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STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

7601 W. Clearwater, Suite 102 • Kennewick, Washington 99336 • (509) 546-2990

May 26, 1994

Mr. Steve Wisness
U.S. Department of Energy
P.O. Box 550
Richland, WA 99352

Dear Mr. Wisness:

Re: Notice of Deficiency for the 200 Area Effluent Treatment Facility

The Notice of Deficiency (NOD) comments for the 200 Area Effluent Treatment Facility (ETF) are enclosed. As stated in the Hanford Federal Facility Agreement and Consent Order, your organization has 120 days to respond to the NOD comments. At that point, I would suggest that your permitting staff and the Washington State Department of Ecology (Ecology) Unit Manager for the ETF meet to begin the new review cycle process. Issue Resolution Workshop Meetings can then be held to reach concurrence on any unresolved issues.

If you have any questions, please call me at (509) 736-3018.

Sincerely,

Alex Stone, ETF Unit Manager
Nuclear Waste Program

AS:mf
Enclosure

cc: Dana Bryson, USDOE
Cliff Clark, USDOE
Jan Fields, WHC
Sue Price, WHC
Dan Duncan, EPA
Administrative Record

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200 Area Effluent Treatment Facility (ETF)
Notice of Deficiency (NOD)

General Comments:

There are a number of comments which are applicable throughout the complete permit application. These are:

1. It is the reviewer's understanding that the Part B Permit Application for the ETF will be combined with those for the 200 Area Liquid Effluent Retention Facility (LERF) and the 200 Area 242-A Evaporator, thereby combining the three separate units into one complete system. The new document, which will be produced by this compilation, will require detailed review as the issues which face each facility individually will substantially change when all three facilities are combined. Therefore, the following permit review is not as strenuous as would be typical for a permit which was expected to undergo less substantial revision. Topics which will be addressed in more detail once the facilities are combined are given only a cursory evaluation, and a more complete and detailed inspection of the new Part B permit application will be necessary once it is issued. There are points, however, where issues which need to be addressed in the combined permit are mentioned to provide an indication of what detail is needed. An example is NOD comment #15, which concerns the piping between the different facilities. Such information would be an important factor in a combined permit. This type of comment, however, is meant as an indication and such level of detail will be required throughout the new, combined permit application.

2. It is the reviewer's understanding that not all sections of the present permit application will be enforceable and that there are sections which are will be superseded because of inconsistency with the conditions of the Hanford Facility Wide Permit for the Treatment, Storage and Disposal of Dangerous Waste. Assuming this understanding is correct, Ecology and USDOE will have to discuss and determine which sections of the application will be "permit conditions" (i.e., enforceable) and which sections will be considered general information. Pending issuance of the above referenced Facility Wide permit, this deficiency may remain "open" if necessary. This issue is addressed at several points throughout the NOD comments to provide further information on the topics which need to be clarified. In general, however, this permit application is in variance at several points with the proposed Facility Wide permit and it is necessary to address potential conflicts at this point.

3. The review of this Part B Permit application for the 200 Area ETF is also less detailed than other permit evaluations due to an absence of a number of very important chapters and appendices. This information must be presented before an initial review of the permit can be completed. Examples of those sections which are missing or incomplete are:

   Appendix 3A (see NOD comment # 39)
   Appendix 4A (see NOD comment # 78)
   Appendix 4B (see NOD comment # 81)
   Appendix 4C (see NOD comment # 26)
   Appendix 4D (see NOD comment # 82)
   Appendix 7A (see NOD comment # 108)
   Chapter 7 (see NOD comment # 28)

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4. Throughout this permit application, there exist insufficient reference to the regulations along with the general comment that the criteria delineated in these citations will be fulfilled. Throughout this document, some examples of the dearth of citations are noted (see NOD comments 92, 94, 102, etc.); however, several more were possible and an effort should be made to quote the following regulations in the sections noted along with the commitment to fulfill the regulatory requirements within:

Section 4.2.2.3 and WAC 173-303-630 (5)(c)
Section 4.2.4 and WAC 173-303-630 (4)
Section 4.2.2.4 and WAC 173-303-630 (7)
Section 4.3.6 and WAC 173-303-640 (3)(a)
Section 4.3.7 and WAC 173-303-640 (3)(b)
Section 4.3.7.1 and WAC 173-303-640 (3)(c)
Section 4.3.7.2 and WAC 173-303-640 (3)(d)
Section 4.3.7.3 and WAC 173-303-640 (3)(e)
Section 4.3.8 and WAC 173-303-640 (4)(b)
Section 11.0 and WAC 173-303-610
Section 11.1.1.2 and WAC 173-303-110 (sampling methods)
Section 11.1.2 and WAC 173-303-610 (3)(c)
Section 11.1.3 and WAC 173-303-610 (3)(a)(iii)
Section 11.1.4.1 and WAC 173-303-640 (4)(a)
Section 11.1.4.6 and WAC 173-303-630 (10)
Section 11.1.4.7 and WAC 173-303-640 (8)
Section 11.1.6 and WAC 173-303-610 (3)(c)
Section 11.1.6 and WAC 173-303-610 (4)
Section 11.1.4.4 and WAC 173-303-610 (5)
Section 11.2 and WAC 173-303-610 (3)(b)
Section 12.2.1.6 and WAC 173-303-610 (3)(c)
Section 12.2.1.6.2 and WAC 173-303-610 (6)
Section 12.2.2.2.1 and WAC 173-303-380 (2) (a), (b), (c) and (d)
Section 12.2.2.2.4 and WAC 173-303-320 (2)

Part A

1. Part A Form 1: 1st Page , line 2

"Name & Title: Lawrence, Michael J., Mgr."

Provide the name and phone number of the current facility contact and any information in the Part A which needs to be updated.

2. Part A Form 3 Revision 1: Page 2 of 9, 1st paragraph

"The 200 Area Effluent Treatment Facility . . . to treat and store process condensate . . . and possibly other Hanford Facility waste that falls within the envelope of acceptable waste at the ETF."

Information needs to be included in the permit which addresses the issue described above of treatment of other Hanford wastes at the ETF. Information needs to be included or a reference made to a document for review which addresses the process which will be used to determine

what wastes are applicable to treatment at the ETF, some indication of the types of wastes which can be treated, and what process will be instituted to prevent the shipment of waste to ETF which is not applicable for the treatments involved.

3. Part A Form 3 Revision 1: Page 2 of 9, 2nd paragraph

"The treatment process is designed to treat . . . 216,000 gallons (817,650 liters) per day."

Information on page 3 of 9 of the same document lists an estimated annual quantity of waste at 657,935,000 lbs. What conversion was used to obtain this number from the gallon number listed above?

4. Part A Form 3 Revision 1: Page 3 of 9, 1st entry

"Estimated annual quantity of waste = 657,935,000 lbs."

USDOEs F001-F005 numbers mean a total of 657,935,000 or does it mean that the total for all five is 5 x 657,935,000 = 3,289,675,000? In other words, it must be made clear that the 657,935,000 is the total for all species. The same comment is valid for all the tanks and containers throughout this section.

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Chapter 1: INTRODUCTION

5. 1.0 Introduction: Page 1-1, lines 9-15

"The ETF treatment concept . . . Treatment and storage operations were separated and the treatment portion was called the 242-A Evaporator/Plutonium-Uranium Extraction (PUREX) Plant condensate Treatment Facility . . . ."

This information needs to be updated. Current understanding indicates that no direct streams will be sent from PUREX to the ETF. In addition, the Part Bs for the 242-A Evaporator, LERF, and the ETF will be combined into a single Part B application (see general comment #1 on the first page of this document). This will further alter the information included in this section.

