for removing groundwater investigation from S Plant Aggregate Area will be provided. Investigation of perched water is part of the source operable unit investigations. This will be clarified in the text.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
	Specific Comments	
1.	Section 1.0, Page 1-1, second paragraph; Integration between RCRA programs, Defence Waste Programs, and RARA Programs is not fully defined. Deferring the management of a waste site to another program is not adequate to describe integration. USDOE must provide and describe a process for regulatory input into work done by other programs on a NPL Site.	Accept. A general description of program interactions will be provided in the executive summary.
2.	Section 1.1.2, Page 1-3, last paragraph; A Focused Feasibility Study must be prepared discussing remedial alternatives for each type of waste unit. For each waste unit, a proposed plan followed by a Interim Record of Decision will be required.	Reject. The Hanford Site Past-Practice Strategy provides for remedy selection without a focused feasibility study. Interim Record of Decisions will be made on a unit or group of units included in an action.
3.	Section 1.2.1, Page 1-4, lines 26 through 28; Figures 1-3 and 1-4 are referred to as showing the eight source aggregate areas in the aggregate area management study (AAMS) program. The eight source aggregate areas include the source operable unit 200-NO-1, which is located in the 200 North aggregate area (Table 1-1). The cited figures show only the 200 East and West aggregate areas. A separate figure for the 200 North aggregate areas, showing the 200-NO-1 source operable unit, should be included and the text should reference this figure for the 200 North aggregate areas.	Accept. Text will be changed to refer to Figure 1-5 for the 200 North Aggregate Area which consists of the 200-NO-1 operable unit.
4.	Section 1.2.1, Page 1-4, lines 29 and 40; The rationale for not including isolated operable units, with the exception of 200-IU-6, in the AAMS is not provided and should be.	Reject. Scope of the AAMS was defined in TPA Milestone M-27-01.
5.	Section 1.2.2, Page 1-6, lines 1 through 3; The text states that a separate report for step 3 (conduct limited field characterization activities) will be prepared. Since step 3 is included in the scope of the AAMS and is a parallel effort in the AAMS, the completion date for step 3 should be indicated in this report.	Reject. The report will be issued after completion of the AAMSR.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
6.	Section 1.2.2, Page 1-6, line 16; The word physiography is obeolesant and it's meaning has changed in the U.S. A more descriptive word describing the configuration of the earth's surface is geomorphology. (reference: Dictionary of Geological Terms, Bates and Jackson, 1984).	Reject. The word physiography is used conventionally in Hanford Site literature to refer to geomorphic and broader scale descriptive aspects of the site.
7.	Section 1.2.2, Page 1-7, lines 13 and 28; The data packages for geologic and geophysics and groundwater field characterizations should indicate the specific plant, facility, and operable unit to which the data packages refer.	Accept. The data packages are specific in previous lines. Line 13 will be deleted.
8.	Section 1.2.2, Page 1-8, lines 3 through 16; A reference document for regulatory agency approval for expanded groundwater monitoring programs and in situ assaying of gamma-emitting radionuclides as part of the AAMS process should be cited. The date for submission of field characterization results topical reports for each AAMS should be presented.	Reject. The Hanford Site Past-Practice Strategy document has been referenced and provides a basis for regulatory agency approval. See Comment 5 for response to submission date of field characterization.
9.	Section 1.2.2, Page 1-8, line 37; The word "retain" should be "remain".	Accept. "retain" changed to "remain".
10.	Section 1.3, Page 1-10, lines 8 and 9; Since field screening activities are a part of the AAMS process (page 1-8, lines 3 and 4), deliverables for an AAMS should also include topical reports for field characterization results.	Reject. See Comment 5.
11.	Section 1.4, Page 1-11 first paragraph; This section should reference where in this report information concerning ongoing field characterization are discussed. The text on quality assurance should also reference standard EPA documents e.g., Contract Laboratory Program Statement of Work for Organic analysis (EPA August 1991), and the Quality Assurance Project Plan (EPA, QAMS-005/80) being written for 100 Area work plans.	Accept. (Ecology: U Plant 2) Section 1.2.2 indicates this information will be discussed in a separate report. EPA Guidance documents will be referenced as appropriate.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
12.	Figure 1-5, Page 1F-5; The 200-NO-1 source operable unit is incorrectly identified as an isolated operable unit. This discrepancy should be corrected.	Reject. 200-NO-1 is considered an isolated operable unit.
13.	Section 2.1, Page 2-1, lines 31 through 33; The S plant aggregate area operable units are incorrectly reported as 200-UP-1, 200-UP-2, and 200-UP-3 instead of as 200-RO-1, 200-RO-2, 200-RO-3, and 200-RO-4 (Table 1-1). This discrepancy should be corrected.	Accept. This discrepancy will be corrected.
14.	Section 2.2, Page 2-1, line 43-46; Names of all the reactors need to be provided. This will help in tracking the history of the Hanford Site.	Accept. Names of reactors will be provided.
15.	Section 2.2, Page 2-2, line 34; Definitions for the acronyms SX and SY should be provided.	Reject. SX and SY are not acronyms. They are tank farm designations.
16.	Section 2.3, Page 2-3, line 12; The word "appropriate" should be removed. What was appropriate in the past is no longer appropriate in the present day context.	Accept. Suggested change will be made.
17.	Section 2.3.1.1, Page 2-5, lines 10 through 12; It is stated that the 202-S Building is still being utilized for offices, storage, and research. This facility has not been used in these capacities for a number of years.	Accept. Information will be checked to verify the accuracy.
18.	Section 2.3.1.1.1, Page 2-5, line 10; The type of material stored in the Canyon and the active period of the area should also be stated.	Accept. See Comment 17.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
19.	Section 2.3.1.2.1, Page 2-6; It is not clear from the text whether the 204-S pumphouse or the 204-S tank farm with above-ground storage tanks was converted for unloading radioactive waste from rail tank cars and for storage of thorium nitrate solution. The period of operation for the 204-S pumphouse and 203-S and 204-S tank farms should be included. It is not clear whether the 204-S pumphouse is existing or if it has been removed. Additional information on the date of removal and the disposal of removed material should be provided for the 203-S and 204-S tank farms.	Accept. Paragraph will be rewritten to clarify information. Additional information will be added as available.
20.	Section 2.3.1.2.2, Page 2-6, lines 29 and 30; The date of removal and the disposal of removed material from the 205-S building should be included.	Accept. Information will be added as available.
21.	Section 2.3.1.2.3, Page 2-6; The type of process chemicals stored in the wooden valve house should be clearly specified. Information on the condition of the wooden valve house and its active period should be provided.	Accept. Will clarify that valve house did not store materials, referenced tanks did. Additional information will be provided as available.
22.	Section 2.3.1.2.4, Page 2-6; Information on the treatment steps used, the types of wastes historically handled and generated, and the capacity of the 219-S waste retention and treatment facility should be included.	Accept. Additional information on source of waste will be included. However, detailed discussion of treatment is not relevant and will not be included.
23.	Section 2.3.1.2.10, Page 2-7; Additional information on the process steps, process chemicals used, and on the generation and disposal of waste from the treatment of methyl isobutyl ketone (MIBK) should be included.	Accept. Waste generation discussion will be included in 2.4 on a general basis. Specific details are not relevant and, therefore, will not be discussed.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
24.	Section 2.3.1.2.14, Page 2-7; Additional information should be given for the 2704-S Monitoring House. There has to be more information as to the past usage of the 2704-S Monitoring House. A site visit or current or past employee interview may yield additional information.	Accept. Additional information will be included as available.
25.	Section 2.3.1.2.11, Page 2-7, line 25; The text should provide information on the frequency of replacement of sand and gravel in the filter and on the disposal of contaminated sand and gravel.	Reject. Information is not relevant to the source AAMS.
26.	Section 2.3.1.2.12, Page 2-7; The approximate amount of waste generated from washing the inner liner of the 291-S stack complex and final disposal of washdown waste should be presented.	Reject. Information is not relevant to Section 2.3.1.2.12.
27.	Section 2.3.2, Page 2-8, last paragraph; Briefly mention about the RCRA closure plan and the time table conforming to the clean up of the CERCLA site. This is important for entire cleanup of the site.	Accept. (Ecology: U Plant 6) Will include text which describes the SST closure program.
28.	Section 2.3.2.1, Page 2-9, lines 19 and 20; The sentence should read that the "tops" and not the "bottoms of most tanks...".	Accept. Sentence will be changed to reflect that the domes are below grade.
29.	Section 2.3.2.1, Page 2-9, lines 27 and 28; The text states that the cascade systems are composed of three tanks each, but it appears from the tank numbers shown in parentheses that five tanks (108-112) were placed in one cascade. Also, tank 106 appears to be listed in two cascades. These discrepancies should be addressed.	Accept. Sentences will be clarified to indicate correct information.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
30.	Section 2.3.2.1, Page 2-9, lines 40 and 41; The text states that radiation intensities should be lower as the wastes move down the cascade. This statement may not be true. The tanks are not always operated in series as originally arranged in a system of cascades. Sections 2.3.2.1.1 through 2.3.2.1.12 discuss the different type of waste received and the operating period for the individual single-shell tanks. Since these tanks receive both effluent from other tanks and liquid wastes directly from sources, radiation intensity in these tanks is expected to be very high.	Accept. Lines 40-41 will be changed.
31.	Section 2.3.2.1, Page 2-9, line 36; Although the text describes most of the waste in the 241-S Tank Farm, a brief description of the remaining waste needs to be mentioned in the text.	Accept. Page 2-9 will be changed to reflect all wastes present in the Tank Farms.
32.	Section 2.3.2.1.2, Page 2-10, lines 13 and 14; The total estimated volume (779,000 gallons) of interstitial liquid and solids currently stored in the 241-S-102 single-shell tank exceeds the capacity (750,000 gallons) of the tank. This discrepancy should be rectified.	Accept. Tank contents will be updated to reflect levels stated in latest Tank Farm Surveillance Report.
33.	Section 2.3.2.1.10, Pages 2-11 and 2-12, lines 46 and 1; The total estimated volume (752,000 gallons) of interstitial liquid and solids currently stored in the 241-S-110 single-shell tank exceeds the capacity (750,000 gallons) of the tank. This discrepancy should be rectified.	Accept. See Comment 32.
34.	Section 2.3.2.2, Page 2-12, lines 43 and 44; This sentence should read that the "tops" and not the "bottoms of most tanks...".	Accept. Insert "the domes" between and/are on page 2-12, line 43.
35.	Section 2.3.2.2.1, Page 2-13, lines 37 and 38; The text should state whether the reported temperatures in the tank were measured before or after the unit was connected to the 241-SX sludge cooler.	Accept. Date of temperature readings will be indicated if information is available.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
36.	Section 2.3.2.2.2, Page 2-14, line 3; Concrete is included as a waste received at tank 241-SX-102 (as in some other single shell tanks). Additional information on this waste, such as its source and form, should be included.	Accept. Further research will be done to determine the state of concrete wastes.
