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STATE OF IDAHO
DIVISION OF
ENVIRONMENTAL QUALITY

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Dirk Kempthorne, Governor

May 14, 1999

RECEIVED IN
MAY 24
Program Management

Ms. Kathleen E. Hain
Environmental Restoration
Office of Program Execution
Department of Energy
850 Energy Drive
Idaho Falls, ID 83401

RE: **IDHW/DEQ COMMENTS ON *DRAFT RECORD OF DECISION, IDAHO NUCLEAR TECHNOLOGY AND ENGINEERING CENTER* (DOE/ID-10660)**

Dear Ms. Hain:

We have reviewed the *Draft Record of Decision, Idaho Nuclear Technology and Engineering Center* (Operable Unit 3-13). The document was received on March 30, 1999 for a 45-day review. Our review comments are attached.

We have identified a number of issues for discussion during the comment resolution period. The most significant issues are associated with establishment of remedial action objectives and remediation goals, further development of the institutional controls plan, and siting issues associated with the proposed INEEL CERCLA Disposal Facility (ICDF). In addition, consideration should be given towards including into the Record of Decision, a more thorough treatment of the rationale for the disposition of No Action and No Further Action sites. Lastly, a number of additional applicable or relevant and appropriate requirements are provided in our comments. We look forward to resolving these issues during the comment resolution period. If you should have any questions, please contact us at (208) 528-2650, or via e-mail at sreno@deq.state.id.us.

Sincerely,

Scott L. Reno

Scott L. Reno
Environmental Scientist

Attachment

cc: Dean Nygard, DEQ-Boise
Daryl Koch, DEQ-Boise
Wayne Pierre, USEPA Region X
Talley Jenkins, DOE-ID
Bob James, LMITCO

IDHW/DEQ COMMENTS ON
DRAFT RECORD OF DECISION
IDAHO NUCLEAR TECHNOLOGY AND ENGINEERING CENTER
March 1999

GENERAL COMMENTS

1) The RAOs for surface soils presented in the Draft ROD are designed to be protective for current and future on-site workers. This is less conservative than the RAOs discussed in the Proposed Plan for OU 3-13. The RAOs presented in the plan should be utilized in the ROD. This provides for making cleanup decisions for INTEC soils at the 1 in 10,000 carcinogenic risk range, or a hazard index of 1, for a future (100 years from now, and beyond) hypothetical resident. Since the land use at the facility 100 years from now cannot be accurately forecast, IDHW/DEQ believes this is a reasonably conservative scenario for risk management decisions, and is consistent with other risk management decisions at INEEL which have been generally accepted by the citizenry of the State of Idaho.

2) The ROD describes the construction of the ICDF, an engineered facility meeting RCRA Subtitle C design and construction requirements for disposal of soils. The text in the description of the selected remedies in the beginning of the ROD indicates that the ICDF is proposed to be located south of INTEC. An assumption is made in the ROD that the ICDF is located within the AOC for Operable Unit 3-13, although the facility location has not been provided in the ROD.

   The location of the ICDF must be defined and an evaluation of its location with respect to the definition of the AOC made. Additionally a written description of the AOC and a figure depicting the location of the AOC needs to be included into the ROD. EPA guidance states, "An AOC is delineated by the areal extent (or boundary) of contiguous contamination. Such contamination must be contiguous, but may contain varying types and concentrations of hazardous substances. Depending on site characteristics, one or more AOCs may be delineated." (See Superfund LDR Guide #5, Determining When Land Disposal Restrictions (LDRs) Are Applicable to CERCLA Response Actions, Directive 9347.3-O5FS, July 1989). If the facility does meet the definition of "within the AOC," LDRs for the soils removed within the AOC will not be necessary. In order to fully assess ARARs for the disposal site, the location of the ICDF must be determined and incorporated into the final ROD.

3) One of the principal items referenced for institutional controls is deed restrictions. However, the INEEL is not controlled by a deed, but rather by land withdrawal documentation. Amongst other generic controls included, the Draft ROD also discusses potential filings, or bills in the State legislature to impose restrictions on drilling in the SRPA, within INEEL boundaries. The institutional controls to be

imposed under this ROD should be of a specific and detailed nature, rather than a brief synopsis of what might occur. A more rigorous treatment of institutional controls for the ROD should be developed during the comment resolution period, and should reflect recent guidance from EPA Region X on institutional controls at Federal Facilities.

4) It would seem that a more thorough treatment of the rationale for the disposition of the No Action and No Further Action sites is warranted for the Record of Decision. Are one-paragraph, summary-level descriptions of each of these sites available to "cut and paste" into this section? The agencies should agree to the level of detail appropriate to these sites during the comment resolution period.