6. 1.1 200 Area Effluent Treatment Facility Permitting: Page 1-1, lines 40-42

"Treated waste water can be discharged to the soil column . . . following approval of a delisting petition . . . ."

Information should be included at this point concerning the delisting petition (EPA responsibility) and what effect it has upon the waste stream. In addition, either a reference to the delisting petition should be included or the delisting petition, itself, should be included as a separate appendix.

7. 1.1 200 Area Effluent Treatment Facility Permitting: Page 1-2, lines 6-9

"Although the treatment, storage, and/or disposal of radioactive waste . . . is not within the scope of RCRA or WAC 173-303 . . . ."

It is the reviewer's understanding that the Hanford Facility Wide Draft Permit for the Treatment, Storage and Disposal of Dangerous Waste addresses this issue. It is the reviewer's preference that such statements be identified as interpretations and that all applicable parties' interpretations be included. If this preference is not agreeable to the applicable parties, it would be the reviewer's preference to delete such statements. Pending issuance of the above referenced permit, this definition may remain open. See general comment # on the first page of this document.

8. 1.1 200 Area Effluent Treatment Facility Permitting: Pages 1-2 and 1-3, line 52 and lines 1-3, respectively

"Because dangerous waste does not include the source, special nuclear, and by-product material components of mixed waste, radionuclides are not with the scope . . . of this permit application documentation."

See the previous NOD comment #7.

9. 1.2.14 References: Page 1-4, lines 29-39

References used throughout this Part B permit application documentation . . . ."

Very few of the references appear on the administrative record as pertaining to the ETF. Those documented in the appendix must be evaluated and those which have a direct relevance to the ETF must be placed on the administrative record for this facility.

10. 1.4 Definitions: Page 1-4, lines 3-5

"Definitions specific to this permit application documentation are provided in this section. These definitions . . . ."

Some of the definitions listed in this section do not agree with those contained in the Hanford Facility Wide Permit. See general comment #2 at the beginning of this document and NOD comment #7.

11. 1.4 Definitions: Page 1-6, lines 11-15

"A unit used for treatment, storage, and/or disposal . . . Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan (Ecology et al. 1992)."

Reference to TPA needs to be updated to the current agreement.

12. 1.4 Definitions: Page 1-6, lines 30-32

"The notifications required by WAC 173-303-830 (4) (a)(i) (A) and (B) for Class 1 changes will be submitted annually to the required regulatory agencies. . . ."

WAC 173-303-830 (4) (a)(i)(A) states, "The permittee must notify. . . within seven calendar days after the change is put into effect." WAC 173-303-830 (4)(a)(i)(B) further states, "For the Class

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1 modifications that require prior department approval, the notification must be made within ninety calendar days after the department approves the request." The permit needs to be changed to reflect these time limits and not the yearly period stated.

Chapter 2: FACILITY DESCRIPTION AND GENERAL PROVISIONS

13. 2.1 Description of the 200 Area Effluent Treatment Facility: Page 2-1, lines 18-22

"Because dangerous waste does not include the source, special nuclear . . . ."

See general comment #2 at the beginning of this report and NOD comment #7.

14. 2.1 Description of the 200 Area Effluent Treatment Facility: Page 2-1, line 36

"Fire control services"

The fire control services need to be described. In addition, the fire control services are not listed in the legend for the general overview of the facility in Appendix 2A.

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15. 2.1.1 Transfer Piping System: Page 2-1 and Page 2-2, lines 47-52 and 1-3, respectively

"This permit application documentation is to permit the ETF treatment systems, including ancillary equipment and piping, from the surge tank to the verification tanks, and transfer piping connecting the LERF to the ETF. This permit . . . ."

The maps provided do not include sufficient information on the piping system between the ETF and the other facilities attached. It is necessary to show diagramatically the location and direction of piping, as well as all valves. This information needs to be provided or a reference made to design drawings for both operational and emergency response considerations. Piping details also must be included for transfer of material within the ETF, including verification tanks and the various chemical modules. It is also important that conditions 2U and 2V of the Hanford Facility Wide Permit be met.

16. 2.1 Description of the 200 Area Effluent Treatment Facility: Page 2-2, line 23

"Rough filter"

In Figure 2-3, the "rough filter" is referred to as Filtration (Coarse). Either the figure or the text need to be altered to prevent confusion and consistency must be maintained throughout the document.

17. 2.1 Description of the 200 Area Effluent Treatment Facility: Page 2-2, lines 37, 39, 41, 42

"Secondary waste receiving tanks"
"Concentration tank"
"Container handling"
"Supporting systems"

In Figure 2-3, these systems are not shown. Figure 2-3 needs to be updated to include this information in order to prevent confusion. In addition, Figure 2-3 includes a box labeled "Dry Solid Waste." The text needs to include this information, as well.

18. 2.1.1 Transfer Piping System: Pages 2-2 and 2-3, lines 50-51 and 1-3, respectively

"Waste water from the 242-A Evaporator . . . The mechanism for accepting waste other than from the 242-A Evaporator or the LERF has not been identified."

From current discussions, it is understood that this information is not currently available. Once the mechanism for accepting waste from other facilities is determined, the Part B must be updated to reflect this change. This update must occur prior to the ETF accepting waste from other facilities. A review of this information will occur at that time.

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19. 2.1.2.11 Verification Tanks: Page 2-4, lines 19-21

"The treated waste is pumped back into the treatment train for additional treatment . . . ."

In Figure 2-3, this process is not represented. Update Figure 2-3 to include this process.

20. 2.1.2.11 Verification Tanks: Page 2-4, lines 30-31

"Some treated waste water . . . is used within various systems in the ETF to minimize the addition of fresh water."

Additional information needs to be provided on where these injections occur and the diagrams should be altered to indicate the points of injection. In addition, it may be more appropriate to address this issue under waste minimization included in Chapter 10. If, however, it is to be mentioned here and further explained in Chapter 10, an appropriate reference must be included.

21. 2.1.3.1 Secondary Waste Receiving Tank: Page 2-4, line 46

". . . that the concentration factor . . . ."

The concentration factor is introduced here without either an explanation or a reference where it is explained within the permit. Define this term or reference a document where the information can be found.

22. 2.1.3.2 Effluent Treatment Facility Evaporator: Page 2-4, line 51

". . . evaporator system was selected to reduce energy consumption."

This sentence is not clear. Does it mean that a particular model/manufacturer of the evaporator was chosen because of its efficiency or that the process was selected to reduce energy consumption? If the former, include information on the evaporator model/manufacturer. If the latter, explain how an energy savings will be realized. In addition, depending upon your response if there is any energy efficiency involved, the information may also want to be included in Chapter 10.

23. 2.1.3.3 Concentrate Tank: Page 2-5, lines 1-4

"The concentrate . . . discharged to two concentrate tanks. One tank receives the concentrate from the ETF evaporator while the other tank feeds material to the thin film dryer."

The concentrate tanks are not represented in Figure 2-3, which needs to be updated (see NOD comment # 17.)

24. 2.1.3.6 Filled Container Storage: Page 2-5, lines 20-22

"The storage area meets secondary containment requirements for storing dry and liquid mixed waste. Containers are stored temporarily until transported for long-term storage or disposal."

A reference needs to be included here which directs the reader to the section of the permit where details on fulfilling secondary requirements are included.

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25. 2.1.4.2 Sump Tank System: Page 2-6, lines 1-3

"Overflow, pressure value release, and spilled waste are collected in two pumps. Collected liquids are transferred to the surge tank."