37.	Section 2.3.2.2.2, Page 2-14, line 17; The statement on pumping the waste to a "minimum supernatant heel" is not clear and should be explained.	Accept. "minimum supernatant heel" will be explained further.
38.	Section 2.3.2.2.4, Page 2-15, lines 8 and 9; It is not explained how a leak of 110,000 gallons of liquid was detected when the dry well radionuclide monitoring results remained stable. This information should be included.	Accept. Text will be clarified with Westinghouse Tank Farm personnel.
39.	Section 2.3.2.2.5, Page 2-15, line 25; The review period should be defined or referenced.	Accept. Review period will be defined.
40.	Sections 2.3.2.2.7, 2.3.2.2.9, and 2.3.2.2.12, pages 2-16 through 2-18; Information on the dates of removal from service of the leaking tanks and the action taken to control the leaks should be included.	Accept. Information will be included if available.
41.	Section 2.3.2.4, Page 2-20, lines 17 and 18; The tank identification numbers should be provided for the wastes transferred from catch tanks to storage tanks.	Reject. This level of detail is irrelevant for this section.
42.	Section 2.3.2.4.2, Page 2-20; The year of removal from service of the 241-S-302A catch tank and the location of the 241-S-304A catch tank should be specified.	Accept. Year of removal from service and location will be specified.
43.	Section 2.3.2.4.3, Page 2-20, line 39; The location of the 241-S-302B catch tank is incorrectly reported. This tank is located on the northeast side, not west, of the 241-S tank farm. This discrepancy should be corrected.	Accept. Location of tank will be noted.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
44.	Section 2.3.3.1, Page 2-22, line 8; The reference to Figure 2-6 for the design of a crib is incorrect. Figure 2-6 shows the design of a double-shell tank. The reference should be for Figure 2-9.	Accept. Correct figure will be referenced.
45.	Section 2.3.3.1, Page 2-22, line 9; The location of the 202-S Building should be depicted in either Figure 2-2 or Figure 2-8;	Accept. 202-S Building will be depicted in Figure 2-2.
46.	Section 2.3.3.1, Page 2-22, line 41; It states that the 216-S-1 and -2 facilities received cell drainage wastes from the D-1 receiver tank and redistilled condensate from the D-2 receiver tank. Additional information on the source, strength, and characteristics of these wastes and the functions of the D-1 and D-2 receiver tanks should be provided.	Accept. Additional information will be provided based on availability.
47.	Section 2.3.3.1, Page 2-23, line 2; The measurement 16 x 33 ft should also be given in meters.	Accept. Dimension in meters will be added.
48.	Section 2.3.3.1, Page 2-23, line 11; Units should be given for the number 60.	Accept. Units will be added.
49.	Section 2.3.3.1, Page 2-23, line 15; Units should be given for the number 20.	Accept. Units will be added.
50.	Section 2.3.3.1, Page 2-23, lines 25-27; The last part of this sentence, "and was moved deeper into the profile before driving the casing deeper" should be clarified.	Accept. Sentence will be clarified.
51.	Section 2.3.3.2, Page 2-24, lines 7 and 8; The 207-S retention basin is noted in reference to the 216-S-5 crib location shown on Figure 2-8. The 207-S retention basin is not shown on the map. This comment is applicable to subsequent sections.	Accept. Figures will be changed to include the 207-S retention basin.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
52.	Section 2.3.3.2, Page 2-24, lines 9 and 11; The specific process vessels or sources from which the acidic process vessel cooling water and steam condensate are generated and the nature of these wastes should be explained elsewhere to better evaluate the type of contaminants disposed of at the crib.	Accept. Pending availability of information Section 2.3 will be expanded.
53.	Section 2.3.3.2, Page 2-24, lines 25 through 27; This sentence need clarification. It states and average of 350 mR/h at the pond interior with localized spots up to 17 mR/h.	Accept. Text will be clarified.
54.	Section 2.3.3.2, Page 2-24, lines 33 and 34; The basis for the reported volume of contaminated soil should be presented. This comment is applicable wherever appropriate in other sections.	Accept. Reference will be added.
55.	Section 2.3.3.2, Page 2-24, lines 38 and 40; It is stated that breakthrough to groundwater is unlikely to have occurred in the vicinity of the crib based on a review of radiation data for sediments beneath the crib. Conversely, it is reported in Table 4-14 that there is a potential for migration of contaminants to the unconfined aquifer. This inconsistency should be rectified. Because of the highly acidic native and the large volume of waste disposed of through this crib, it is likely that the contaminants would have been in soluble form and would have migrated to groundwater during infiltration, in addition to being deposited in sediments beneath the crib.	Accept. Information will be added and will reference Section 4.1.1.5 where Table 4-14 is discussed.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
56.	Section 2.3.3.3, Page 2-25; The text states that the crib received a total of 1.18×10^9 gal of low salt, natural/basic liquid waste. It then states that the site received the process vessel cooling water and steam condensate. In the third paragraph, it states that the site received high-level radioactive contaminated condensate. It is not clear whether the total amount of waste includes the amount of cooling water and steam condensate. This ambiguity should be clarified. Also, the text should explain the sources of the low salt, neutral/basic liquid wastes and high-level condensate, and include a description of low salt, neutral/basic liquid wastes in Section 2.4. The basis for suspecting only contaminants Cs-137, Sr-90, Ru-106, and nitrate should be provided. This comment is applicable wherever appropriate for other sections.	Accept. Text will be clarified. Reference will be added where available. Only those analytes that were listed are reported.
57.	Section 2.3.3.3, Page 2-25, line 16 through 18; In the second paragraph, the text indicates that a runoff ditch is provided for temporary excess flows at the crib. Additional information on the size of the run-off ditch and the amount of excess flows, if any are received, should be provided.	Accept. Additional information will be added if available.
58.	Section 2.3.3.4, Page 2-25, lines 40 and 41; The generation rates and characteristics of all drainage and process condensates and the functions of the D-1 and D-2 receiver tanks and the H-6 condenser should be provided, and also given in Section 2.4.	Reject. Detailed information is not relevant.
59.	Section 2.3.3.4, Page 2-25, line 42; The specific location and tank (single-shell or double-shell tanks) to which the H-6 condenser condensate was rerouted for storage should be included.	Accept. Location of storage tank will be included if available.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
60.	Section 2.3.3.4, Pages 2-25 and 2-26; The approximate volumes of gravel fill, contaminated soil, and overburden soil are not reported for this crib. To be consistent with other sections, this information should be included. This comments is applicable wherever appropriate.	Accept. Volumes of fill and soil will be added for this crib if available. In general, however, all available information was included.
61.	Section 2.3.3.7, Page 2-27, line 44. The location of the 216-S-20 Crib is referenced as being "... 93 m (300ft) southeast of the 222-S Laboratory...". This should be "... 93 m (300 ft) east of the 222-S Laboratory...".	Accept. Location will be verified.
62.	Section 2.3.3.7, Page 2-28, line 15; The statement "the ground was filled in" should be revised to give a more accurate account of the procedure.	Accept. The text will be changed to state "the excavation was filled in".
63.	Section 2.3.3.10, Page 2-30, line 4; This paragraph should identify under which program 216-S-25 Crib is handled.	Accept. The applicable program will be noted.
64.	Section 2.3.3.11, Page 2-30, line 30; A reference or value should be given for the ^{90}Sr guide.	Accept. Reference will be added.
65.	Section 2.3.3.12, Page 2-31, line 2; A reference is made to figure 2-8 for the location of 216-S-3 French Drain. The 216-S-3 French Drain is not located on this figure nor on Plate 1.	Accept. 216-S-3 French Drain will be added to Figure 2-8 and Plate 1.
66.	Section 2.3.5.1.2, Page 2-32, line 39; The first sentence "...and 500 MR/h in spots..." should read "...and 500 mR/h in spots...".	Accept. Text will be corrected from "MR/h" to "mR/h".
67.	Section 2.3.5.1.2, Page 2-32, line 45; A reference should be given for the boring sampling event.	Accept. Reference will be provided if released.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
68.	Section 2.3.5.1.3, Page 2-33, line 8; This paragraph should identify under which program 216-S-11 Pond is handled.	Accept. See Comment 63.
69.	Section 2.3.5.1.3, Page 2-33, first sentence; A reference is made to figure 2-11 for the location of 216-S-15 Pond. The 216-S-15 Pond is not located on this figure nor on Plate 1.	Accept. Figure 2-11 and Plate 1 will be corrected to include 216-S-15 Pond.
70.	Section 2.3.5.1.5, Page 2-36, line 34; Clarification should be given as to the reference of this source of contamination.	Reject. Reference is already provided page 2-36, line 36.
71.	Section 2.3.5.1.5, Page 2-36, lines 41 and 42; The last sentence of this paragraph should be deleted.	Accept. Sentence will be deleted, reference will still be included.
72.	Section 2.3.5.1/5, Page 2-37, line 1; The sentence is incomplete. "The addition of" should be added to the beginning of the statement.	Accept. Noted correction will be made.
73.	Section 2.3.5.1.6, Page 2-38, line 16; The 216-S-19 Pond is located approximately 2400 ft southeast of 202-S Building, not southwest.	Accept. Location will be verified and corrected.
74.	Section 2.3.5.1.6, Page 2-38, line 22; A reference should be given for the prescribed disposal guidelines.	Accept. Guidelines will be added if found.
75.	Section 2.3.5.2.1, Page 2-39, lines 32-33; This states that excavations across the 216-S-10D Ditch in 1971 was free from contamination. The type of contamination and the method(s) used to determine this should be given.	Reject. All available information known to exist has been included.
76.	Section 2.3.7.3, Page 2-45, line 35; The 2904-S-170 Control Structure is located southeast of the 241-SX Tank Farm, not southwest. The 2904-S-170 is not contained on Plate 1.	Accept. Location will be verified and corrected.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
77.	Section 2.3.7.4, Page 2-46, line 11; The location of the 2904-S-171 Control Structure is shown in different locations on figure 2-14 and Plate 1. Identify the correct location and make the corrections.	Accept. Location will be identified and corrected.
78.	Section 2.3.7.15, Page 2-49, line 22; The 241-SX-A Valve Pit is not shown on Figure 2-14, nor on Plate 1.	Accept. Unit will be added to figure and plate.
79.	Section 2.3.7.16, Page 2-49, line 31; The 241-SX-B Valve Pit is not shown on Figure 2-14, nor on Plate 1.	Accept. Unit will be added to figure and plate.
80.	Section 2.3.7.17, Page 2-49, line 39; The 241-SY-A Valve Pit is not shown on Plate 1.	Accept. Unit will be added to figure and plate.
81.	Section 2.3.7.18, Page 2-50, line 1; The 241-SY-B Valve Pit is not shown on Plate 1.	Accept. Unit will be added to figure and plate.