5) Section 12.2 did not reveal the utilization of any other air emissions sources, such as generators, sorters, etc. The air emissions from other sources or stacks, in addition to the emissions of vehicle traffic, excavation, storage piles, etc., must be estimated to determine compliance with the air quality rules and regulations.

SPECIFIC COMMENTS

1) Page iii

The CERCLIS number for INEEL should be included with the Site Name and Location. The CERCLIS ID is ID4890008952. Additionally, the number of identified releases is different in paragraph 2 (101) than in paragraph 4 (100) [see also, last paragraph of page 1-1]. Lastly, the first page after the cover page should be page "i."

2) Page iv, Paragraph 3

It is suggested that the term "new Tank Farm RI/FS" is replaced with "the OU 3-14 RI/FS."

3) Page iv, First Bullet

The bullet states that the remedy for Group 2 (soils under buildings) will use the existing building as an engineered barrier. Any future monolithed structures would be evaluated to see if they meet the performance standards of an engineered barrier. If the monolith did not meet acceptable performance standards, an engineered barrier would be constructed as part of the remedy.

It is suggested that the bullet is revised to more accurately state, "Until the buildings above these sites are closed, it is assumed that the building or structure serves as

an equivalent to an engineered barrier, by limiting infiltration of water through the contaminated soils, and preventing exposures to the soils.

4) Page v.

Please add a bullet under the Other Surface Soils summary which discusses that the Waste Acceptance Criteria (WAC) for the CERCLA disposal facility will be developed during Remedial Design, and discusses contingent disposal for soils which may not meet the WAC.

Please add a bullet under the Other Surface Soils summary which states that the facility will <u>only</u> accept CERCLA wastes from the INEEL. Specify that a ROD amendment (with requisite public involvement), or permitting programs would be necessary to modify acceptance criteria to accept any other waste.

5) Page vii.

Please add a bullet, under the SFE-20 Hot Waste Tank description, which explains that residue or debris determined to be transuranic waste (TRU) will be disposed of in the Waste Isolation Pilot Plant (WIPP).

6) Page 4-7, Section 4.2

The text indicates that the waste calcine facility is being closed as a RCRA landfill under 40 CFR 265 Subpart N by grouting in place and that it will be included within this record of decision. Since this facility is part of this action, IDAPA 16.01.05.009 [40 CFR 265 Subpart N] should be listed in Table 12-2, Compliance with ARARs for Group 2, on page 12-9.

7) Page xi.

Please change the name on the IDHW/DEQ signature page from Wallace Cory to C. Stephen Allred, Administrator.

8) Page 2-1, Section 2.2, Paragraph 1

The paragraph accounts for 83 sites in the original Federal Facility Agreement and Consent Order (FFA/CO) Action Plan, and 17 additional sites, plus the windblown area. Only 16 new site identification forms have been signed. To what release does the 17th site reference?

9) Page 2-2, Section 2.2, Paragraph 1

The sentence lists sites to be addressed by programs other than CERCLA. Included in this list is site CPP-66, which is proposed for transfer to WAG 10 for evaluation of ecological risks due to boron. Please note, the WAG 10 ecological assessment is still under CERCLA, and revise accordingly.

10) Page 2-2, Section 2.2, Paragraph 4

This paragraph describes removal actions which have been performed at Waste Area Group 3 (WAG 3) since the signing of the FFA/CO. The paragraph does not include the PCB removals which have been performed (e.g., CPP-61).

11) Page 2-4, Section 2.3, Paragraph 3

The paragraph describes HWMA/RCRA closure activities at the Old Waste Calcine Facility. Please include a brief explanation in this paragraph that post-closure care and monitoring requirements for the facility will be incorporated into the post-ROD monitoring plan for Operable Unit 3-13.

12) Page 2-5, Section 2.3, Paragraph 1

The second sentence places the expected release date for the High-Level Waste and Facility Disposition Environmental Impact Statement (HLW&FDEIS) as April 1999. The currently proposed release date is in July of 1999.

13) Page 2-5, Section 2.3, Paragraph 2

The paragraph states that DOE has petitioned for an "equivalency demonstration" on the HWMA/RCRA closure of the percolation ponds. Please note that this petition was approved in 1995, and revise accordingly.

14) Page 3-1, Section 3, Paragraph 1

The paragraph accounts for two "update" fact sheets mass-mailed to the public during the WAG 3 RI/FS. Were there not five fact sheets released over the course of the project?

15) Page 3-2, Section 3, Paragraph 1

The paragraph discusses a briefing with University of Idaho students upon the Proposed Plan on November 19, 1999. This section should also report that a public

meeting was held on the plan that day in Moscow, for interested members of the public.

16) Page 4-1, Section 4, Paragraph 1

This paragraph states that "closure of RCRA-regulated units and impacts associated with these closed units is not included in this ROD. . . ." This is not correct, since post-closure care and monitoring from the Old WCF will be incorporated into the post-ROD monitoring plan. Please revise.