Is the surge tank included as part of the secondary containment system? If so, this must be mentioned and a reference included to where the secondary containment information can be found within the permit.

26. 2.3.1 Seismic Consideration: Page 2-6, lines 41-42

"The ETF was designed . . . for earthquake Zone 2."

A reference should be made here to Appendix 4C: Seismic Analysis and the appropriate WAC regulations. In addition, the information promised in Appendix 4C must be included in the next revision of this permit and will be reviewed at that time.

27. 2.4.3 Transfer of Waste: Page 2-9, lines 25-27

"Although on-site waste transfers are exempt from the manifest . . . ."

The Hanford Facility Wide Draft Permit for the Treatment, Storage and Disposal of Dangerous Waste currently addresses the manifest system and identifies under what conditioned dangerous wastes shall be manifested. In addition, see the general comment #2 at the beginning of this document and NOD comment #7.

28. 2.7 Spills and Discharges into the Environment: Page 2-12, line 36

". . . are documented in Chapter 7.0."

Chapter 7 consists of a single page and needs to be expanded. A summary of the information needs to be provided and the full documents referenced for those who wish additional detail.

29. 2.7 Notification: Page 2-13, lines 1,3

"Name, address, and telephone number(s) of the owner or operator"
"Date, time, and type of incident"

WAC 173-303-810 (14)(f)(iii)(B) states the "Name, address, and telephone number of the facility;" should be included between the two items listed above. Add the information to the list to be provided. In addition, the appropriate documents should be referenced at this point and not referred to Chapter 7, which then refers to other documents.

30. 2.7.1 Notification: Pages 2-12 and 2-13, lines 41-51 and 1-21, respectively

"Reporting of any noncompliance with final status requirements that might endanger human health. . ."

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Confirm if the spill and discharge notification procedures identified are in agreement with those of the Hanford Facility Wide Draft Permit for the Treatment, Storage and Disposal of Dangerous Waste's immediate reporting requirements. Where discrepancies occur, the procedures should be changed to agree with the draft permit requirements. For example, the draft permit currently requires immediate verbal reporting to occur within two hours of the permittees becoming aware of the release and the procedures of the application commit to an indeterminate "immediate" reporting. As another example, the specific informational criteria of page 2-15, lines 10-16, is not identical to that of the draft permit. Pending issuance of the Facility Wide permit, this deficiency may remain unresolved, if necessary. In addition, see general comment #2 on the first page of this document.

31. 2.7.2 Mitigation and Control: Page 2-13, lines 26-39

"Releases or discharges of dangerous waste . . . in accordance with . . . Chapter 7.0."

Chapter 7 references additional documents without providing a summary of the salient points. See NOD comment #28.

32. 2.8.2.1 Transporter Responsibilities: Page 2-14, lines 39-42

"The 242-A Evaporator . . . is responsible for transferring waste from the 242-A Evaporator to the LERF and to the ETF. The ETF . . . is responsible for transferring waste . . . from the LERF to the ETF."

Following the above information, a list of responsibilities are provided. The information, however, is not made clear which are the responsibilities of the ETF and of the 242-A Evaporator. Indicate the organization which is responsible for each item and, where appropriate, indicate where the records are to be kept. Lastly, where appropriate, indicate how each item is to be addressed and/or where the information is found and which facility controls the transfer at each stage.

33. 2.8.2.1 Transporter Responsibilities: Page 2-15, line 4

"Ensuring leak detection."

Information needs to be included on the leak detection capabilities/checks or a reference needs to be included to the location where this information can be found.

34. 2.8.3 Response to Significant Discrepancies: Page 2-15, lines 36-37

"A significant discrepancy will be a volumetric difference . . . ."

Define that amount of volumetric difference which will determine whether a discrepancy is significant or not. Otherwise, one is to assume that any difference other than zero will be treated as significant. In addition, is the volumetric difference dependent upon the size of the tanks? The size of the tanks within the ETF vary considerably, and what would be a significant volumetric difference for one tank might be insignificant for another. Include a description on how the volumetric difference is determined and interpreted.

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35. Section 2.8.3 Response to Significant Discrepancies: Page 2-15 , lines 27-47

Additional information is needed in this section. This includes a description of the criteria to determine if a discrepancy has been adequately resolved, and a description of the actions to be taken if a significant discrepancy is not resolved.

36. 2.8.4 Provisions for Nonacceptance of Shipment: Page 2-16, lines 3-4

"Provisions for nonacceptance of shipments are discussed in the following sections."

What provisions are built into the acceptance process to prevent acceptance of off-spec wastes? This topic needs to be either discussed here in detail or a reference needs to be made where this information can be found.

37. 2.8.4.1 Nonacceptance of Undamaged Shipment: Page 2-16, line 7

". . . suitable for treatment in the ETF, the waste is not transferred to the ETF."

Include the following phrase before the end of the sentence, " as defined in WAC 173-303-370(5)(a)(i)."

38. 2.8.4.2 Activation of Contingency Plan for Damaged Shipment: Page 2-16, lines 9-12

"This section is not applicable. Damaged shipments . . . ."

On Page 2-14, lines 1-29 indicate that there are containerized on-site waste shipments. The permit application needs to make it clear that the ETF will not be accepting containerized waste, but will only accept piped waste or tanker waste. Any containerized waste associated with the ETF will be a transfer from the ETF to other on-site waste facilities.

Chapter 3.0: WASTE CHARACTERISTICS

39. 3.1 Chemical, Biological, and Physical Analysis: Page 3-1, lines 22-23

"Additional information on sampling methods is provided in the ETF waste analysis plan (Appendix 3A)."

A Waste Analysis Plan must be provided for the next permit application review.

40. 3.1.1 200 Area Effluent Treatment Facility Treatment and Verification Tank Storage: Page 3-2, lines 9-10

"The ability to store dangerous waste in the verification tanks is necessary should the waste water need to be stored longer than 90 days."

Why is storage for greater than 90 days within the verification tanks necessary? It was understood that with the sample turn around time inherent in the WSCF laboratory, sampling results will be available quickly. The solution can therefore either be discharged if it reaches the permissible discharge limits or be returned to the ETF for additional treatment within the 90 days necessary. Storage as a dangerous waste for greater than 90 days should therefore not be necessary. In addition, if these tanks should be permitted for greater than 90 day storage, a very detailed and specific set of requirements for closure are invoked. If the tanks are not needed for greater than 90 day storage, the expense of RCRA closure should be avoided. Provide information and justification if the verification tanks are to be permitted for storage.

41. 3.1.1 200 Area Effluent Treatment Facility Treatment and Verification Tank Storage: Page 3-1, lines 34-50

"Waste acceptance criteria are based upon laboratory tests performed on a non-radioactive surrogate solution; these tests . . . ."

Information needs to be provided to Ecology here on the conditions of and results from the pilot studies along with a reference where more detailed information can be obtained.

42. 3.1.4.2 Process Condensate Waste Analysis: Page 3-3, lines 21-22

". . . 34 grab samples taken of the PC between August 1985 and March 1989 at four sampling locations."

The results of these sampling efforts need to be included within the permit. It is necessary either to include information on what analyses were done on the process condensate or refer to another document where the information can be found. In addition, a discussion of what these results indicated would be appropriate along with any information on how unanticipated analytes which may appear in future runs might be handled.

43. 3.1.4.3 Waste Characterization: Page 3-36, lines 40-42

"The sampling and analysis of treated waste water ad secondary waste, and the proper management of secondary waste also is (are??) discussed in the waste analysis plan (Appendix 3A)."