82.	Section 2.3.9.1, Page 2-51, line 22; The 218-W-7 Burial Ground is not shown in Figure 2-21, nor in Plate 1.	Accept. Unit will be added to figure and plate.
83.	Section 2.3.9.2, Page 2-51, line 39; If an unknown amount of waste was buried in the burial ground, can it be certain that the total beta activity is less than 0.1 Ci. A reference should be given.	Accept. Reference will be provided if released.
84.	Section 2.3.10, Page 2-52; This states that there were 45 unplanned releases in the S Plant Aggregate Area. However, Tables 2-1 and 2-6 show 46 unplanned releases and Figure 2-22 shows 42 unplanned releases. Plate 1 does not show 42 unplanned releases. Which is correct? Please check the location and number and update accordingly.	Accept. Tables and figures will be checked and corrected appropriately.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
85.	Section 2.3.11, Page 2-52, lines 16 and 17; The text mentions that the steam condensate discharges may provide a means to mobilize contaminants in adjacent waste management units. The locations of each of these discharges relative to the nearest waste management unit should be discussed.	Reject. This statement was inappropriate and this section will be deleted.
86.	Section 2.4, Page 2-52; This section should include a subsection for wastes generated from decommissioning and decontamination operations including the methods, equipment, the chemicals used, waste generated, and the waste management units that received the wastes.	Reject. The specific details of the Decommissioning and Decontamination are not within the scope of this document.
87.	Section 2.4.3, Page 2-55, lines 39 and 40; The text states that ". . . the remaining organic phase was contacted with a new aqueous phase (not containing the Al(NO3)3) . . . ." What was in this aqueous phase?	Reject. This level of detail is not relevant.
88.	Section 2.4.7, Page 2-59, first paragraph; The text states that organic wastes from the laboratory or other buildings were decontaminated and treated and then transported to a designated site for burial. Where was the designated burial site?	Accept. Information will be provided if available.
89.	Section 2.7, Pages 2-63 through 2-65 This section is informative in that other Hanford programs are described. However, the text says little about how these programs interact to ensure integrated, mutually supportive, and cost-effective compliance and remediation occur on a site-wide basis.	Accept. Information will be provided in the executive summary.
90.	Figure 2-2, Page 2F-2; Building 222-S is mislabeled as 233-S.	Accept. Figure will be corrected.
91.	Figure 2-3, Page 2F-3; The vaults are not labeled on this figure. Identify the tanks from the vaults in the figure 2F-3. This needs to be put in words with arrows.	Accept. Figure will be corrected.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
92.	Figure 2-14, Page 2F-14; This figure is too small to be of much use. Also, several Valve Pits are mislabeled, 241-S-C and 241-S-D, should be 241-SX-C and 241-SX-D.	Accept. Figure will be corrected and enlarged to the extent possible on a 8½" x 11" sheet.
93.	Figure 2-22, Page 2F-22; Table 2-1, Pages 2T-1a through 2T-1p; Table 2-6, Pages 2T-6a through 2T-6k; There are units shown in Tables 2-1 and 2-6 that do not appear in Figure 2-22; and units shown in Figure 2-22 that do not appear in Tables 2-1 and 2-6. Many of these inconsistencies appear to be typing errors, however they should be corrected.	Accept. Figures and tables will be double-checked and corrected accordingly.
94.	Tables 2-2 through 2-4, Pages 2T-2 through 2T-4c; The titles of these tables should state that the tables contain all "available data"; not necessarily a complete set of data.	Accept. Table titles will be changed.
95.	Section 3.2.1, Page 3-3, first paragraph; The description of precipitation should include information concerning seasonal storm events. This would lead into a more detailed discussion in Sections 3.5.1 and 3.5.2.2 concerning the potential impact of stormwater runoff on recharge and the spread of contamination.	Accept. (Ecology: U Plant 19) Additional information will be provided.
96.	Section 3.3.1, Page 3-4, lines 13 through 15; It is noted that surface drainage from the Horse Heaven Basin enters the Pasco Basin. As shown in the Figure 3-7, the Horse Heaven Basin does not drain into Pasco Basin. Determine which is correct.	Accept. Text will be revised to delete the Horse Haven Basin from the listing of basins that discharge to the Pasco Basin.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
97.	Section 3.3.3, Page 3-5; Identify if there is any well defined drainage channel exist in the S-Plant Aggregate Area. It was mentioned above (in 2nd para, page 3-5) that approximately one-third of the Hanford site is drained by the Yakima River system. What about the S-Plant Aggregate Area? Does it belong to the Yakima River system? This should be explained in detail.	Reject. No well defined drainage exists in the S Plant Aggregate Area. Text will be revised to indicate drainage to the Yakima River.
98.	Section 3.4, Pages 3-5 and 3-6; This section is well written and concise. Since the readership will include many people whose area of expertise is not geology, an effort should be made to use more common language instead of the more specialized technical language. Some examples of these terms include, but are not limited to: intercalated, pedogenic, epiclastic, siliciclastic, anticline.	Reject. The text is appropriate for the subject matter discussed.
99.	Section 3.4.1.1, page 3-6, line 38; This sentence refers to ". . . Neogene- to Quaternary-age sediments." Paleogene and Neogene, and Tertiary and Quaternary are two different sets of nomenclature for the periods within the Cenozoic Era. It would be more correct to use one nomenclature or the other and not mix the two.	Accept. Tertiary will be used instead of Neogene.
100.	Section 3.4.2.3, Page 3-10; Recent studies on Ringgold Formations are included in Lindsey and Gaylord (1990), and Lindsey, (1991) publications. The 1989 publication as mentioned in your text seems to be old. The Stratigraphy was revised by Lindsey in 1991. Lindsey and Gaylord (1990) and Lindsey (1991) have recognized five separate sand and gravel fluvial sequences in the Lower Ringgold , which are designated as FSA, FSB, FSC, FSD1, and FSE. Revision of the stratigraphy of the Ringgold Formation should be made in context with the recent publications wherever applicable.	Accept. The document was prepared using the most recent information available at that time. The document will be revised to reflect the recent information released subsequent to the issuance of this document.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
101.	Section 3.4.2.6, Page 3-12; According to the Stratigraphy of the Hanford site as depicted in Figure 3F-12 the Early "Palouse" soil is a part of the Hanford Formation. The description should therefore be included in the Hanford Formation. Also give the reference in figure 3F-12.	Accept. Figure 3-12 will be corrected.
102.	Section 3.4.2.7.1, Page 3-12; As per the stratigraphic figure 3F-12, the gravel dominated facies is the Pasco Gravel. The Pasco gravel has been identified in the stratigraphy and the words "Gravel Dominated Facies" should be replaced by Pasco Gravel.	Accept. Stratigraphy will be updated to reflect Lindsey 1991.
103.	Section 3.4.2.7.2, Page 3-12; As per the stratigraphic figure 3F-12, the Touchol beds seem to correspond to the sand dominated facies and slack water facies. These need to be checked with the latest publication(s) and if so, appropriate changes are to be made i.e. instead of calling sand dominated facies, etc. it should be named "Touchol beds".	Accept. The section will be revised to reflect the most recent information.
104.	Section 3.4.2.8, Page 3-13, line 14; Remove the word Holocene from "Holocene Surficial Deposits".	Accept. "Holocene" will be deleted.
105.	Section 3.4.3.2, Page 3-14; See comment on Section 3.4.2.3.	Accept. See Comment 100.
106.	Section 3.4.3.4, Page 3-15; See comment on Section 3.4.2.6.	Accept. See Comment 101.
107.	Section 3.4.3.6, Page 3-16; See comment on Section 3.4.2.8.	Accept. See Comment 104.
108.	Section 3.5.1, Page 3-18, lines 11 through 15; Did the research by Gee (1987) and Rouston and Johnson (1990) include sampling during early spring storm events? Temperatures in February-March would seem to inhibit much evapotranspiration.	Accept. The discussion of subject documents will be clarified with respect to the testing conditions. Additional information regarding the 100 year storm event will also be included in the discussion.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
109.	Section 3.5.2.1, Page 3-20 and 3-21; References to UNSAT-H and PORFLO-3 are missing in the text.	Accept. Reference will be included.
110.	Section 3.5.1.2, page 3-21, lines 39 through 40; The water table is defined as the zone where the fluid pressure in the pores of the porous medium is exactly atmospheric. The pressure head at the water table is equal to zero. It would be more correct to say that ". . . capillary pressure within the horizon may exceed atmospheric, i.e., saturated conditions may develop."	Accept. Change will be made as suggested.
111.	Section 3.5.2.1.2, Page 3-21, Line 35-43; Definition of perched water table given this paragraph is not necessary.	Reject. Information is believed to be necessary.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
112.	Section 3.5.2.1.3, Page 3-22, line 22-30; The term "confined" is not appropriate since there are evidence of direct communication of Unit A with Unit E. The term "semi-confined" seems to be most appropriate name for the Unit A aquifer. Also, when using any of these terms, it should end with the term "aquifer" not by "groundwater" as used in the text (eg. semi-confined groundwater in line 24, pg. 3-22, should be semi- confined aquifer).	Reject: First Part. 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. Line 24 will be revised to eliminate the term "groundwater".
113.	Section 3.5.2.2, Page 3-23; This section should be titled as "Natural Groundwater Recharge and Discharge" and should identify if there is any discharge of groundwater. For example, shallow groundwater discharges to the Columbia River along the northern margin of the 100 area have been documented by many investigators. This needs to be investigated for S Plant aggregate Area and mentioned.	Reject. Title is consistent with all previous AAMS that have been submitted and therefore will remain as is.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
114.	Section 3.5.2.2, Page 3-23, lines 24 through 29; The conclusion that less than 25% of the precipitation falling on typical Hanford Site soil actually infiltrates to any depth (page 3-23, lines 28-30) is in contrary to the previous conclusion made in Section 3.5.1, pages 3-18, second paragraph.	Reject. Section 3.5.1 discusses conclusions on a study-specific basis. Section 3.5.2.2 was a generalization of all the studies and are consistent.
115.	Section 3.5.2.2, Pages 3-23 and 3-24; Examples of precipitation recharge studies showing different recharge rates need some more explanation on evapotranspiration. Some of the results seemed to be the opposite of what Gee (1987) and Rouston and Johnson (1990) have found.	Reject. Existing text provides sufficient information on the differences in the studies that account for the opposite results. References are provided as a source of additional detail.
116.	Section 3.5.2.4, Page 3-25, line 36; The text indicates that Figure 3-40 presents information on the groundwater mounding beneath the 200 Areas. The correct figure is Figure 3-42.	Accept. Figure reference will be corrected in the text.
117.	Section 3.5.2.4, Page 3-25, line 38; It is noted that the horizontal hydraulic gradient is expected to increase as the 200 West mound continues to dissipate. The gradient should actually decrease.	Accept. The sentence will be revised to read "The ratio of the vertical to the horizontal will decrease as the mound begins to dissipate."