17) Page 4-1, Section 4.1, Paragraph 1

The paragraph states, "The contaminated soils at the Tank Farm comprise about 95% of the known contaminant inventory at the INTEC." Please revise to clarify, "Contamination resulting from releases from waste transfer lines and valve boxes in the Tank Farm area currently account for approximately 95% of the known contaminant inventory, in total curies of radioactive material, at the INTEC."

18) Page 4-7, Section 4.2, Paragraph 3

The paragraph describes inclusion of the closed Old WCF building into the WAG 3 ROD as a new site to eliminate duplication of effort and minimize costs associated with long-term maintenance and monitoring. IDHW/DEQ has not concurred upon this means of administratively addressing the challenges of HWMA/RCRA/CERCLA integration. The specific administrative means of integrating these programs should be resolved during the comment resolution period for the Draft OU 3-13 ROD.

19) Page 4-8, Section 4.3, Paragraph 1

The paragraph states that approximately 640 soil boxes are in site CPP-92. For the purposes of the ROD, please provide a precise number of boxes for CPP-92.

20) Page 4-8, Section 4.5, Paragraph 1

The last sentence on this page explains that figure 1-7 shows the estimated extent of the I-129 plume which exceeds the "1 pCi/L maximum contaminant level (MCL) in the SRPA." Since 1 pCi/L for I-129 is not technically an MCL, it is suggested that the sentence is revised to state, "Figure 1-7 shows the estimated extent of the I-129 plume which currently exceeds 1 pCi/L, and contributes to exceedance of the 4 millirem/year maximum contaminant level (MCL) in the SRPA."

21) Page 4-9, Section 4.5, Paragraph 1

The next to last sentence states that "the predicted future plutonium concentrations in the SRPA may be significantly over predicted." The statement is true but the concentrations may be under predicted if the K_d value is too large. Data are insufficient at this time to warrant a conclusion as to appropriateness of the K_d value. It is recommended that the sentence be deleted or that it be reworded to state that there is uncertainty associated with the source term and the K_d value in a spatial sense between the release point and points of interests.

22) Page 4-10, Section 4.7, Paragraph 1

The paragraph states that vault for the SFE-20 Hot Waste Tank may be removed as part of "future D&D" efforts, and that potentially contaminated soils beneath the vault would be dispositioned with Group 3 soils at the INEEL CERCLA Disposal Facility (ICDF). However, the description of the selected remedy, on page 11-8, consists of "Excavation and removal of the tank, tank vault, pump pit enclosures, and other associated structures." Please explain this discrepancy.

23) Page 4-10, Section 4.8

It would seem that a more thorough treatment of the rationale for the disposition of the No Action and No Further Action sites is warranted for the Record of Decision. Are one-paragraph, summary-level descriptions of each of these sites available to "cut and paste" into this section? The agencies should agree to the level of detail appropriate to these sites during the comment resolution period.

24) Page 4-11, Table 4.2

The table lists No Action and No Further Action sites at WAG 3. The entry for site CPP-70 lists it as both No Action and No Further Action. This site was No Action with the signing of the FFA/CO and should only be listed as No Action.

25) Page 5-1, Section 5.1.1, Paragraph 2

The next to last sentence refers to Figure 5-4 showing the locations of dry wells. Both dry wells and perched water wells are shown on Figure 5-3. Please correct the cited figure number.

26) Page 5-1, Section 5.1.1, Paragraph 2

Lines four through seven state that the sedimentary units form the perched water

zones. It should be pointed out for completeness that low permeability basalt flows or parts of flows can impede the vertical movement of water and can form perched water bodies as can the sedimentary units.

27) Page 5-5, Section 5.2, Paragraph 1

After the sentence which describes the failures of the injection well, please add another sentence which states, "In addition, migration of contamination from surface releases contributes to contamination in these zones."

28) Page 5-7, Section 5.2, Paragraph 1

The last sentence states, "A response action (*upon the perched zones*) is necessary during the operational life of the facility to minimize or eliminate the transport of contaminants along this path." The intent of taking a phased approach to addressing recharge sources in the response action is to ensure that uncertainties in the flow model do not result in other recharge sources presenting a significant contribution of water to the contaminated portion of the vadose zone. It has not been fully determined if recharge from the Big Lost River alone is sufficient to produce a future aquifer risk. Therefore, it is suggested that the phrase, "during the operational life of the facility" is deleted.

29) Page 5-7, Section 5.2, Paragraph 2

The paragraph states that arsenic, chromium, and nitrates were discharged through the injection well at concentrations below federal and state groundwater quality standards. Please note that concentrations of nitrate in ICPP vicinity aquifer wells during the early 1980s exceeded the 10 mg/L nitrate MCL. If the injection well was not the source of this contamination, then there must be some other significant source of nitrate to the aquifer near ICPP. It would be safe to conclude that the source of this nitrate was from the injection well (perhaps nitric acid?).