Although the waste analysis plan in Appendix 3A has not yet been provided for review, it is appropriate to note that in the waste analysis plan the two waste streams (treated and secondary waste) need to be addressed as separate issues. The issues/needs/concerns for each stream should be addressed for permit review, either as part of the permit or as a separate referenced document.

44. 3.1.5.2.4 Butyl Alcohol: Page 3-5, lines 41-45

"Butyl alcohol is an impurity and degradation product from tributyl phosphate . . . ."

This section is unclear as to its intent. Butyl alcohol is a F003 listed waste. If the compound is being excluded from this waste code because it was not used as a spent solvent as defined in WAC 173-303-9904, then this needs to be made clear. If so, justification needs to be presented that this compound was only found as a degradation product and not as a waste solvent from such facilities as on-site laboratories.

45. 3.1.5.2.8 Pyridine: Page 3-6, lines 28-31

"Pyridine was detected in 1 of 34 samples at a concentration of . . . ."

Pyridine is a dangerous waste as defined in WAC 173-303-9905. Therefore, information needs to be presented on the reason for its detection and justification needs to be presented proving that this compound was not a waste solvent from such facilities as on-site laboratories.

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46. 3.1.5.4 Dangerous Waste Mixtures: Page 3-6, lines 39-41

"The ETF verification tanks could have constituents that are identified in 40 CFR 302.4 (Spill Table) and in the Registry of Toxic Effects of Chemical Substances (NIOSH 1990)."

Include examples of species or types of chemical compounds which will be of concern from these references for the ETF verification tanks. In addition, 40 CFR Appendix IX should be included as a reference here of potential compounds which must be considered. If not, justification for its omission needs to be provided.

47. 3.1.5.4.1 Toxicity: Page 3-7, lines 2-4

"Forty-seven substances associated with toxic categories were identified as potential constituents of the PC. These 47 substances contribute to the calculated equivalent concentration percent sum."

Either a reference where this information can be found or the information must be included on the 47 substances and the calculation of the "equivalent concentration percent sum" at this point.

48. 3.1.5.4.2 Persistence: Page 3-7, lines 11-15

"A review of existing processes and analytical data indicated the PC . . . ."

Information must be included here which substantiates this claim or a reference needs to be added explaining where this information can be found. The information in this section only refers to the process condensate. Information throughout this whole section needs to address the waste from the secondary waste stream.

49. 3.1.5.5.2 Corrosivity: Page 3-8, lines 12-15

"Measurements of pH for the different waste types . . . ."

The information in this section only refers to the process condensate. Information throughout this whole section needs to address the waste from the secondary waste stream.

50. 3.1.5.5.3 Reactivity: Page 3-8, lines 28-33

"Analysis was performed to determine cyanide and sulfide concentrations .... The unofficial thresholds levels, as stated in SW-846 (EPA 1986), for hydrogen cyanide gas and hydrogen sulfide gas are 250 milligrams per kilogram and 500 milligrams per kilogram, respectively."

Additional information needs to be included at this point on exactly what analysis was used to provide this reference, and it is necessary to determine if the numbers quoted above are valid for the ETF. For example, analyses for hydrocyanic and sulfuric acids would be more appropriate than analyses for the individual gases. SW-846 method 9010 lists a method detection limit for hydrocyanic acid of either .1 or .02 mg/L, depending upon which procedure is chosen. In addition, the levels using units of milligrams per kilogram are more typical for analyses of soils or sediments and not strictly aqueous solutions. These issues need to be addressed and clarified.

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51. 3.1.11 Envelope of Waste Characteristics Allowed as Feed to the 200 Area Effluent Treatment Facility: Page 3-10, lines 9-30

"The operating envelope for the organic constituents ...."

The information from the pilot test results and actual data from the ETF need to be compared at some point to determine if the facility is achieving the objectives for which it was built. A statement to this effect should be included at some point in the permit application and this may be a valid point for insertion.

52. 3.2 Waste Analysis Plan: Page 3-10, lines 36-40

"Waste generated in the ETF includes the treated waste water, powdered solids from the ETF drier, spent IX resins ...."

Are there other wastes not mentioned which should be included such as air filters from the HEPA filters?

53. 3.2.1 Parameters and Rationale: Page 3-11, lines 3-8

"The parameters and rationale were selected to characterize ...."

This information needs to be updated. The process for determining the "operating envelope" for the material accepted into the facility and the process for determining the constituents at the end of the treatment have been separated. This paragraph is no longer valid.

54. 3.2.3 Sampling Methods: Page 3-11, lines 19-38

"Sampling methods are as follows: ...."

Information must be included here on the samplers used to both the flow proportional sampler mentioned in line 21 and the sampler in line 33. It is not necessary to include model name, but

information on what criteria the sampler must fulfill and/or reference to a document which provides information on this type of data would be appropriate.

55. 3.2.5 Liquid Effluent Discharge Limits Persistence: Page 3-11, lines 49-50

"Discharge limits are set in the State Waste Discharge Permit Program (WAC 173-216)."

This section needs to be updated to include the results of the DQO process which will determine the constituents and analytical limits for the effluent discharge limits. It would be appropriate here to include a summary of these results for clarification and to reference the 216 permit if additional information is required.

56. 3.2.6 Quality Assurance Program: Page 3-12, lines 3-10

"A laboratory quality assurance plan identifies . . . ."

The Hanford Facility Wide permit (see general comment #2 on page 1 of this document and NOD comment #7) includes QA permit conditions. It is appropriate to either defer a comparison with the Facility Wide permit until it is finalized, or attempt to compare the information included here with current draft requirements.

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57. 3.4 Additional Requirements for Ignitable, Reactive, or Incompatible Waste: Page 3-12, lines 22-25

"Ignitable, reactive, or incompatible waste is not treated or stored in the ETF. Section 3.1.5.5 discusses the dangerous characteristics of the PC. Therefore, ..."

As mentioned earlier, the powdered waste from the secondary treatment process has not been addressed. Therefore, this section needs to be updated to assess the effect this waste stream has upon these requirements.

58. 3.5 Land Disposal Restrictions: Page 3-12, lines 30-35

"Treated waste water from the ETF will be a delisted . . . ."

The State of Washington is not currently designated the legal right to enforce LDR restrictions. Therefore this section will be reviewed by the EPA and any comments will be sent at a later date.

Chapter 4.0: PROCESS INFORMATION

59. 4.1.1 Primary Treatment Train: Page 4-1, line 52

"Cooling tower."

A cooling tower could not be found in Figure F4-1 or F4-2. Although a possible cooling tower was found on Figure 4-3, no label was found to confirm this. Therefore, update the appropriate figures. In addition, is the order correct (i.e., shouldn't the cooling tower be placed after the UV/OX and RO units)?

60. 4.1.1.2 Coarse Filtration: Page 4-2, lines 29-30

". . . to reduce the temperature . . . before entering the UV/OX chambers."

Add a reference to section 4.1.1.1.2 where the cooling towers are explained.

61. 4.1.1.5 Hydrogen Peroxide Decomposer: Page 4-3, lines 34-35

"The residual hydrogen peroxide is decomposed by . . . packed beds of catalyst."

Add more detail on the catalyst, such as its chemical constituency and how it achieves its goal.

62. 4.1.1.8 Reverse Osmosis System: Page 4-4, lines 38-43

"The membranes are of a composite polyamide type . . . ."

This section needs to be rewritten to increase clarity. For example, the phrase "contaminants are removed from the waste water" is misleading.

63. 4.1.1.9 Polisher: Page 4-5, line 32

"Eventually, the IX resins become exhausted so that further regeneration is inefficient."

This section needs to be expanded to include information on how it is determined that the resin is exhausted, and what the limits are for recycling.