118.	Section 3.5.3.1, Page 3-26, line 9; Additional information on the aquifer systems is contained...(...not in contained).	Accept. Typo will be corrected.
119.	Section 3.5.3.1.1, Page 3-26, line 19; Again, the reference should be to figure 3-42 (figure 3-41 is the particle size and water retention curves for Hanford soils).	Accept. Figure reference will be corrected.
120.	Section 3.5.3.1.1, Pages 3-26 and 3-27; Moisture content is described in terms of volume in the text and in Figures 3-40 and 3-41, but as moisture content by weight percent in the table on page 3-27. Units should be consistent in the report for comparison.	Accept. If data are available to convert moisture content to volume percent from weight percent, these conversions will be made and documented in the text.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
121.	Section 3.5.3.2 page 3-28, lines 2 through 4; Higher infiltration rates would also be expected in areas where the topography is flatter.	Accept. Text will be clarified to indicate this.
122.	Section 3.6, Page 3-28 to 3-35; There is a great deal of information in this section. Unfortunately, there are no references provided to simplify additional data collection. For example, it would be helpful for planning field work to know the location of sensitive or threatened flora. A reference is made to badgers (section 3.6.3.1) and harvester ants (section 3.6.1.3.4), with data indicating these fauna can spread contamination. A key data objective for this and subsequent studies is to quantify environmental pathways; this report should consistently support meeting this objective. The text notes that there are no "domestic" groundwater supply wells within the aggregate area. Are there any public groundwater supply wells? The text should explain where on-site workers derive their potable water. The text also notes that the nearest domestic well is over 20 miles distant from the study area. The wells 699-24-94 and 66-52-C are located approximately 5 miles west southwest of the 200 West Area. The text should be modified.	Accept. (Ecology: U Plant 22 & 23) No references are provided because this is an original work by Site biologists. Accept. See Comment G4. Accept. Text will be clarified and include a discussion of well 66-52-C at the PNL Observatory, well S28-E0 at the Training Academy and Well 699-41900-C at the Yakima Barricade. The well designated as 699-2495(4) is a seep well and will also be included.
123.	Section 3.6.2, Page 3-33; Access to the entire Hanford site is administratively controlled and is expected to remain this way for foreseeable future to ensure public health and safety and for reasons of national security. This information needs to be incorporated in the text.	Accept. Text, as provided in comment, will be added to the end of first paragraph in Section 3.6.2.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
124.	Section 3.7.2, Page 3-34; The text needs specific references, especially on publications by Rice, 1980, Chatter, 1989, etc.	Accept. References will be added if documents have been released.
125.	Section 4.1, Page 4-1, line 24; The title of 4.1 should be KNOWN AND SUSPECTED CONTAMINATION instead of "NATURE AND EXTENT OF CONTAMINATION".	Accept. Title will be changed.
126.	Section 4.1, Pages 4-1 to 4-2, lines 45,46 & 1 respectively; Table 2-2 is given as a reference for the list of chemicals identified as potentially present in the S Plant Aggregate Area. This is not a complete reference, table 2-2 only contains a list of radionuclides and does not contain any other contaminants. The statement that the list of potential chemicals "does not necessarily include wastes that may have originated in the S plant Aggregate Area or other areas of the Hanford Site" is unclear.	Accept. Table 2-3 will also be referenced. Accept. Statement will be clarified to indicate that these tables are not a complete list of potential chemicals.
127.	Section 4.1, page 4-2, lines 32-34; The text states that ". . . few of the sample locations were directly associated with any of the identified waste management units and so most of this information is only useful in characterizing area-wide trends." Some of this information can be useful for finding previously unidentified contaminant areas. In addition, later sections in the report rely on this information to make decisions regarding cleanup priorities.	Reject. The sentence references TLD measurements which were not used in establishing cleanup priorities. These measurements are taken at stationary points and therefore would not likely be useful for finding previously unidentified areas.
128.	Section 4.1.1.1, page 4-3, fifth paragraph to page 4-4, fifth paragraph These paragraphs discuss an aerial gamma radiation survey, TLD measurements, and surface radiological surveys. These paragraphs should be moved to the section on surface soil (Section 4.1.1.2). The surveys and measurements primarily tell you what's in the surface and near surface soil.	Accept. Text will be moved to Section 4.1.1.2.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
129.	Section 4.1.1, Page 4-3, lines 44 and 45; It is not clear why it is "impractical" to convert gross gamma counts to a meaningful exposure rate due to "complex distribution of radionuclides on the site". It would be better to attempt to make sense of what data do indicate, with limitations, rather than explaining why they don't tell us.	Accept. Section will be clarified regarding the usefulness of this data. The text will indicate that the radiological survey technique provides an indication of both surface and subsurface contamination. Without direct sampling data to determine the location and speciation of contaminants, exposure calculations would be based on supposition. The data does however provide an indication of where additional sampling might be done to provide data required to calculate exposure rates.
130.	Section 4.1.1.1, Page 4-4, lines 8 and 9; Figure 4-1, Page 4F-1; "Other significant areas in S Plant include waste management unit 216-S-6 . . . ." Figure 4-1 actually lists that area as the 216-S-17 pond.	Accept. Text will be revised to indicate the 216-S-17 Pond.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
131.	Section 4.1.1.1, Page 4-4, third paragraph; The text states that there were five grid locations ". . . within or adjacent to the S Plant Aggregate Area . . ." that were sampled from 1978 to 1988. From Plate 3, it appears that four of locations were inside the Aggregate Area. This should be stated in the text.	Accept. Text will be clarified.
	The text states that the TLD sampling results for 1985, 1986, and 1989 are listed in Table 4-6. Are the TLD results for the entire 200 West Area or just the S Plant Aggregate Area? Also, Table 4-6 indicates TLD results for 1985 through 1988, not 1985, 1986, and 1989. In addition, the table only shows two TLD locations.	Accept. Text will be clarified.
	The last sentence of this paragraph says that ". . . results of this sampling are presented in Appendix A." This sentence should probably be: "The results of the TLD sampling for both the 200 West and 200 East Areas from 1978 to 1988 are presented in Appendix A (Figure A-2)." The data for just the five TLD stations within or adjacent to the S Plant Aggregate Area sampled from 1978 to 1988 should be provided.	Accept. Sentence will be revised to indicate the S Plant Aggregate Area results can be found in Table 4-6, not Appendix A.
132.	Section 4.1.1.1, Page 4-4, fourth paragraph; The report says that in 1989, the TLD stations were reconfigured. There were two new sampling locations established in the S Plant AA; one in 216-S-19. According to Plate 3 - that sampling location is actually located at 2607-WZ which is a septic tank receiving nonhazardous/nonradioactive wastewater and sewage. In addition, the paragraph mentions that the results of the 1990 sampling are presented in Appendix A. The results are not there.	Accept. Locations will be checked and corrected. TLD data will be presented in Table 4-6.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
133.	Section 4.1.1.1, Page 4-4, fifth paragraph; This paragraph should contain a more detailed discussion of Table 4-5. Summarize where the surface radiation surveys are performed and discuss the results. What do the numbers tell us?	Accept. A paragraph will be added to discuss Table 4-5.
134.	Section 4.1.1.4, Page 4-5, lines 40 and 41; The report states that no upward trends in radionuclide concentrations were detected in wildlife species. This statement should be accompanied by the data.	Accept. Reference will be provided. Eberhardt et al. (1989).
135.	Section 4.1.1.4, Page 4-6, lines 9 through 11; This paragraph says ". . . summaries of the analytical results form 1985 through 1989 are presented in Appendix A." Appendix A only contains Figure A-9, "Yearly Averages for Cesium-137 in Vegetation."	Accept. Data will be included in Appendix A.
136.	Section 4.1.1.5, Page 4-6, fourth paragraph; How were the determinations, that stated that 17 waste management units potentially contaminate the unconfined aquifer, used in making LFI and IRM recommendations?	Reject. Table 4-14 was not used to determine LFI and IRM recommendations. See Figure 9-1 for determining LFIs and IRMs.
137.	Section 4.1.2.1.1, Page 4-7, lines 19 and 20; "Fission products and volatile organics have been detected at this site." The data should be presented. What technique was used to detect these contaminants? Where within the 291-S Stack Complex were they detected? Give more details.	Accept. Additional information will be included pending availability.
138.	Section 4.1.2.2, Page 4-7, lines 32 and 33; "The 241-SX Tank Farm has four assumed leaking tanks . . . ." Is this assumption based on elevated gamma radiation levels detected in vadose zone boreholes in the vicinity of the tanks? If so, why are five confirmed (what methodology?) and the other four only assumed leakers?	Accept. Assumed leaking and confirmed leaking tanks will be defined further and the basis for designating the tanks as one or the other will be discussed.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
139.	Section 4.1.2.2.1, Page 4-8, lines 17 through 19; This paragraph mentions that the 241-S Tank Farm is an area that is being used as a temporary storage area for drums and boxes presumable full of monitoring well installation waste. Are there no records of the material in the boxes?	Accept. Additional information will be included pending availability.
140.	Section 4.1.2.2.14, Page 4-10, lines 27 through 29; What kind and how much apparatus is on the surface at this site? What are the contents of the "abovegroundwater" tanks? (Should it read "aboveground" tanks?)	Accept. The text will be clarified and information will be added if available.
141.	Section 4.2, Page 4-31 and 4-32; The purpose of this section is to assess known data and develop a conceptual model on potential impacts to human health and the environment. This discussion presents only human exposure concerns. The text should also discuss potential ecological concerns.	Accept. (Ecology: U Plant 32) Text will be clarified to include ecological concerns and environmental pathways. No ecological risk studies specific to waste management units or the Aggregate Area are available for assessing relative ecologic risks. Sections 4 and 8 will be revised to clarify this data gap.
142.	Section 4.2, Page 4-32, lines 9 through 11; Standard EPA risk assessment guidance documents, e.g. Risk Assessment Guidance for Superfund, should also be referenced in this paragraph	Accept. (Ecology: U Plant 33) Will reference appropriate EPA risk assessment guidance documents.
143.	Section 4.2.2.1.4, Page 4-36, line 9; The second reference to Cobalt 60 should be changed from ^{60}CO to ^{60}Co.	Accept. Text will be changed to ^{60}Co.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
144.	Section 4.2.2.2, Page 4-37, lines 44 through 46; The conclusion that the fugitive dust emissions from the S Plant Aggregate Area do not contribute significantly to the overall Hanford Site dust emissions is not substantiated. It is also contrary to the discussion in Section 4.1.1.1 where high levels of surface radiation have apparently been found.	Accept. (Ecology: U Plant 35) Appropriate reference basis for this statement will be provided. High levels of surface radiation do not necessarily correspond with high fugitive dust emissions.