30) Page 5-8, Section 5.3.1

The text describes CPP-15 as a leak from a flange on a solvent tank. Information on the contaminants of concern does not list any chemical constituents that would represent the solvent. Please explain if the solvents known to be present in the solvent tank that leaked are listed or characteristic hazardous wastes. If listed or characteristic hazardous wastes have been released to the Tank Farm Soils, they should be added to the list of contaminants of concern.

In addition, the text reports radiation levels to 3 R/hr. Were not radiation levels at

CPP-15 encountered during the electrical utilities systems upgrade project at up to 10 R/hr? Please review the CPP-15 documentation to ensure that this value is correct.

31) Page 5-9, Table 5-2

The maximum detected concentrations reported in the table for various radionuclides are incorrect. The correct values are as follows: Am-241is16,600 pCi/g; Pu-238 is 276,000 pCi/g; Pu 239/240 is 89,900 pCi/g; and Sr-90 is 5,410,000 pCi/g (ref., *Report of 1993/1994 Tank Farm Drilling and Sampling Investigation at the Idaho Chemical Processing Plant,* February 1995).

In addition, the value for Cs-137 is also incorrect. A sample collected at site CPP-31, in 1974 was 108,000,000 pCi/g Cs-137. This was decayed to 102,000,000 pCi/g for the 1995 Track 2 investigation (ref., *Track 2 Summary Report for Operable Unit 3-07*, Table 4-7, May 8, 1993).

32) Page 5-9, Section 5.3.2, Paragraph 2

The section includes site CPP-37b as a Group 2 (soils under buildings site). Site CPP-37b is more appropriately addressed as a Group 3 miscellaneous soils site. Group 2 was designated for sites which are unaccessible due to the presence of an operational building above the release site which impedes investigation and remedial action. Site CPP-37b is not located beneath any buildings, and is currently accessible for investigation and remedial action.

33) Page 5-10, Section 5.3.2, First Bullet

The bullet for site CPP-02 states that the site was not sampled. It should be noted that the D&D program removed approximately 3000 yd^3 of contaminated media from the drain prior to the construction of the graphite fuel storage area. Were there no analytical results from the removed material which could give an indication of the concentrations of contaminants remaining at the site? Alternatively, the sentence would be more accurate if it stated that the soils remaining beneath the building have not been sampled.

Also, as an editorial comment, the second sentence should read, "*An* estimated 493 Ci *was*. . . ."

34) Page 5-16, Table 5-6

There is no entry for "arithmetic mean" for Sr-90, in the table.

35) Page 5-20, Section 5.3.3.10, Paragraph 3

The last sentence describes that the service wastewater is monitored for radioactivity prior to discharge. Given the regulatory concerns associated with the influent to the percolation ponds, this statement is misleading. The statement would be more accurate if revised to state that the wastestream is monitored for gross alpha, gross beta, and gamma scan.

36) Page 5-25, Section 5.3.3.13, Paragraph 2

The paragraph lists constituents of concern for site CPP-19. Plutonium isotopes should be included in this list.

37) Page 5-32, Section 5.3.3.17, Paragraph 1

This section describes the CPP-37a gravel pit, which was utilized for service waste disposal while repairs were made to the ICPP injection well. The paragraph states that grab samples from the service waste contained no radionuclides or hazardous chemicals. This data is inconsistent with the nature of the wastestream, particularly during the period of time in question. Please provide IDHW/DEQ with the data cited, or delete the reference.

38) Page 5-35, Section 5.3.4, Paragraph 1

The paragraph states that perched water has been contaminated primarily by two radionuclides (Sr-90 and tritium). Please list all of the radionuclides of interest for completeness.

39) Page 5-35, Section 5.3.4, Paragraph 1

The definition of "Perched water" is inadequate. Please expand to note that it includes water in the vadose zone above the aquifer that is saturating the sediments or basalts. As stated, it could be assumed that perched water includes water in an unsaturated zone.

40) Page 5-36, Section 5.3.7, Paragraph 1

The paragraph states that there is no evidence that the tank has leaked. Since it is known that the tank vault itself is contaminated, and that a waterline is present in the vault, this statement is misleading. The statement should be deleted.

41) Page 5-37, Table 5-20

The table describes the relative percentages of various contaminant activities, for various sources at the INTEC. In the case of Sr-90, approximately 7,000 Ci was discharged through the facility injection well. The estimated total historical environmental release inventory at the INTEC is approximately 50,000 Ci. This would place the injection well percentage of Sr-90 at approximately 14%. Yet, the percentage in Table 5-20 attributed to Sr-90 from the injection well is only 0.12 percent. The values of this entire table are in question and are confusing as to whether they reference activities at the time of release, or are decayed to present. It is suggested that this entire table is replaced with the estimated source terms at the time of their release from various media, in curies (rather than percentages), from section 6 of the RI/FS report.