64. 4.1.1.11 Verification Tanks: Page 4-6, lines 27-32

"All of the verification tanks have a liquid sensor, a liquid level . . . ."

Tables 4-1 lists the tanks throughout the facility with the appropriate designation and volume information. It would benefit this discussion if an additional column was included which describes the volume of the tank above which the high-level alarms would engage.

65. 4.1.1.12 Cooling Tower: Page 4-6, lines 34-36

"The UV/OX and RO systems have . . . ."

This section needs to be expanded to include information on where the cooling towers are found within the enclosed figures.

66. 4.1.2.1 Secondary Waste Receiving Tanks: Page 4-7, lines 17-18

"A high level alarm indicates an abnormal situation."

The term "abnormal situation" needs to be defined and information needs to be included on how this "abnormal situation" is discovered and resolved. For example, is the system shut down automatically upon the determination of an "abnormal situation?"

67. 4.1.2.1 Secondary Waste Receiving Tanks: Page 4-7, line 18

"Secondary containment for these tanks . . . ."

Refer to Table 4-7 where information on the volume of secondary containment involved for each tank is listed. Include this reference in other areas where secondary containment is mentioned (line 48 of the same page, for example).

68. 4.1.2.3 Concentrate Receiving Tanks: Page 4-8, lines 13-14

"The temperature of the concentrate is increased by a steam preheater to enhance operation of the thin film dryer."

Are there any offgasses from this process? If so, what is the final fate of these offgasses (i.e., are they condensed and added back into the process at some point)?

69. 4.2 Containers: Page 4-9, lines 35-41

"The airlock is opened and the smear sample (surface wipe) is taken . . . ."

Is this contamination confirmation in agreement with the criteria for contamination confirmation contained in the Hanford Site Solid Waste Acceptance Criteria? As the material involved is very likely radioactive, it would be beneficial to include a radioactive survey and visual inspection of the tanks in addition to a smear sample. A smear sample will only be indicative of the region covered by the smear which should be supplemented with the additional sampling. If upon chemical evaluation of the material upon initial startup of the facility the radioactivity is proven to be very low, it may be possible to discontinue the radiological surveys. The radiological surveys would have to be re-implemented, however, if the waste stream changes.

70. 4.2.1 Containers With Free Liquids: Page 4-10 lines 17-20

"Most regulated waste generated at the ETF is dry; however, some containerized waste might contain free liquids . . . ."

On page 4-9, lines 44-46, the permit states, "The containers are stored on pallets, stacked three high, providing 30 inches (76.2 centimeters) of aisle space on both sides of each pallet." Although the regulations allow stacking drums three high, it is not recommended for drums containing liquids. Has this factor been considered, and is it appropriate for these potentially liquid containing drums to be stacked three high? If not, what measures will be taken to minimize the risk of rupture and spillage within the ETF? In addition, the issue of how the drums will be inspected at that height needs to be addressed.

71. 4.2.2 Containers Without Free Liquids: Page 4-10, line 30

"Organic constituents are removed during the treatment process."

This information is not in agreement with the Part A application. Under the section of the Part A dealing with Estimated Annual Quantity of Waste, a long list of organic constituents are listed under the "Storage-Container" heading. This discrepancy needs to be addressed.

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72. 4.2.2.1 Tests for Free Liquids: Page 4-10, lines 41-42

"Tests for free liquids are performed before transfer for long-term storage or disposal."

Information needs to be included on what these tests consist of and how the results will be evaluated. If this information is available in another part of the permit or in another document, it needs to be referenced.

73. 4.2.2.2 Description of Containers: Page 4-10, lines 51-52

"The one exception to this type of container is the container used for storage of spent resin."

Additional information needs to be provided concerning this statement. In particular, what type of container is used and why is it necessary to use a different type.

74. 4.2.2.2 Description of Containers: Page 4-11, lines 6-7

"A hazardous waste label . . . is affixed to the container (WHC 1988)."

Additional information needs to be provided. What method is used to attach the label (i.e., is it done remotely or manually)?

75. 4.2.2.3 Container Management Practices: Page 4-12, lines 1-3

"If radioactive contamination is found on the surface of a container, the container is moved by conveyor to . . . ."

Is there any action taken to clean and/or evaluate the conveyor system for contamination? It is assumed that if contaminated drums are found, that contamination could be transferred from the drums to the conveyor belt. This issue needs to be addressed

76. 4.2.2.3 Container Management Practices: Page 4-12, lines 18-20

"Filled containers are closed, labeled, palletized, strapped, and . . . ."

What is meant by the term strapped? Add an explanation of this term at some point in the permit. In addition, how will this affect the stability of the pallets, particularly if they are stored three high?

77. 4.2.2.3 Container Management Practices: Page 4-12, lines 22-24

"An example storage configuration is shown in Figure 4-8."

According to the configuration shown in Figure 4-8, a total of 660 drums can be stored assuming the drums are four to a square, three high and five squares to a row times 11 rows. The text earlier (page 4-9, line 44), however, indicates that 720 containers can be stored within this facility. Resolve this discrepancy and include information which indicates how the correct number was derived.

78. 4.3.2 Piping, Instrumentation, and Process Flow: Page 4-15, lines 46-47

"Drawings showing piping and instrumentation for each tank and process system are found in Appendix 4A."

This document could not be found. Appendix 4A (Engineering Design Report) was missing and the following statement was found: "This report will be provided in a future permit application revision." Include the Appendix with the appropriate documents in the next revision for review.

79. 4.3.3 Ignitable, Reactive, and Incompatible Waste: Page 4-16, lines 20-26

"Two smaller tanks inside the ETF Building . . . ."

This section deals with the two dilute pH adjustment tanks. Either at this point or somewhere else in this chapter, the information must be provided on the dilution of material from the acid and base tanks outside the building into these tanks. Include the source of dilution water.

80. 4.3.4 Labels or Signs: Page 4-18, lines 2-3

"Tanks and vessels containing dangerous waste are posted with hazardous waste labels."

This section should include a citation that WAC 173-303-640 (5) is being complied with.

81. 4.3.6 Assessment of New Tank System Integrity: Page 4-18, lines 17-20

"The ETF tanks systems for handling dangerous waste are . . . contained (Appendix 4B)."

Appendix 4B is incomplete due to incomplete design at time of submission. Portions of the facility, such as the drum handling system, the chemical reagent feel system, and the utilities, are not included. Update this information for the next permit review. In addition, update Table 4-2 once the engineer's certification is complete.

82. 4.3.6.3 Corrosion Assessment and Protection: Page 4-21 lines 11-12

"The corrosion analysis report is provided in Appendix 4D."

Appendix 4D consisted of the statement, "This report will be provided in a future permit application revision." Include this report in the next permit application.

83. 4.3.7 Inspection, Verification, and Testing Phases: Page 4-22 through 4-27

"Tanks, piping and process systems in the ETF were subject to several inspections and test before waste water was processed. These activities . . . ."

As construction of the ETF is as yet incomplete, much of the information in this section predicts what will occur once construction is complete. Therefore it needs to be checked to make sure the contents agree with expected practice and current plans. In addition, the section must be more closely reviewed in the next revision as careful evaluation at present is not possible.

84. 4.3.9.9 Collection and Removal of Waste: Page 4-32 lines 3-6

"Swab risers are located every 100 feet . . . ."

What are "swab risers?" Include a definition and demonstrate exactly what the function of these devices are.

85. 4.8 Land Treatment: Page 4-33, lines 42-44

"Samples are collected regularly from the verification tanks and analyzed to verify the success of the treatment process and to confirm that the treated waste water is safe for discharge."