145.	Section 4.2.3, Page 4-39, line 1; Figure 4-3 and Plate 4; Both of the conceptual model figures depict arrows in both directions between humans and biota through the ingestion exposure route. The arrow should only indicate a transfer from biota to humans.	Accept. Arrow will be deleted on Figure 4-3.
146.	Section 4.2.4, Page 4-41, first paragraph; The rationale or reference for using the second criterion is not presented, and contaminants appear to be inappropriately eliminated by the use of the third screening criteria. The second criterion indicates that buildup of short-lived radionuclide daughter activity to a level of 1 percent or greater of the parent radionuclide activity causes the daughter to be included on the contaminant-of-concern list. However, the rationale or reference for this criterion is not included, and should be. If the parent activity is extremely high, 1 percent may not be a conservative screening level. The third criterion indicates that contaminants were placed on the contaminant-of-concern list if they are known or suspected carcinogens or have an EPA noncarcinogenic toxicity factor. It appears that contaminants not meeting such criteria are eliminated from the contaminant list. This screening fails to follow the contaminant screening process outlined in the DOE (1991) methodology. This criterion should be deleted.	Accept. (Ecology: U Plant 37) The basis for this criterion will be modified and more clearly stated. Although daughter radionuclides are normally identified during the course of parent radionuclide investigations, they are also identified as contaminant of concerns through this criterion. This provides an additional level of assurance that all contaminants will be addressed. A statement will be included, similar to one in subsequent AAMS, that states contaminants without toxicity factors are included in the list if they have a recognized toxic effect.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
147.	Section 4.2.4.1, Page 4-41, lines 42 through 44; "Three surface soil sampling locations and one high volume air monitoring station surround the 241-S, -SX, and -SY Tank Farms, and serve to characterize that grouping of waste management units." Three sampling locations will not characterize the tank farms.	Accept. Sentence will be clarified.
148.	Section 4.2.4.2, Page 4-42, second paragraph; Uranium-235 should be added to the list (See Table 2-5).	Accept. Uranium-235 will be added.
149.	Section 4.2.4.5.1, Page 4-46, lines 1 and 2; EPA Risk Assessment Guidance for Superfund should also be referenced in this paragraph.	Accept. (Ecology: U Plant 41) Appropriate EPA guidance will be referenced.
150.	Section 4.2.4.5.2, Page 4-46, lines 29 and 30; This paragraph states that many chemicals lacking toxicity criteria have ". . . negligible toxicity or are necessary nutrients in the human diet." There is no citation provided for this assertion, and it is of questionable validity. Many trace metals are necessary in the human diet, and most are highly toxic, some acutely so, in sufficient levels. What is the point of this statement?	Accept. (Ecology: U Plant 43) Text will be deleted. None of these chemicals were dropped from the contaminant of concern list for this reason.
151.	Figure 4-1, Page 4F-1; "The results are displayed as relative levels of man-made radionuclide activity." Does this mean that background was subtracted? If so, how and where was background measured?	Accept. Data will be checked to verify if background was subtracted.
152.	Figure 4-2, Page 4F-2; This figure only includes the northern portion of the S Plant Aggregate Area.	Accept. Southern portion of S Plant Aggregate Area will be included if available.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
153.	Table 4-5, Pages 4T-5a through 4T-5i; This table is unclear. For example: 1) Why is there a column for both counts-per-minute and disintegrations-per-minute? 2) There are many places where the radiation type is unknown. The type of instrument used for the survey will usually tell you the type of radiation that is being measured.	Reject. All information available was provided. Different instruments provide readings in different units which cannot be converted. Type of instruments used in the survey were not found.
154.	Table 4-6, Page 4T-6; TLD sampling location 216-S-19 is not shown on Plate 3 (See comment on Section 4.1.1.1, page 4-4, third paragraph).	Accept. Location of sampling site will be corrected.
155.	Table 4-12, Pages 4T-12a through 4T-12d; The sampling sites in this table should have a brief location description in addition to the coordinates listed.	Accept. Sample grid map will be included in Appendix A.
156.	Table 4-14, Page 4T-14b; A footnote to this table states that waste management units 216-S-10P, 216-U-9, 216-S-14, and 216-S-18 were not included due to lack of inventory data. Table 2-1 lists the waste volume received by waste management units 216-S-10P and 216-S-14. These units should be included in Table 4-14.	Accept. Data will be verified and 216-S-10P and 216-S-14 will be included if appropriate.
157.	Table 4-25, Page 4T-25a to 4T-25b; References should be included, in a footnote, for each piece of data in this table.	Accept. Table will be modified. The reference for the toxicity information will be included for each entry in the table.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
158.	Table 5-1, Page 5T-1a; Reference documents should be cited for the reported hazard ranking system (HRS) scores for the S plant aggregate area. Also, the year data were collected for determining the HRS score should be provided. Waste management units 216-S-13, 216-S-22, and 216-S-23 cribs are not considered as high priority sites in this table. Interim remedial measure (IRM) and limited field investigation (LFI) paths, however, are used for these sites, which indicates that they are being treated as high priority waste sites (Table 9-1). See below. Similarly, the 216-S-15 and 216-S-19 ponds are not considered to be high priority sites in the table but are treated as high priority sites in Table 9-1. See below. The 2904-S-171 control structure is considered to be a high priority site in this table but is not included in the Table 9-1. The text in Section 5.2.1 (page 5-3, line 41) states that the 216-S-172 control structure is recommended as a high priority site; this site is not included in Table 5-1.	Accept. It is agreed that some of the sites listed as low priority as sites should be relisted as high priority sites with the following exceptions: 1) Sites with no data will be revaluated to determine if the need for high priority exists. This will be based on suspected contamination and similarities with other releases. In general sites with no data exist primarily because they do not pose sufficient risk to warrant additional surveys (i.e., UN-200-W-52, UN-200-W-83, and UPR-200-W-124). 2) Low priority release sites associated with high priority units will remain low priority. However Section 9.0 will indicate that all releases associated with a high priority site will be included in the investigation of the high priority site (i.e., UPR-200-W-36, UPR-200-W-95, and UPR-200-W-139). 3) Sites with data that indicate contamination is below the action criteria (i.e., 216-S-19 and UN-200-W-42).

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)			16. Disposition (Provide brief justification if NOT accepted.)
	216-S-13	crib	LOW priority -subsurface -timber structure that may subside	4) Sites which were incorrectly included in the prioritization which will be deleted since they are part of a separate program (i.e., UPR-200-W-141 through -146). It should be noted that the priority is use determine IRM candidate. A low priority does not imply that the site does not need cleanup.
	216-S-22	crib	LOW priority -subsurface	
	216-S-23	crib	LOW priority -subsurface	
	216-S-15	pond	-?? -surface and subsurface radiation contamination warning signs -1 Ci subsurface	
	216-S-19	pond	HIGH priority -200 mR/h in 1953 -3000 cpm beta-gamma in 1980	
	216-S-12	trench	LOW priority -backfilled	
	216-S-14	trench	LOW priority -backfilled	
	216-S-18	trench	LOW priority -backfilled	
	2607-W6	septic tank and tile field	LOW priority -active	
	2607-WZ	septic tank and tile field	LOW priority -active	
	----	sanitary crib	LOW priority -active	
	UN-200-W-10	---	LOW priority -covered with asphalt -not in table 5-1	
	UN-200-W-35	UPR	LOW priority -remedial action taken	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)			16. Disposition (Provide brief justification if NOT accepted.)
	UN-200-W-41	UPR	HIGH priority -up to 1000 mR/h -from transport of burial box on right-of-way from 202-S railroad cut to burial ground	
	UN-200-W-42	UPR	HIGH priority -50 to 500 mR/h unknown beta/gamma -cleaned to 2000 to 5000 c/h	
	UN-200-W-43	UPR	HIGH priority -wind-blown contamination over 1200 sq. feet east of 223-S	
	UN-200-W-49	UPR	HIGH priority -release from 241-SX tank farm -unknown beta/gamma up to 150 mR/h -one spot up to 10,000 Mr/h	
	UN-200-W-50	UPR	HIGH priority -wind blown contamination from 241-SX-113 -spread over 2 acres east of 241-SX tank farm -unknown beta/gamma of 40,000 c/min unknown beta/gamma in spots up to 100 mR/h	
	UN-200-W-52	UPR	HIGH priority -leakage from 241-S-151 diversion box -see also, UPR-200-W-20 and UPE-200-W-51	
	UN-200-W-56	UPR	HIGH priority -unknown beta/gamma of 30,000 and 80,000 c/min	
	UN-200-W-61	UPR	LOW priority -remedial action taken	
	UN-200-W-82	UPR	LOW priority -cleaned up	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)			16. Disposition (Provide brief justification if NOT accepted.)
	UN-200-W-83	UPR	?? -unknown amount of radioactive contamination spilled onto ground near 2-4-S radiation zone	
	UN-200-W-108	UPR	LOW priority -below surface leak from crib waste lines	
	UN-200-W-123	UPR	LOW priority -cleaned up	
	UN-200-W-127	UPR	LOW priority -small pool covered with dirt next to 204-S unloading facility -remediate with 204-S unloading facility -204-s unloading facility included in RARA program	
	UPE-200-W-13	UPR	HIGH priority -up to 700 mR/h	
	UPR-200-W-15	UPR	HIGH priority -35 rem/h 2" from ground	
	UPR-200-W-20	UPR	HIGH priority -leakage from 241-S-151 diversion box -see also, UN-200-W-52 and UPR-200-W-51	
	UPR-200-W-36	UPR	HIGH priority -release from 216-s-1 and -2 cribs due to ruptured test well -remediate with the cribs	
	UPR-200-W-47	UPR	HIGH priority -dike branch of 216-S-16P -150 x 300 yds -up to 750 mR/h	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)			16. Disposition (Provide brief justification if NOT accepted.)
	UPR-200-W-51	UPR	HIGH priority -leakage from 241-S-151 diversion box -unknown beta/gamma up to 50 mR/h within 100 feet of the box -4000 c/min outside fenced area -see also, UPR-200-W-20 and UN-200-W-52	
	UPR-200-W-57	UPR	LOW priority -remedial action taken	
	UPR-200-W-59	UPR	HIGH priority -effluent from F-1 process vessel coil in 202-S building in 200-RO-01 -max does rate of 190 mR/h at #1 pond inlet	
	UPR-200-W-87	UPR	LOW priority -contaminated soil removed	
	UPR-200-W-95	UPOR	HIGH priority -202-S building process coil leaks into 207-S retention basin -10 Ci, but interpreted as low activity -basin covered with dirt -remediate with the retention basin, which has high HRS	
	UPR-200-W-124	UPR	-as high as 202-S pond -dike breach from 202-S building pond covering 30 x 1000 feet -no monitoring data	
	UPR-200-W-139	UPR	HIGH priority -contamination from unknown source in 216-U-9 ditch -216-U-19 ditch is itself ranked high priority in table 5-1	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)			16. Disposition (Provide brief justification if NOT accepted.)