42) Page 6-1, Section 6.1, Paragraph 1

The sentence states that some hunting is allowed on the INEEL during periods of time controlled by DOE. It should be noted that hunting on the INEEL is also controlled by the Idaho Department of Fish and Game, or Native American Treaties.

43) Page 6-1, Section 6.2, Paragraph 1

This paragraph discusses future land use at the INEEL. The last sentence states that no new major private developments (residential or nonresidential) on public lands are expected in areas adjacent to the site. Since Sawtooth farms recently proposed to locate a new hog farm southwest of the facility, the Idaho Spaceport proposal continues to move forward for siting within INEEL boundaries, and privatized waste processing operations are slated for construction at INEEL, this statement appears to be outdated and should be deleted.

44) Page 6-2, Section 6.3, Fourth Bullet

This section describes the basis for future land use assumptions. The fourth bullet cites "the likely inability to green field the industrial complex without total removal." There is considerable public debate and a lack of a consensus on what the end state of the INEEL nuclear operations will look like. Further, the DOE itself is currently considering risk-based approaches to safely close INEEL existing facilities without "total removal." This statement does not add value to the ROD, and should be deleted.

45) Page 6-2, Section 6.4, Paragraph 1

This paragraph states that use of contaminated portions of the SRPA will be restricted from future use until the year 2095. To avoid concerns, please specify that contamination is not expected to migrate past current INEEL boundaries and that these restrictions will only apply within the boundaries of the INEEL.

46) Page 6-2, Section 6.4, Paragraph 1

The paragraph refers to a production well but it is understood that more than one production wells are used at this facility. Please correct as needed.

47) Page 7-1, Section 7.1.1.1, Paragraph 1

The section describes the screening criteria for human health assessment of contaminated soils. The paragraph discusses elimination of contaminants with a detection frequency less than 5%. Please clarify 5% of what.

48) Page 7-1, Section 7.1.1.2, Paragraph 1

It would be helpful to explain the basis for using, as the limiting concentration, the MCL, the 1E-6 risk level, or a hazard quotient of 1. The reader might want to know, for example, if the MCL was always used if available for a particular contaminant, or if the lowest of the values was used.

49) Page 7-2, Section 7.1.1.2, Paragraph 1

The text explains determination of contaminants of concern for the groundwater pathway. Contaminants of concern were "based upon other factors" in the third identification step. It would be helpful to the reader to provide an example of what these other factors are, and preferably, to list them in entirety.

50) Page 7-2, Section 7.1.1.2, Paragraph 3

It would be helpful to explain briefly why the risk for the TRA footprint is being discussed in the OU 3-13 ROD.

51) Page 7-3, Section 7.1.2.2, Paragraph 2

It is agreed that the difference in exposure between children and adults is greatest for the soil ingestion exposure route, due to the higher intake and lower body weight of children. However, children have higher contaminant intakes, in mg/kg-day, for

other exposure routes as well, such as water ingestion. For example, while the daily intake of soil is over nine times greater for children than adults, the daily intake of water is also over 2 times greater for children. Adults ingest twice as much water, but weigh over four times more.

Also, caution is recommended in suggesting that IRIS/HEAST data may not be appropriate for child exposures. A child that is born and then lives for 30 years on this land would certainly experience chronic exposure as a child. Furthermore, EPA is currently focusing attention on child health, including whether Superfund remedial decisions are adequately protective of children. It is recommended, then, to have less detail in this section, and simply say that child exposure was evaluated specifically for the soil ingestion exposure route because children have the potential for much greater exposure via this route.

52) Page 7-4, Section 7.1.4

The assumption is made that cancer may develop over a lifetime, assumed by EPA to be 70 years; this is why the averaging time term in the RAGS risk equations is 70 years for carcinogens. The exposure period of 30 years thus does not represent lifetime exposure, so it is technically not correct to say that carcinogenic risks are expressed as an estimated probability that an individual might develop cancer from lifetime exposure.

53) Page 7-5, Section 7.1.4.2

Please specify that the predicted future aquifer risks are only if no action is taken under Operable Unit 3-14.

In addition, Section 7.1.2 indicates that dermal absorption of groundwater and inhalation of water vapors (it should be vapors, not water vapors) during indoor water use were evaluated. The last sentence of Section 7.1.4.2 states that these exposure routes were not evaluated since all of the COCs are inorganics. For consistency, it would be better to state that these exposure routes were evaluated, but were eliminated because the contaminants are not volatile and are not readily absorbed through the skin. Therefore, the risk associated with these exposure routes was judged to be insignificant.