Earlier sampling information refers to proportional sampling of the line between the pH adjustment tank and the verification tanks. No mention was made of sampling of the verification tank itself. The sampling to be done on the discharge from the ETF to/in the verification tank needs to be made uniform throughout the document.

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86. Figures F4-3: 200 Area Effluent Treatment Facility Process Flow Diagram

This figure needs to provide more information on the direction of the various flows; a number of arrows appear throughout the document with no information on the process involved. For example, it appears from the diagram that the recycle capability from the three Verification Tanks to the Surge Tank is included within the document. However, the labeling does not make this clear.

87. Figures F4-4: Plan View of Container Handling Room

This figure needs to provide more information on the direction of the movement within the graph. In addition, it would be beneficial if various portions of the system are better described. For example, it would be advantageous to have various sections of the system labeled such as empty drum loading, filled drum storage, cleaning conveyor, rotator, remotely operated washdown station, etc.

88. Figure F4-5: Side View of Dryer Powder Hopper and Container Handling Room

This figure needs to provide more information on the various sections of the system. It would also be beneficial to include information on the direction of flow of material through the system.

89. Figure F4-6: Capping Station

The reason for this figure is not evident. It does not provide any substantial information on how the capping procedure is accomplished. It needs to be augmented with additional information on how the process occurs.

90. Figures F4-8: Example Storage Configuration in the Filled Container Storage Area

This figure could be improved if the remainder of the container handling system is shown (although not in detail) and one is able better to visualize how the drums are transferred from the outlet of the handling system into the storage area.

91. Table 4-1: 200 Area Effluent Treatment Facility Tank Systems Information

Information needs to be added to this table which deals with the volume of ancillary equipment. In addition, either here or somewhere within the permit, the issue of which ancillary "belongs" to which tank needs to be addressed. These issues are not of direct importance now but will be important in the future when decontamination and decommissioning occur. There also exists several TBDs in the Table which need to be updated.

Chapter 6.0: PROCEDURES TO PREVENT HAZARDS

92. 6.1.1 Security Procedures and Equipment: Pages 6-1, lines 18-20

"The following sections describe the 24-hour surveillance . . . ."

Cite 173-303-310 and state the requirements within will be met.

93. 6.1.1.2 Barrier and Means to Control Entry: Page 6-1, line 41-43

"The perimeter of the ETF is fenced . . . ."

More information is required on the fencing of the ETF. Will the fence be posted? Will the gate be left open or will access be controlled? Can the gate provide access for unauthorized vehicles, etc.?

94. 6.2 Inspection Schedule: Page 6-2, lines 10-13

"This section describes the method and schedule for inspection . . . ."

Cite 173-303-320 and state the requirements contained within will be met.

95. 6.2.2.1 Visual Inspection Plan: Pages 6-2 through 6-3

"The visual inspection plan provides direction . . . ."

The information on the visual inspection plan is provided in the tables included at the end of this chapter. The information, however, was difficult to verify because the particular information was not referenced at the correct points. Add references for the particular details where appropriate.

96. 6.2.2.2 Instrumentation Monitoring Inspection Plan: Page 6-3, lines 16-18

"In radioactive areas, many inspection are performed . . . and visual indicators track alarm status."

The term "visual indicators" used at this point is not adequately explained and some confusion exists concerning exactly what is meant by this passage. Edit this section to prevent confusion.

97. 6.2.2.3 Instrumentation Monitoring Inspection Plan: Page 6-3, lines 21-25 and 32-35, respectively

"After an alarm is activated, the process operator responds . . . ."

This section needs to be extended and information needs to be included concerning exactly how this information will be used. At a minimum, a log should be kept of all occurrences containing as much pertinent information as possible and be made available to Ecology personnel (unit manager and compliance inspector, in particular) upon request. The exact details can be deferred until the plant is operational and a better idea can be obtained of how the information will be structured and what it will contain. The commitment to address this issue, however, must be made now.

98. 6.2.2.3 Preventive Maintenance Plan: Page 6-3, lines 42-51

"The ETF instrumentation is calibrated regularly . . . ."

No mention is made here of the determination of conversion factors which are necessary in order to understand the results being displayed. Are conversions factors going to be calculated and, if so, the calculations need to be explained at this point or a reference must be included which directs individuals to the documents where the information can be found.

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99. 6.3.1.2 External Communications: Page 6-5 lines 9-10

"Priority message system (Management Bulletin)--a network of telefax machines used to disseminate information to personnel."

Additional information needs to be provided on the network of telefax machines including the location of the various fax machines and the position of the individuals to whom the faxes would be sent.

100. 6.3.1.3 emergency Equipment: Page 6-5 lines 39-42

"Respirators, hazardous material protective gear . . . ."

An itemization of the emergency equipment present at the ETF needs to be included here. The itemization will include information such as how many and what kind of respirators, what kind of protective gear and how many, etc. Often the information is included in the building emergency plan which can be referenced if that is the decision made with the ETF.

101. 6.3.2 Aisle Space Requirement: Page 6-6, line 18

"Drawing H-2-69267 in Appendix 4A . . . ."

This document could not be found. See NOD comment #79.

102. 6.4.1 Spill Prevention and Control: Page 6-6, lines 37-41

"This section discusses the prevention of dangerous waste spills . . . ."

Cite 173-303-145 and state the requirements contained within will be met.

103. 6.4.2 Run-Off: Page 6-7, lines 3-4

"Run-on and run-off controls will be maintained through the life . . . ."

Insert the word "active" before life, and the phrase "including the post closure period" after life in the above sentence.

104. 6.4.4.1 Equipment and Power Failures: Page 6-8, lines 2-3

"Spare parts are maintained . . . ."

Itemize the parts which will be kept as spare. This information is often included in the building contingency plan and, if this is the intent for the ETF, reference the document here.

105. 6.4.4.2 Power Failure: Page 6-8, lines 5-29

"The ETF does not have a standby power source. Selected lighting . . . ."

This information will have to be provided in more detail. If it is the intent to include this information in the building contingency plan, a reference needs to be included here.

106. Table 6-1 Visual Inspection Schedule for Process Equipment, Piping, Structures, and Areas: Page 3 of 3

"Satellite accumulation areas inspected on a weekly basis."

WAC 173-303-320 (2)(c) states that "areas subject to spills must be inspected daily when in use." Adjust the inspection frequency for the satellite accumulation areas to reflect this regulation from the current weekly inspection frequency to daily. In addition, cite WAC 173-303-320 (2)(c) and state that the ETF will comply with the requirements listed within. In addition, does the satellite accumulation areas include the drum storage area? If not, this needs to be included.

107. Table 6-1 Visual Inspection Schedule for Process Equipment, Piping, Structures, and Areas: Page 3 of 3

Footnote: "*Stated inspection frequency to be performed only during ETF operations"

The term "ETF Operations" is not adequately defined. Change the footnote to state that the appropriate portions of the ETF will be evaluated while in use.

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Chapter 7.0: CONTINGENCY PLAN

108. General Comment:

The Hanford Facility Contingency Plan needs to be included. Although this plan addresses the rest of the Hanford Facility, it is normally included in Part B Permit applications for completeness.

109. 7.0 Contingency Plan: Page 7-1, lines 1-8

"The WAC 173-303 requirements . . . are satisfied in the following documents: the Building Emergency Plan . . . (Appendix 7A) . . . ."

A Building Emergency Plan for the ETF must be provided for the next permit application review and will be evaluated at that time. In addition, the Building Emergency Plan must be provided prior to hot operation of the ETF.