	UPR-200-W-140	UPR	LOW priority -subsurface leakage from 241-SX-107 single shell tank	
	UPR-200-W-141	UPR	HIGH priority -leakage from and around 241-SX-108 single shell tank	
	UPR-200-W-142	UPR	HIGH priority -leakage from and around 241-SX-109 single shell tank	
	UPR-200-W-143	UPR	HIGH priority -leakage from and around 241-SX-111 single shell tank	
	UPR-200-W-144	UPR	HIGH priority -leakage from and around 241-SX-112 single shell tank	
	UPR-200-W-145	UPR	HIGH priority -leakage from and around 241-SX-113 single shell tank	
	UPR-200-W-146	UPR	HIGH priority -leakage from and around 241-SX-109 single shell tank	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
159.	Section 6.0, Page 6-1; Several Chemical Specific, Action Specific, and Location Specific ARARs are missing from this section. The following is a comprehensive list of state and federal ARARs: STATE ARAR's 1. CHEMICAL SPECIFIC WAC 173-303 Dangerous Waste Regulations APPLICABLE Chapter 173-303 WAC establishes procedures for characterizing hazardous waste as Dangerous Waste (DW) or Extremely Hazardous Waste (EHW). Additional distinction is based on Persistence, carcinogenicity, mutagenicity, tetratogenicity, concentration of certain compounds, and toxicity as defined by WAC 173-303-070 to 110. Wastes excavated on sites which upon testing designates as DW or EHW must be handled under this regulation. Other sections not identified here should be considered relevant and appropriate. WAC 173-340 MTCA Cleanup Regulations APPLICABLE Chapter 173-340 WAC defines specific cleanup levels for numerous contaminants and point of compliance. WAC 173-400 General Regulations for Air Pollution Sources APPLICABLE Chapter 173-400 WAC establishes standards that are technically feasible and reasonably attainable for air pollution sources. WAC 173-474 Ambient Air Quality Standards for Sulfur Oxides APPLICABLE Chapter 173-474 WAC establishes maximum	Accept. ARARs will be cross-checked with those in text. Additional ARARs will be added or corrected as appropriate.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
	WAC 173-4 Ambient Air Quality Standards for Carbon Monoxide, Ozone, and Nitrogen Dioxide APPLICABLE Chapter 173-475 WAC defines state wide air quality standards for carbon monoxide, ozone, and nitrogen dioxide. WAC 173-48 Ambient Air Quality Standards and Emission Limits for Radionuclides APPLICABLE Chapter 173-480 WAC defines maximum allowable levels for radionuclides in the ambient air. WAC 173-490 Emission Standards and Controls for Sources Emitting Volatile Organic Compounds (VOC) APPLICABLE Chapter 173-490 WAC establishes technically feasible and reasonable attainable standards for sources emitting VOC's. Soil Cleanup/Remediation at Hanford February 1992 To Be Considered The Department of Ecology Nuclear and Mixed Waste Management Program Soil Cleanup Policy became effective February 5, 1992. The purpose of this policy is to provide a basis for consistent cleanups, remediations, and closures at the Hanford Site. 2. ACTION SPECIFIC RCW 18.104 Water Well Construction RELEVANT AND APPROPRIATE This regulation establishes authority for Ecology to require the licensing of water well contractors and operators and for the regulation of water well construction. RCW 70.94 Washington Clean Air Act APPLICABLE	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	RCW 70.95 Solid Waste Management RELEVANT AND APPROPRIATE Chapter 70.95 RCW establishes a state wide program for solid waste handling, and solid waste recovery and/or recycling which will prevent land, air, and water pollution and conserve the natural, economic and energy resource of this state. RCW 70.98 Nuclear Energy and Radiation RELEVANT AND APPROPRIATE Chapter 70.98 RCW establishes a program to establish procedures for assumption and performance of certain regulatory responsibilities with respect to byproduct, source, and special nuclear materials. RCW 70.105 Hazardous Waste Management APPLICABLE The purpose of Chapter 70.105 RCW is to establish a comprehensive state-wide framework for planning, regulation, control, and management of hazardous waste which will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of the state. RCW 70.105D Hazardous Waste Cleanup, Model Toxics Control Act (MTCA) APPLICABLE Chapter 70.105D RCW provides Ecology with the authority to investigate and conduct remedial actions upon releases of hazardous substances.	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
-	RCW 90.44 Regulation of Public Ground Water RELEVANT AND APPROPRIATE This chapter gives Ecology the authority to regulate and control ground water of the state. RCW 90.44 Regulation of Public Ground Water RELEVANT AND APPROPRIATE This chapter gives Ecology the authority to regulate and control ground water of the state. RCW 90.48 Water pollution Control APPLICABLE Chapter 90.48 RCW provides authority to regulate discharges of any pollutant to waters of the state (including surface and ground water, direct and indirect discharges). RCW 90.52 Pollution Disclosure Act RELEVANT AND APPROPRIATE Chapter 90.52 RCW describes the authority of the state to regulate reports for any commercial or industrial discharge, other than sanitary sewage, into waters of the state. RCW 90.54 Water Resources Act RELEVANT AND APPROPRIATE Chapter 90.54 RCW gives the state authority to implement water related resources programs. WAC 173-160 Minimum Standards for Construction and Maintenance of Wells RELEVANT AND APPROPRIATE Well construction regulations establish minimum standards for water well construction and require the preparation of construction reports.	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	WAC 173-162 Rules and Regulations Governing the Licensing of Well Contractors and Operators RELEVANT AND APPROPRIATE Chapter 173-162 WAC establishes requirements for licensing of well drillers. WAC 173-216 State Waste Discharge Permit Program APPLICABLE Chapter 173-216 WAC establishes a permit system for discharges of waste water to groundwater and surface water via municipal sewage systems. WAC 173-218 Underground Injection Control Program APPLICABLE Chapter 173-218 WAC pertains to the injection of wastes into aquifers that are used for drinking water. WAC 173-303-670 Incinerators RELEVANT AND APPROPRIATE If incinerators are used as a remedial technology this regulation would be applicable. WAC 173-304 Minimum Functional Standards for Solid Waste Handling RELEVANT AND APPROPRIATE Chapter 173-304 WAC establishes minimum functional performance standards for the proper handling of all solid waste materials.	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	WAC 173-403 Implementation of Regulations for Air Contaminant Sources RELEVANT AND APPROPRIATE Chapter 173-403 WAC establishes procedures for the implementation of regulations and rules generally applicable to control and/or prevention of the emission of air contaminants. WAC 173-470 Ambient Air Quality Standards for Particulate Matter RELEVANT AND APPROPRIATE Chapter 173-470 WAC establishes concentrations for particle fallout standards for all ares within the State of Washington. WAC 173-480 Ambient Air Quality Standards and Emission Limits for Radionuclides APPLICABLE Chapter 173-480 WAC establishes a 25 mrem/y hole body or 75 mrem/y critical organ dose to any member of the public. The point of compliance is all portions of the site. WAC 246-221 Radiation Protection Standards APPLICABLE Chapter 246-221 WAC establishes standards for protection against radiation hazards. WAC 246-247 Radiation Protection -- Air Emissions APPLICABLE Chapter 246-247 WAC establishes a 25 mrem/y hole body or 75 mrem/y critical organ dose to any member of the public. It also, requires registration of the source with Ecology.	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	3. LOCATION SPECIFIC RCW 90.03 & RCW 90.14 State Water Code and Water Rights RELEVANT AND APPROPRIATE Water code and water rights laws specify conditions for extracting surface water or ground water for non-domestic uses. In essence, the laws provide that water extraction must be consistent with beneficial uses of the resource and must not be wasteful. WAC 296-62 Washington Industrial Safety and Health Act Occupational Health Standards--Safety Standards for Carcinogens RELEVANT AND APPROPRIATE State health and safety regulations are generally similar to those espoused by the federal regulations (i.e., OSHA), and are applicable to all remedial actions involving potential human exposure to hazardous materials. WAC 173-154 Protection of Upper Aquifer Zones RELEVANT AND APPROPRIATE Chapter 173-154 WAC provides for protection of the upper aquifers and upper aquifer zones to avoid depletions, excessive water level declines, or reductions in water quality. State regulations for upper aquifer zones are applicable to remedial alternatives that involve treating ground water or presenting risks of ground water contamination.	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	WAC 173-201 Water Quality Standards for the State of Washington APPLICABLE Ecology classifies surface waters according to their water quality and uses of the water body. The surface waters of the Columbia River are classified as Class A. WAC 173-220 National Pollutant Discharge Elimination System Permit Program RELEVANT AND APPROPRIATE The purpose of this chapter is to establish a state permit program, applicable to the discharge of pollutants and other wastes and materials to surface waters of the state. WAC 173-240 Submissions of Plans and Reports for Construction of Waste Water Facilities RELEVANT AND APPROPRIATE Chapter 173-240 WAC regulations require that Ecology review and approve plans and for waste water treatment facilities that discharge to ground water. WAC 173-300 Certification of Operators of Solid Waste Incinerator and Landfill Facilities RELEVANT AND APPROPRIATE Chapter 173-300 WAC defines when certification of operators is necessary at incinerators and landfills.	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	WAC 173-304 Minimum Functional Standards for Solid Waste Handling APPLICABLE Chapter 173-304 WAC regulations pertain to solid waste handling facilities (e.g., municipal landfills). They contain provisions for facility design, maintenance, and closure. WAC 173-434 Solid Waste Incinerator Facilities RELEVANT AND APPROPRIATE This regulation defines emission standards and design and operation of solid waste incinerator facilities. WAC 232-12 Wildlife Classification RELEVANT AND APPROPRIATE Chapter 232-12 WAC identifies endangered, threatened, and sensitive species of fauna. WAC 248-54 Public Water Supplies RELEVANT AND APPROPRIATE Chapter 248-54 WAC identifies the requirements of public water supply systems. WAC 446-50 Transport of Hazardous Materials APPLICABLE Chapter 446-50 WAC regulations are generally analogous to the corresponding federal regulations 49 CFR. Transport regulations are applicable to any off-site transportation of hazardous materials.	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	FEDERAL ARARs 4. CHEMICAL SPECIFIC 33 U.S.C. 1251 Clean Water Act APPLICABLE 40 C.F.R. 131 Water Quality Standards APPLICABLE 42 U.S.C. 300 (f), 40 C.F.R. 141 Safe Drinking Water Act APPLICABLE 40 C.F.R. Designation of Hazardous Substances APPLICABLE 40 C.F.R. 264 Subpart F Concentration Limits TO BE CONSIDERED 40 C.F.R. 264.521 Corrective Action at Solid Waste Management Units TO BE CONSIDERED 40 C.F.R 141.13 Maximum Contaminant Levels for Turbidity RELEVANT AND APPROPRIATE 40 C.F.R 141.3 Secondary Maximum Contaminant Levels for Drinking Water RELEVANT AND APPROPRIATE E.P.A Directive 9355-.4-01FS 1990 Guide on Remedial Actions at Superfund Sites with PCB Contamination TO BE CONSIDERED Richland City Ordinance 35-84 Public Owned Treatment Works TO BE CONSIDERED	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	5. ACTION SPECIFIC 42 U.S.C. 6901 Resource Conservation and Recovery Act APPLICABLE 29 C.F.R. 1910 Occupational Safety and Health Act APPLICABLE 40 C.F.R. 122 Discharge of Treated Effluent APPLICABLE 40 C.F.R. 141.13 Maximum Contaminant Levels for Turbidity RELEVANT AND APPROPRIATE 40 C.F.R. 262 Standards for Generators of Hazardous Waste APPLICABLE 40 C.F.R 264 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities APPLICABLE 40 C.F.R. 268.44 Land Disposal Restrictions APPLICABLE 40 C.F.R. 761.30 PCBs Storage and Disposal RELEVANT AND APPROPRIATE 40 C.F.R. 761.60 Alternative Technology to Incineration RELEVANT AND APPROPRIATE 40 C.F.R. 761.70 Chemical Waste Landfill RELEVANT AND APPROPRIATE 40 C.F.R. 50 Air Quality Standards RELEVANT AND APPROPRIATE 40 C.F.R. 58 Ambient Air Quality Surveillance RELEVANT AND APPROPRIATE 40 C.F.R. 60 New Source Performance Standards RELEVANT AND APPROPRIATE 40 C.F.R. 61 National Emissions Standards	

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
	40 C.F.R. 12 NPDES Permit Program RELEVANT AND APPROPRIATE 6. LOCATION SPECIFIC 16 U.S.C 461 Historic Sites, Buildings, and Antiquities Act RELEVANT AND APPROPRIATE 16 U.S.C. 742 Fish and Wildlife Improvement Act RELEVANT AND APPROPRIATE 16 U.S.C. 2901 Fish and Wildlife Conservation Act RELEVANT AND APPROPRIATE 167 U.S.C. 1271 Wild and Scenic Rivers Act RELEVANT AND APPROPRIATE 50 C.F.R. 17 Endangered Species Act RELEVANT AND APPROPRIATE	
160.	Section 6.2.2.1, Page 6-5, paragraph 6: It is inappropriate to discuss the use of the Method A Tables. Method A may only be used on routine sites with few contaminants. The Department of Ecology is taking this opportunity to notify USDOE that Hanford is not a routine site nor does it contain relatively few contaminants. Chapter 173-340 Method B or C are the only acceptable cleanup scenarios that are available for use.	Reject. The ARARs section provides a discussion of MTCA in general. The application of MTCA as an ARAR will not be determined until a ROD is issued.