54) Page 7-6, Table 7-2

Please note that the table title reports risk from "sites of concern." This is inaccurate since the many of the risks reported are from *site groupings*, which use area-weighted averaging to determine exposure-point concentrations.

Under the Group 4 Perched Water and Group 5 Snake River Plain Aquifer, please add another footnote explaining that risk calculations on future impacts will be refined under the Tank Farm RI/FS (OU 3-14).

Under the asterisk for the half-life footnote, please add "(in years) ."

Footnote c. explains that no surface risks exist for the Group 2 soils due to an incomplete exposure pathway. The use of this rationale for the future residential receptor requires additional explanation; for example, that buildings will be left in place, or removed with subsequent capping or removal of underlying soil.

Also, the future worker is shown to experience no risk from the Snake River Plain Aquifer. A footnote should indicate that this will only be true if some form of institutional control or water treatment is in place, as is currently the case.

55) Page 7-7, Section 7.1.5.1

Since this is a section on uncertainty relating to human health risk assessment, animal uptake factors for contaminants are not relevant, unless a meat/egg/milk ingestion exposure route was analyzed. Plant uptake factors are relevant to the homegrown produce ingestion exposure route. This section, however, sounds as though it were intended for a discussion of uncertainty associated with the ecological risk assessment.

56) Page 7-7, Section 7.1.5.5

Most of the rationale for conservatism in derivation of slope factors from animal studies is not appropriate for WAG 3, because most of the COCs are radionuclides. Slope factors for radionuclides are derived from human data, and they are intended to be best estimates, rather than upperbound estimates of risk.

57) Page 7-7, Section 7.1.5.6

This section discusses the high level of uncertainty associated with computer modeled contaminant concentrations in groundwater, and how this uncertainty cannot be quantified accurately. The text should also state that this uncertainty may lead to either an overestimation or an underestimation of risk.

58) Page 7-9, Section 7.2.5, Screening Steps

The risk management decision was to eliminate contaminants of concern if the exposure point concentration **did not** exceed 10x the background value (Step 1).

Similarly, COCs were eliminated if the 95% UCL **did not** exceed 10x background (Step 2).

59) Page 7-10, Section 7.2.5, Paragraph 5

The last sentence of this section describes the WAG 10 ecological risk assessment. Please specify that if the WAG 10 assessment determines that those WAG 3 sites screened at less than 10x background, or HQ less than 10, require further action, that action will be undertaken during the 5-year reviews for WAG 3.

60) Page 8-1, Section 8, Paragraph 3

The text states that, "For certain sites inside the INTEC fenceline, a future industrial use scenario was used to develop RAOs." This differs from the RAOs discussed in the Proposed Plan for OU 3-13. The RAOs presented in the plan should be utilized in the ROD. This provides for making cleanup decisions for INTEC soils at the 1 in 10,000 carcinogenic risk range for a future (100 years from now, and beyond) hypothetical resident. Since the future land use at the facility 100 years from now cannot be accurately forecast, IDHW/DEQ believes this is a reasonably conservative scenario for risk management decisions, and is consistent with other risk management decisions at INEEL which have been generally accepted by the citizenry of the State of Idaho.

61) Page 8-2, Section 8, RAO 2.a.

The last sentence of the first paragraph indicates that Sr-90 and I-129 are beta-gamma-emitting isotopes. However, Sr-90 is a pure beta emitter, as is correctly stated in Table 8-1. Please revise.

62) Page 8-2, Section 8, RAO 4

This section discusses the RAOs for surface soils. The RAOs are designed for protectiveness for current and future on-site workers. This is less conservative than the RAOs discussed in the Proposed Plan for OU 3-13. The RAOs presented in the plan should be utilized in the ROD. This provides for making cleanup decisions for INTEC soils at the 1 in 10,000 carcinogenic risk range, or a hazard index of 1, for a future (100 years from now, and beyond) hypothetical resident. Since the land use at the facility 100 years from now cannot be accurately forecast, IDHW/DEQ believes this is a reasonably conservative scenario for risk management decisions, and is consistent with other risk management decisions at INEEL which have been generally accepted by the citizenry of the State of Idaho.

63) Page 8-2, Section 8, RAO 4.a. footnote a.

The assumption that areas inside the INTEC fence line will be permanently industrial represents an important risk management decision and deviation from what the agencies told the public they planned to do during our community involvement meetings. This warrants more than a footnote in a discussion of RAOs. Please provide clarification regarding the assumed future scenarios with respect to all exposure pathways and routes, on both sides of the INTEC fence line.

Also, in the second sentence of footnote a.: "...presumed that a residential cleanup goals . . . "

64) Page 8-3, Table 8-1

This table describes groundwater standards which are RAOs. For the contaminants of concern, Sr-90 and Plutonium, please add "+ daughters."