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Chapter 8.0: PERSONNEL TRAINING

110. General Comment:

Several questions have arisen pertaining to personnel training as a program. It is the reviewer's understanding that a system for tracking personnel training requirements and status (TRAC) is currently being developed. Please provide a description of this system and an identification of how Ecology may obtain access to the information when needed. It is also the reviewer's understanding that a document exists (WHC 5-34, 1.8) which identifies all courses and certifications required for the various job classifications. Table 8-3 should be updated to reflect the most current requirements (course titles and numbers). The reviewer requests clarification throughout Chapter 8.0 of certification, courses, and job titles.

111. 8.1.5 Relevance of Training to Job Positions: Page 8-16 through 8-17

"The training program for the TSD unit management employees was developed . . . ."

WAC 173-303-330 (1) states that this section "must teach facility personnel dangerous waste management procedures (including contingency plan implementation) . . . " which is lacking. Update this section of the training program to include information on contingency plan training.

112. Figure 8-2: Distribution of Training Responsibility for Treatment, Storage, and/or Disposal Units

This figure mentions various training and support organizations. Name those organizations and the type of support that they are expected to provide.

Chapter 11.0: CLOSURE AND POSTCLOSURE REQUIREMENTS

113. 11.0 Closure and Postclosure Requirements: Page 11-1 , lines 5-6

"No postclosure activities are applicable . . . ."

Rephrase the sentence to state, "no postclosure activities will be required in the event that the ETF unit is clean closed."

114. 11.0 Closure and Postclosure Requirements: Page 11-1 , lines 6-8

"Clean closure requires that . . . ."

Restate the sentence to reflect that "the clean closure performance standards of WAC 173-303-610 (2) will be the goal (i.e., not only the waste will be removed but the unit will be decontaminated of dangerous waste constituents and/or residues)."

115. 11.1 Closure Plan: Page 11-1 , lines 18-28

"As currently envisioned, closure activities . . . ."

A clear identification of which piping and equipment being considered in both Phase I and Phase 2 activities needs to be provided to Ecology when available, and a statement to that fact included in the permit. In addition, the "appropriate disposal unit" referred to in lines 24 and 28 needs to be altered to "appropriate disposal and/or storage unit" as final disposition of the contents of the ETF can not be determined at this time.

116. 11.1.1.1 Performance Standard: Page 11-1 , lines 40-50

"Minimizes the need for future maintenance"
"Controls, minimizes, or eliminates to the extent . . . ."

Change the punctuation and wording for the above section to agree with that contained in WAC 173-303-610 (2) (i.e., add ";" after maintenance in line 40, and add "; and" after atmosphere in line 46, etc.).

117. 11.1.1.1 Performance Standard: Page 11-2 , lines 5-6

"The ETF is designed for a 30-year operational life . . . ."

The term "operational life" must be defined here or the terminology altered to conform with WAC 173-303-040 (i.e., "active life, "active portion," etc.)

118. 11.1.1.1 Performance Standard: Page 11-2 , lines 5-9

"The ETF is designed for a 30-year operational life . . . ."

A 30-year operational life is discussed in this section without addressing partial closure requirements, which are found in WAC 173-303-610 (3)(c). Partial closure requirements may apply at any time during the facility's "active life." While the "active life" of the facility may be thirty years, portions of the ETF may undergo partial closure; therefore, the closure plan must include provisions to address the possibility of partial closure of any of the applicable storage and/or treatment units addressed by the permit. Update this section to address partial closure considerations.

119. 11.1.1.1 Performance Standard: Page 11-2 , lines 11-15

"Clean closure of the ETF . . . ."

Include provisions to verify/confirm decontamination of equipment and/or structures coming into contact with waste. In other words, clarify this section to indicate that soil sampling will not be the only media sampled during clean closure confirmation.

120. 11.1.1.2 Removal or Decontamination Standard: Page 11-2 , lines 17-19

"Clean closure of the ETF will consist of the removal and disposal of dangerous waste . . . ."

Details need to be provided on the final destination/disposal of any dangerous waste remaining in the facility upon closure, or a statement needs to be made that the regulations as specified by WAC 173-303-610 will be complied with.

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121. 11.1.4 Inventory Removal, Disposal, or Decontamination of Equipment, Structures, and Soils: Page 11-3 , lines 10-15

"The ETF closure plan will provide . . . ."

Three bullets need to be added here. The first identifies equipment/structure sampling (i.e., surface sampling of tanks, piping, etc., concrete sampling of flooring where applicable, etc.). Soil sampling alone is insufficient to complete closure of the ETF. The second addresses waste inventory disposition, and the third addresses a WAP for closure confirmation sampling.

122. 11.1.4 Inventory Removal, Disposal, or Decontamination of Equipment, Structures, and Soils: Page 11-3 , lines 10-15

"Uncontaminated equipment disposition"
"Contaminated equipment disposition"

How will the determination between contaminated and uncontaminated equipment be made? This issue either needs to be addressed at this point or a reference added to where the information can be found.

123. 11.1.4.3 Contaminated Equipment and Structures: Page 11-3 , lines 33-36

"If contaminated with either dangerous or mixed waste . . . ."

How will it be determined if the units/equipment has been "contaminated with either dangerous or mixed waste constituents?" The reviewer recommends an identification of all solid waste management units (as defined by WAC 173-303-040) at the time of initial usage. In other words, the creation of a RCRA Facility Assessment (RFA) is recommended.

124. 11.1.4.4 Decontamination of Equipment: Page 11-3 , lines 45-46

"The flush water will collected, sampled . . . ."

Indicate at this point that the flush water will be subjected to a designation exercise as described in WAC 173-303-070, and will be managed appropriately depending upon the information obtained from the waste designation.

125. 11.1.4.4 Decontamination of Equipment: Page 11-3 , lines 47-49

"Procedures for cleaning and decontaminating equipment contained in the Guide for Decontaminating Buildings, Structures, and Equipment of Superfund Sites (EPA 1985) . . . will be used as a guidance."

The reviewer is unfamiliar with this document and questions its appropriateness for use in a RCRA facility. The document needs to be provided for review and a justification offered on the applicability of its use for the ETF. In addition, this document must be compared with both the Department of Ecology's draft Guidance for Clean Closure of Dangerous Waste Facilities (April, 1993) and the RCRA Guidance Manual for Subpart G Closure and Post-Closure Care Requirements and Subpart H Cost Estimating Requirements (OSWER Policy Directive #9476.00-5).

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126. 11.1.6 Schedule for Closure: Page 11-5, lines 17-18

"The projected closure schedule for the ETF will be examined periodically and will be provided in a future permit modification."

The time frame involved for a closure schedule must be provided for the next review of the ETF permit.

127. 11.1.8 Amendments to Closure Plan: Page 11-5, lines 33-35

"Should changes be required . . . WAC 173-303-610 (3)(a)."

The reference to the WAC above is incorrect and should refer to WAC 173-303-610 (3)(b). Change the sentence to reflect the correct citation.

128. 11.1.9 Certification of Closure and Survey Plat: Page 11-5, lines 40-42

"Within 60 days of final closure of the ETF . . . ."

Restate the sentence indicating that certification of closure will be submitted within 60 days "of completion of closure of each dangerous waste management unit . . . ."

129. 11.1.9 Certification of Closure and Survey Plat: Page 11-5, lines 42-44

"This certification will be signed . . . ."

Insert the word "registered" between "independent" and "professional" in this sentence.

130. 11.4 Closure Cost Estimate: Page 11-6, lines 33-39

"Federal facilities are not required to comply with . . . ."