161.	Section 6.6, Page 6-15, second paragraph: Point of compliance is defined in WAC 173-340-740(6) a-d. For soil cleanup levels based on human exposure via direct contact, the point of compliance shall be established in the soils throughout the site from the ground surface to fifteen feet below the ground surface. This represents a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface as a result of site development activities.	Accept. Text will be clarified to refer to previous sections in Chapter 6 for regulations that define point of compliance.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
162.	Section 7.0, Page 7-1, second paragraph: Selection of remedial action technologies must be screened against standard EPA criteria. The following are a list of the nine criteria in order of importance. A technology must either pass each level of screening (i.e., threshold criteria, primary balancing criteria, and modifying criteria) or be wavered before it can proceed to the next level. Threshold • Overall Protection of Human Health and the Criteria Environment • Compliance with ARARs Primary • Long Term Effectiveness and Permanence Balancing • Reduction in Toxicity, Mobility, or Volume Through Criteria Treatment • Short Term Effectiveness • Implementability • Cost Modifying • State Acceptance Criteria • Community Acceptance	Reject. In accordance with Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (EPA 1988) Section 4.3.2 - Screening evaluation indicates that alternatives are evaluated against the short- and long-term aspects of three broad criteria - effectiveness, implementability, and cost.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
163.	Section 7.1, Page 7-2, third paragraph; This report unilaterally defines the present and future human exposure scenario to be that of an occupational industrial worker. Land use has not been determined for the Hanford site. It is possible that the Hanford site may include multiple uses ranging from residential to industrial. Future land use is now being determined, therefore, any remedial action should not preclude any future land use scenarios.	Reject. Third paragraph and the AAMS report do not define future human exposure scenario to an occupational industrial worker.
164.	Section 7.2, Page 7-4, forth paragraph; Waste treatment options should also include waste reduction (e.g., soil washing) Inorganic contamination can not be destroyed, therefor, it must be reduced to it's smallest volume and immobilized or isolated from the environment.	Reject. Document does include options such as soil washing, see line 37 in fourth paragraph.
165.	Section 7.3, Page 7-5, first paragraph; See comment on Section 7.0 above.	Accept. See Comment 162.
166.	Table 7-3, Page 7T-3b; CERCLA has a preference for new and innovative technologies. Cryogenics is a promising new technology. Vender information indicates that this technology would be easily implemented with comparable capitol costs. Additional information is necessary prior to eliminating this technology from further consideration at Hanford.	Accept. Will revise Table 7-3 to reflect the vendor information.
167.	Section 8.1.1, Page 8-5, line 11; "...for screening purposed..." should read "... for screening purposes..."	Accept. Text will be changed.
168.	Section 8.1.1, Page 8-5, line 16; The statement that "The methods are unable to differentiate the various radionuclides..." seems to contradict line 1 on page 8-5 which states "...the RLS is designed to identify individual radionuclide species...". This should be clarified.	Accept. Line 16 will be changed to read "some methods are unable to differentiate..."

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
169.	Section 8.1.1, Page 8-5, line 26; This line should read "...the borehole geophysical data...", not "...the borehole geophysics data..."	Accept. The typo will be corrected.
170.	Section 8.1.3, Page 8-9, line 17; The term "S Plant" should be substituted for U Plant.	Accept. S Plant will be substituted for U Plant.
171.	Section 8.1.3, Page 8-9, line 17; Reference is made to figure 4-23; there is no figure 4-23, this should be figure 4-3.	Accept. Figure reference will be corrected.
172.	Section 8.1.5, Page 8-10, line 44; A reference to Section 5.0 is given for the contaminants of concern and their distribution, this reference should be Table 4-17.	Accept. Reference will be made to Section 4.
173.	Section 8.2.1, Page 8-13; There is reference in this section to ecological risk, but without a commitment to gather biologic data. "Site characterization: generally refers to geologic, hydrologic, and contaminant specific data. This section should address biotic data uses.	Accept. No ecological risk studies specific to waste management units on the Aggregate Area are available for assessing relative ecologic risks. Section 4 and 8 will be revised to clarify this data gap.
174.	Section 8.2.1, Page 8-14, lines 34 and 35; It is stated that unplanned releases in particular are lacking in information for locating the sites. Give more information or references that will address how these will be located and handled.	Accept. Text will be clarified to indicate that the location will be defined through characterization activities.
175.	Section 8.2.1, Page 8-13, lines 38 through 41; More detail should be provided in regards to the development of the site specific sampling and analysis plans.	Accept. Sentence will be included which references the Hanford Site Past-Practice Strategy as the basis for development of site-specific SAPs.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
176.	Section 8.2.2.2, Pages 8-15 through 8-17; This section should also incorporate the concepts and requirements defined in the Quality Assurance Project Plan. This generic document will be used in 100 Area investigations, and should be used in the 200 Areas.	Accept. (Ecology: U Plant 60) Text will be modified, adapted to the 200 Areas.
177.	Section 8.2.2.2, Page 8-16, lines 1 through 13; The text indicates that the data quality objective (DQO) parameters listed in Table 8-4 will be used for the development of site-specific sampling and analysis plans. Because of inadequate information on the disposal of waste constituents at the waste management units, the DQO parameters should include a full suite of CERCLA analytes (TCL and TAL) and radionuclides at least for critical samples that are to be identified for each waste management unit. Also, general physical and chemical parameters should be included in the site-specific sampling and analysis plan and quality assurance project plans.	Reject. Table 8-4 is based on Table 4-17 and there should not have additional constituents added at this time.
178.	Section 8.2.2.2, Page 8-17, line 1; Define what a "trained and qualified person" is that will assess the usability of the field data.	Reject. Trained and qualified persons are defined by Quality Assurance procedures.
179.	Section 8.2.2.3, Page 8-17; The text notes that in the absence of data, an approach or rationale "will need to be developed to justify sampling locations and the number of samples selected.". The text should also describe when, how , and by whom this will occur.	Accept. (Ecology: U Plant 61) Please see comment G3.
180.	Section 8.2.2.4, Page 8-17, line 27; The data collection activities are structured to obtain the needed data, independent of cost. Delete "...in a cost-effective manner.".	Reject. In accordance with the Hanford Site Past-Practice Strategy data collection activities will be done in a cost-effective manner.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
181.	Section 8.2.2.4, Page 8-17, line 41; The reference to the Contract Laboratory Program (EPA 1988, EPA 1989a) is out-of-date. Use the most current documents and make any necessary changes in the document.	Accept. The up-to-date reference will be provided.
182.	Section 8.2.2.5, Page 8-18, second paragraph; The statement that analysis of arsenic to much lower levels is "impossible because of limitations of analytical methods" should be explained. Most CLP procedures, e.g., Method 200.62-C-CLP, can analyze to 500 ppb. However, we agree that background levels may make this point moot.	Accept. (Ecology: U Plant 62) Explanation will be provided.
183.	Section 8.3.3.6, Pages 8-24 and 8-26; The ecological investigation discussion should include a statement that the information obtained through ecological investigation activities will be used to refine the conceptual model and in the ecological risk assessment.	Accept. (Ecology: U Plant 64) Statement will be added.
184.	Table 8-4, Page 8T-4a through 8T-4e Subheadings and appropriate units (for example, PQL in pCi/g, precision in RPD, accuracy in %) should be included at the top of each column in this table. References for analytical methods should be superscripted corresponding to each method or should be provided in a separate column for clarity.	Accept. Subheadings and appropriate units will be added.
185.	Table 8-6, Page 8T-6a through 8T-6f; The rationale for excluding the following waste management units from characterization should be provided: • 241-S-302 A catch tank • 241-S-302 B catch tank • 241-SX 302 catch tank • 244-S receiver tank	Reject. Rationale is provided in Section 9.3.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.)	16. Disposition (Provide brief justification if NOT accepted.)
186.	Section 9.0, Page 9-2, first paragraph; Integration amongst programs that monitor, manage, and remediate waste units within a CERCLA NPL site is very important. All decisions regarding these sites must involve the regulatory agency's. The ER program is responsible for coordination with other programs and transferring information to Ecology and EPA. Decision regarding transferring waste units to the RARA program require additional thought.	Accept. (Ecology: U Plant G6) See Comment G5.