65) Page 8-3, Section 8, RAO 6

The RAO says it pertains to release sites which pose a safety hazard. In order to incorporate the SFE-20 Hot Waste Tank into this RAO, please state that the RAO pertains to sites which pose a *threat of release*, or a safety hazard. In addition, please add item "b." which will state, "Eliminate the threat of release to the environment of hazardous substances from the SFE-20 Tank System."

66) Page 8-4, Section 8.1, Paragraph 1

Remediation goals in CERCLA investigations are based on soil concentrations which are associated with an acceptable level of risk. A corresponding dose rate may be determined, but it is the cancer risk based on the use of EPA slope factors, rather than the dose rate, that determines acceptable media concentrations of radionuclides. Much greater development of the remediation goals is necessary for the Draft Final ROD.

67) Page 8-4, Section 8.1, Paragraph 1

IDHW/DEQ has not adopted the MARSSIM approach for universal use in verification sampling at FFA/CO remedial actions. While the MARSSIM approach may be useful in some instances, it's application should be considered on a case-by-case basis. This entire paragraph should be deleted.

68) Page 8-4, Section 8.1.1

This section describes remediation goals for the Tank Farm Soils interim action. The Proposed Plan for OU 3-13 included reducing recharge through the Tank Farm soils by at least 80%. Please include a bullet in this section which memorializes this commitment.

69) Page 8-4, Section 8.1.2, Second Bullet

It is stated that a remediation goal is to prevent direct radiation exposure risks to humans in excess of TBD mRem/year. A dose rate is not a risk; the goal should represent an acceptable risk level, and be expressed by an activity-based value for each COC.

70) Page 8-5, Section 8.1.3.1

The first bullet discusses utilizing dose-based remediation goals for Group 3 Soils. While dose-based field screening during remedial action may be appropriate, activity-based remediation goals are necessary, and laboratory verification of field screening results will be necessary. Additionally, the bullet discusses an Appendix A for further discussion of something related to this proposal. No such appendix is included in the Draft ROD. Appendix A is the Responsiveness Summary. This bullet should be deleted and replaced with activity-based remediation goals for Group 3 soils.

The fourth bullet describes a recent review by the agencies of the strategy for soils contaminated with listed wastes contained in Appendix G of the OU 3-13 Feasibility Study. The bullet states that the agencies have determined that a different land use scenario than envisioned in Appendix G of the FS is appropriate for deciding risk-based concentrations of HWMA/RCRA listed constitutents in contaminated media. IDHW/DEQ has not participated in any such review of Appendix G. It should be pointed out that the Appendix G risk-based criteria proposed for listed soils were adapted from the proposed HWIR Media Rule "brightline concentrations" which were not promulgated in the final rule. Appendix G of the OU 3-13 FS should be updated to reflect the final HWIR Media Rule, and the LDR Phase IV Rules. IDHW/DEQ is unsure what "more appropriate land use scenarios" this bullet discusses. In addition, the Appendix A of the ROD described by the bullet could not be located. Appendix A is the Responsiveness Summary. There are no other appendices to the ROD. The entire bullet should be deleted. Concentration-based remediation goals for soils contaminated with listed constituents should be developed during the comment resolution period.

71) Page 8-6, Section 8.1.3.1, Paragraph 1

This paragraph refers to an appendix which is not included in the Draft ROD. This entire paragraph should be deleted.

72) Page 8-6, Section 8.1.3.2

ICDF goals and requirements include design requirements, operational requirements, and closure and post-closure requirements. Under the design requirements, 40 CFR is listed as an ARAR for the technical design criteria. However, HWMA/RCRA requirements are not specified in the discussion of Operational Requirements, or the Closure and Post-Closure Requirements. HWMA/RCRA requirements should be discussed in this section concerning operation and closure and post-closure of the ICDF facility.

73) Page 8-6, Section 8.1.3.2

Under the Operational requirements, the third bullet states that, "During the operational phase, leachate shall be collected and treated as necessary; treatment systems for the leachate shall be included as part of the remedial design." Will leachate be monitored, collected, and treated through the closure and post-closure period? What is the closure/post closure period for the ICDF? Is the closure/post-closure period the same timeframe as the institutional controls period (2095)?

74) Page 8-7, Section 8.1.3.2, First Sentence

The phrase "consideration will be given to limiting casual use of the area such as hunting or hiking" is vague. Recreational scenarios have not been routinely included in INEEL risk assessments, based on the assumption that residential scenarios are bounding. However, if residential and industrial development will be prevented through institutional controls, it becomes necessary to assess the risk associated with any scenario that might be allowed. If a decision is made to limit recreational use, this should be a risk-based decision.

75) Page 8-7, Section 8.1.4

The first bullet contains a placeholder for a TBD vadose zone saturation value, as a remediation goal for the perched zones. The value should be discussed during comment resolution for the Draft ROD.