It is asserted that a closure cost estimate is not required because "Federal facilities are not required to comply with WAC 173-303-620." WAC 173-303-620 (1)(c) exempts federal facilities from the requirements of closure cost estimates; however, under WAC 173-303-620 (1)(c) ". . . operators of facilities who are under contract with the . . . federal government must meet the requirements of this section." On page iii of this permit, it states "Westinghouse Hanford Company . . . serves as co-operator of the 200 Area Effluent Treatment Facility . . . ." Therefore, a detailed closure cost estimate as required by WAC 173-303-620 (3)(a) must be provided. For consistency, it is requested that the text utilized in the equivalent sections of the 305-B Storage Facility permit application, the 2727-S Nonradioactive Dangerous Waste Storage Facility closure plan and the 300 Area Solvent Evaporator closure plan be utilized in this application.

131. 11.6 Postclosure Cost Estimate: Page 11-7, lines 3-9

"Federal facilities are not required to comply with . . . ."

Following the logic identified under NOD comment #130, a detailed written cost estimate for postclosure care as required by WAC 173-303-620 must be provided, if applicable. The test should reflect that in the event that postclosure care is required at this unit, the estimate will be provided, or as in the case of the 305-B Storage Facility permit application, the text may reflect the intent not to close the unit as a dangerous waste disposal unit.

Chapter 12: Reporting and Recordkeeping

132. 12.2 Treatment, Storage, and/or Disposal Requirements: Page 12-1, lines 24-25

"The records and reports described in this section are available by contacting RCRA Compliance Support."

The reviewer is unfamiliar with the concept of contacting "RCRA Compliance Support" for reports and records. Please confirm if this manner of record and report collection/provision is in agreement with the Hanford Facility Draft Permit for the Treatment, Storage and Disposal of Dangerous Waste. If not, delete this phrase from throughout Chapter 12. In addition, identify which records and reports will also be maintained at the unit (i.e., copies of manifests, shipping papers, inspection sheets, permit, etc.).

133. 12.2.1.1 Waste Manifest Report: Page 12-1 and 12-2, lines 46-50 and 1-3, respectively

"The Hanford Facility has methods in place for tracking . . . ."

Dangerous waste transportation requirements are specified by Conditions II.P. and II.Q. of the Hanford Facility Wide Draft permit for the Treatment, Storage and Disposal of Dangerous Waste. Modify the referenced statement to reflect the requirements. Pending issuance of the above referenced permit, this deficiency may remain "open" if necessary.

134. 12.2.1.2 Annual Dangerous Waste Reports: Page 12-2, lines 19-20

"The report form and instructions in the "Waste Management Facility Annual Dangerous Waste Report-Form 5" are used . . . ."

It is the reviewer's understanding that the Waste Management Facility Annual Dangerous Waste Report-Form 5" is to be significantly changed. Include the provision to provide whatever information is required by the revised form.

135. 12.2.1.5 Contingency Plan Incident Notification: Page 12-2 and 12-4, lines 35 through 3, respectively

"The building emergency director or coordinator . . . ."

After the building emergency plan is written (and clearly identifies personnel responsibilities), it is requested that this section be compared and revised, if necessary, to ensure consistency throughout the application.

136. 12.2.2 Recordkeeping Requirements: Page 12-4, lines 39-40

"These records can be located by contacting RCRA Compliance Support."

It is indicated that certain records are "retained by the ETF" (page 12-4, line 33) and that these records "can be located by contacting RCRA Compliance Support." Identify the location and content of the records described in this fashion. In addition, refer to NOD comment #133.

137. 12.2.2.2 Operating Records: Page 12-4, lines 50-52

Description and the quantity of each dangerous waste received . . . ."

Rewrite the bullet to make it agree with WAC 173-303-380 (1)(a):

"A description of and the quantity of each dangerous waste received or managed on-site, and the method(s) and date(s) of its treatment, storage, or disposal . . . ."

In addition, add a bullet indicating dates of storage and/or treatment for the operating record.

138. 12.2.2.2 Operating Records: Page 12-5, line 12

"Groundwater monitoring records"

Delete this bullet, as earlier information has indicated that groundwater monitoring is not applicable for the ETF. Replace it with a bullet for the closure cost estimates (i.e., the estimates for ETF only pulled out of other reports for the Hanford Facility).

139. New Section: Page 12-5, line 27

Add a new section dealing with Recordkeeping and cite WAC 173-303-380 (2) stating the facility will abide by the conditions stated within. The information provided in Section 12.2.2.2 is insufficient to fulfill the requirements of WAC 173-303-380 (2).

140. New Section: Page 12-5, line 49

Add a new section dealing with Availability, Retention, and Disposition of Records, cite WAC 173-303-380 (3) and state that the facility will abide by the conditions stated within. In addition,

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a statement needs to be added with will make the records available and to retain the records beyond the regulatory retention period in the event of any unresolved enforcement action.

141. 12.2.2.2 Operating Records: Page 12-4, lines 46-48

"Operating records maintained at the ETF . . . ."

Cite WAC 173-303-380 prior to the bulleted items and state that the conditions within the regulations will be complied with. In addition, check to make sure the conditions above fulfill the requirement of the Hanford Facility Wide permit.

142. 12.2.2.2.4 Inspection Records: Page 12-5, lines 40-43

"Records of ETF inspections are maintained . . . ."

For the inspections described above, it is necessary to utilize inspection forms to maintain accuracy and continuity. In addition, the form used needs to be provided to Ecology for perusal and the location where these records are to be maintained needs to be made clear (see NOD comment #133).

143. 12.2.2.2.8 Contingency Plan Incident Records: Page 12-6, lines 34-43

"Records documenting the details of any incidents requiring the implementation . . . ."

Information must be included here which clearly delineates which "off normal events, unusual occurrences, or emergencies" reports are provide to Ecology. In addition, include information on exactly how and within what time frame these reports will be provided.

144. 12.2.2.3.1 Training Records: Page 12-7, lines 11-15

"Presently, the training records of individual employees . . . ."

It is the reviewer's understanding that the conditions of disclosure of employee training records is currently undergoing evaluation and change. Update this section to agree with the new policy, if applicable, or state that it will comply with any new policy should the conditions change.

145. 12.2.2.3.2 Closure and Postclosure Cost Estimates: Page 12-7, lines 17-21

"In accordance with 40 CFR 264.140 (c) and WAC . . . ."

This section needs to be revised. See NOD comment #130.

146. 12.3 Immediate Reporting: Page 12-7, lines 45-51

"The DOE-RL verbally will report to Ecology and the EPA . . . ."

This section needs to be rewritten to agree with the Hanford Facility Wide Draft permit (see general comment # 2 on the first page of this document). Specifically, the immediate reporting

requirements of Condition I.E.15 must be done "within two hours after the permittees" become aware of the release and/or noncompliance." In addition, there are very specific criteria to be reported which are not identified in this section.

147. Table 12-1: Page 12-5, line 27

Treatment, Storage, and/or Disposal Reports and Records

Add two columns to this table which identify: 1) record retention times, and 2) record storage locations.

Chapter 14: Certification

148. General Comment:

A new certification will have to be submitted either when this application is submitted for another review or when the Part B permit applications for the 242-A, LERF, and ETF are combined into a single permit (see general comment #1 on the first page of this document).

Chapter 15: References

149. General Comment:

The documents listed in this section need to be checked to determine if the information is current. For example, see the following NOD comment.

150. 15.1 Documents: Page 15-4, lines 19-20

"WHC, 1988, Hanford Site Sold Waste Acceptance Criteria, ..."

The above document is currently in Revision 4 and the document number is: WHC-EP-0063-4. Update the information to the current revision.

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