187.	Section 9.0, Page 9-2, lines 21 through 24; The text states that all recommendations for future characterization needs will be fully developed in the RFI/CMS. This statement is contrary to the Hanford Past Practice Strategy, which emphasizes LFIs in order to provide data necessary to make IRM decision. Section 8.3.3 correctly lists field investigations being undertaken primarily as LFIs and IRMs, and "possibly some RIs".	Accept. (Ecology: U Plant 65) Text will be clarified so that it does not preclude options identified in the Hanford Site Past-Practice Strategy. We will delete RI/FS (RFI/CMS) and add "through work plans which may be operable unit (geographically) based or based on LFIs or IRMs (specific waste management units or groups of waste management) future work plans will focus on the sampling rational and approved.
188.	Section 9.1, Pages 9-2 and 9-3, split paragraph; The text in this paragraph implies a degree of certainty for making recommendations that is inconsistent with other paragraphs describing data limitations (For example: Section 8.1.4, last paragraph). This designation process should be expressed in very preliminary terms. What data, for example, were used to eliminate waste management units? The HRS ranking system data are extremely limited, and address essentially radioactivity only. The mHRS system is not approved by the EPA or Ecology.	Accept. (Ecology: U Plant 67) Text will be revised to describe the context for screening decisions within the AAMS reports.
189.	Section 9.1, Page 9-3, lines 12 and 13; The basis for the decision making IRM criteria should be referenced or discussed.	Accept. Basis for decision making will be provided.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
190.	Section 9.1, Page 9-3, second paragraph; A statement in this paragraph says that operational program sites that cannot be remediated ". . . within a time frame compatible with the past practice program, . . . will be readdressed by the 200 AAMS process." How will these sites be tracked? How long is this time frame? Will the individual operable unit work plans discuss the process for tracking operational program sites?	Accept. Statement will be added that individual Aggregate Area/Operable Unit works plans will discuss the process for tracking operational program sites.
191.	Section 9.1.1, Page 9-5, lines 5 through 8; The rationale for using 100 times the CERCLA reportable quantity or 100 times the most applicable standard for a particular constituent when determining whether a site warrants an expedited response action (ERA) should be provided. It should be noted that this criterion is applicable under 173-340 WAC for soils only.	Accept. (Ecology: U Plant 69) Text will be revised to describe the context for screening decisions within the AAMS reports.
192.	Section 9.1.1, Page 9-6, lines 3 and 4; The final decision regarding the justification of an ERA cannot be based on the "availability of resources."	Accept. (Ecology: U Plant 70) Change "Whether ERAs are justified "to" the conduct of ERAs."
193.	Section 9.1.2, Page 9-6, third paragraph; Grouping of sites assumes that similar units have received the same quantity and quality of wastes and that all units have the same potential for causing adverse environmental effects. The text in Section 9.2.3.1, page 9-11, fifth paragraph brings other criteria into consideration, and expresses a justified conservative approach. Consider moving this paragraph into Section 9.1.2. or modify to address this qualification.	Accept. (Ecology: U Plant 71) Text will be moved.
194.	Section 9.1.2, Page 9-7, lines 2 and 3; The availability of resources is not a criterion for justifying an IRM and should be deleted.	Accept. (Ecology: U Plant 72) Please see response to comment 192. Change "on whether... justified" to regarding the conduct of IRMs in the S Plant Aggregate Area".

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
195.	Section 9.2.1, Page 9-7, lines 40 and 41; The text states that none of the candidate units were recommended for an expedited response action (ERA), but in Table 9-1, 2904-S-160, 2904-S-170, 2904-S-172 control structures are recommended for ERA and IRM. This discrepancy should be corrected.	Accept. The discrepancy will be corrected.
196.	Section 9.2.1.1, Page 9-8, lines 5 and 6; Cribs 216-S-7 and 216-S-20 are identified that have the potential to collapse. Section 9.1.1 identifies several criteria for inclusion in the ERA program. Ecology believes that grouting these cribs may preclude the use of future remedial actions. Therefore, reconsideration of ERA remediation of these cribs is requested.	Reject. Criteria established will preclude actions that would impact future remedial actions. If future studies find grouting cribs would preclude actions, this alternative would not be implemented.
197.	Section 9.2.1.2, Page 9-8; Any surface stabilization activity performed by the RARA Program or ER Program must include regulatory oversite. Surface stabilization would make excellent candidates for ERAs. Consider remediating these sites under ER Programs or strengthen this section or Section 1 to include a process for integration of programs.	Reject. Existing regulatory framework does not preclude actions under an operating program. Integration of these programs will be generally discussed in the executive summary.
198.	Section 9.2.2, Page 9-9, lines 36 through 39; Thirty-four candidate units are recommended for IRM, but only 23 candidate units including three control structures are listed as considered for IRM action in Table 9-1.	Accept. Discrepancies will be corrected.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
198 (cont)	The first sentence states 34 of the 78 units are candidates for IRMs, then the second sentence states 10 of the 25 were because of HRS and mHRS scores. Is the "25" supposed to be "34"? Please clarify. Also, in lines 37 and 38, data gathering is proposed for only 22 of the 34 candidate IRM units. The text is not clear whether adequate data are available for the remaining 12 IRM candidate units to support IRM action. Further, a list of the remaining 12 IRM candidate units is not provided and should be.	
199.	Section 9.2.3.1, Page 9-10, line 17; The reference in the first sentence refers the reader to Section 9.2.1.2.1, however, there is no such section. Should the reference be changed to Section 9.2.1.1?	Accept. Section reference will be corrected.
200.	Section 9.2.3.3, Page 9-12, line 28; The 2904-S-171 control structure is considered for LEI in this section but is not included in Table 9-1. Conversely, the 2904-S-172 control structure is included for IRM in Table 9-1, but is not considered in this section. This discrepancy should be corrected.	Accept. Discrepancy will be corrected.
201.	Section 9.2.4.1.1, Page 9-13 and Section 9.2.4.1.3, Page 9-14; The 216-S-8 trench and 207-S retention basin are high priority units, but it is proposed to proceed with an RI. The text should explain why an LEI is not proposed for these units as for other high priority units where data are inadequate.	Accept. Will provide additional explanation.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
202.	Section 9.2.4.2, Page 9-15, lines 4 through 11; No additional investigation is proposed for unplanned release UN-200-W-41. The stated reason is incorrect. The specific contaminated area is presented in Table 2-6, while the contamination attributed to this unknown release is discussed in Section 4.1.2.9.6. This site should be further assessed under an RI to confirm that no contamination exists here.	Reject. Table 2-6 does not provide specific location of contamination.
203.	Section 9.3.2, Page 9-16, lines 16 through 18; The rationale for removing the groundwater investigation from the scope of the S Plant operable units should be provided.	Accept. (Ecology: U Plant 77) Justification for removing the groundwater investigation from the source area management study reports will be provided.
204.	Section 9.3.2, Page 9-16, lines 20 through 26; A reference should be cited for information relating to the high-level waste transfer facilities and pipelines that are to be eliminated from the work scope. The rationale should be provided for inclusion of the 216-S-4 French drain and the 216-S-21 crib in the 200-RO-1 operable unit. Also, the text should explain the recommended action for these sites.	Accept. (Ecology: U Plant 77) Text will be clarified to indicate that these facilities are not (and have never been) within S Plant operable units. These facilities are in the operational program or the Single-Shell Tank Program.
205.	Section 9.3.3, Page 9-16, lines 38 through 44; The text recommends investigation of cribs and French drain first and the S pond system next. It then states that the 200-RO-2 operable unit should be investigated before the 200-RO-1 operable unit, which should in turn be investigated before the 200-RO-3 operable unit. However, many of the cribs that received the largest quantities of contamination are included in the 200-RO-1 and 200-RO-3 operable units. The operable units should be redefined based on inventories of contaminants and should then be prioritized for investigation.	Accept. Operable unit redefinition and prioritization will be reevaluated. Prioritization will be corrected based on inventories.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
206.	Figure 9-1, Page 9F-1; This process flow chart does not directly correspond with Figure 1-2. There is no reason to develop a new process. This chart could be deleted and Figure 1-2 be used in its place. If, used an explanatory text should be provided (located in Section 9.2). It should be noted this chart is not intended to be comprehensive, for example, it does not include administrative requirements such as the Proposed Plan and public involvement prior to undertaking an IRM.	Accept. (Ecology: U Plant 78) Text will be added to Section 9.1, where the explanatory text for Figure 9-1 is currently located.
207.	Table 9-1, Pages 9T-1a through 9T-1e; Inconsistencies exist in reporting the waste management units (WMUs) for site characterization investigation methods. For example, investigation methods are proposed for some WMUs in Table 8-1, which are not included in Table 9-1. Example include the: • 291-S stack complex • 240-S-302 catch tank • 216-S-25 crib • 216-S-26 crib • 207-SL-retention basin For some of the WMUs, investigation at representative analogous sites is proposed, but the analogous sites are not identified. The table should include the corresponding operable unit for each waste site.	Accept. Inconsistencies will be corrected.
208.	Appendix D, Section 2.2, Page D-2; Section 2.1 is referenced as having a complete list of all the pertinent EIIs for data collection. There are no EIIs listed for sampling; these should also be listed.	Reject. Section 1 contains general data types and associated EIIs. Section 2 addresses data collection and references manual where specific EIIs are located. Definition of specific EIIs will be made on a site-specific basis in a sampling plan.

14. Item	15. Comment(s) (Provide technical justification for the comment and proposed action to correct or resolve the comment.	16. Disposition (Provide brief justification if NOT accepted.)
209.	Plate 1; Several figures are mislabeled: 2704-W, should be 2704-S; 292-S Jet Pit, should be 291-S. Also, the arrow pointing to the 242-S Evaporator is wrong. Numerous facilities, buildings, and structures given in section 2 are not on this plate.	Accept. Discrepancies will be corrected.
210.	Plate 3; The key on Plate 3 shows that a solid triangle indicates a new sampling location (1990 and later). There were none found on this plate.	Accept. Plate will be corrected.

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
S. H. Wisness, RL (M. J. Galgoul, WHC)	P. T. Day, EPA D. B. Jansen, Ecology	Incoming 9203136 Xref 9254434D

Subject: RESPONSE TO THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY'S REVIEW OF THE S PLANT SOURCE AGGREGATE AREA MANAGEMENT STUDY REPORT DRAFT A

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	
		M. R. Adams	H4-55	
		L. D. Arnold	B2-35	
		R. A. Carlson	H4-55	
		G. D. Carpenter	B2-16	
		C. K. DiSibio	B3-03	
		M. J. Galgoul	H4-55	
		R. E. Lerch, Assignee	B2-35	
		P. J. Mackey	B3-15	
		H. E. McGuire, Level 1	B3-63	
		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 9253406D. tmp, 6-5211