The second bullet discusses plans to ". . . divert, or relocate the Big Lost River, and close or relocate the STP ponds. . . ." Please revise to state, "divert, or line the Big Lost River, close or relocate. . . ."

76) Page 8-8, Section 8.1.7

The second to last sentence states that contaminated soils encountered during excavation of the SFE-20 Hot Waste Tank "will be remediated." Please specify that contaminated soils encountered will be remediated *under the RAOs established for surface soils.*

77) Page 9-1, Section 9.1.1.3

This section describes the development of alternative 3 for the Tank Farm soils interim action. The proposed plan discussed reducing infiltration of moisture through the Tank Farm soils, by at least 80%. This commitment should be included in the discussion for this section.

78) Page 9-2, Section 9.2

The section discusses evaluations which will be performed to ensure that the structures above the soils under building sites continue to provide the functional equivalent of an engineered barrier. Please specify in this section that the evaluations will be part of the CERCLA 5-year review process for Operable Unit 3-13.

79) Page 9-2, Section 9.2.1.2

The last sentence of this section states, "If the building or structure is entombed in place, it will act as engineered barrier to prevent external exposure or intrusion." Please revise the sentence to state, "If the building or structure is entombed in place, the end-state will be subject to review under the FFA/CO to ensure that the RAOs for perched water, surface soils, and the SRPA are met."

80) Page 11-1, Section 11.1, Paragraph 4

The text references a Figure 1-3, which is supposed to depict the area of the AOC. Figure 1-3 is a drawing of the locations of the various site groups, not the AOC. A definition and figure depicting the extent of the AOC is necessary, however, for inclusion in the ROD.

81) Page 11-1, Section 11.1.1, Paragraph 1

This section describes the selected remedy for the Tank Farm soils. Please reiterate, in this section, the commitment to reduce infiltration in the Tank Farm soils by at least 80%.

82) Page 11-2, Section 11.1.2

The text states that the preferred alternative for the Group 2 soils under buildings and structures will consist of institutional controls and containment including land use restrictions. The text does not describe in detail what type of land use restrictions will be used and how they will be carried out administratively. Please provide a more thorough description of what land use restrictions will be implemented.

83) Page 11-2, Section 11.1.3, Paragraph 1

This section describes the selected remedy for the miscellaneous surface soils. Reducing external exposure to a "TBD" dose rate is suggested. Remediation goals in CERCLA investigations are based on soil concentrations which are associated with an acceptable level of risk. A corresponding dose rate may be determined, but it is the cancer risk based on the use of EPA slope factors, rather than the dose rate, that determines acceptable media concentrations of radionuclides. Much greater development of the remediation goals is necessary for the Draft Final ROD.

84) Page 11-2, Section 11.1.3, Paragraph 2

This paragraph describes selection of the ICDF as part of the remedy for other surface soils. Please include verbiage in this sections which states that only INEEL CERCLA waste will be disposed at the ICDF. Further, a ROD Amendment and requisite public involvement would be necessary to modify this criteria. Additionally, please add language to this section which discusses development of the Waste Acceptance Criteria during remedial design, and specifies that acceptance criteria will be based upon RCRA Subtitle C and 10 CFR 61 performance objectives and design criteria, along with groundwater modeling to ensure SRPA RAOs are met.

85) Page 11-4, Section 11.1.4, Paragraph 2

The text indicates that groundwater ARARs are not appropriate for the perched water because the water beneath INTEC is not currently available for use, institutional controls will prevent perched water use until 2095, and reducing the

manmade recharge to perched water should reduce the volume of perched water so that it is not available for use. Groundwater ARARs should, at a minimum, be designated as relevant and appropriate since monitoring of the perched groundwater will be performed under this alternative. Under state law, all groundwaters are waters of the state and, thus, must be monitored and managed under state or federal programs that protect these waters regardless of whether they are being used presently or not. Detection and compliance monitoring at the site are important to determine if contaminant concentrations are increasing in the perched zone, and if contaminants in the perched zone are resulting in increased contaminant concentrations in the regional SRPA.

Also, as an editorial comment, the word "if" in the third sentence of this paragraph should be "of."

86) Page 11-4, Section 11.1.4, Paragraph 5

It is overly conservative to state that five year reviews will be continued until "there is no longer a risk posed . . . " Inserting the term unacceptable would appropriately modify the statement.

87) Page 11-5, Section 11.1.5.1

This section discusses institutional controls under the selected remedy for the SRPA. One of the principal items in these controls is deed restrictions. However, the INEEL is not controlled by a deed, but rather by land withdrawal documentation. This section also discusses potential filings, or bills in the State legislature to impose restrictions on drilling in the SRPA, within INEEL boundaries. The institutional controls to be imposed under this ROD should be of a specific and detailed nature, rather a brief discussion of what might occur. A more rigorous treatment of institutional controls for the ROD should be developed during the comment resolution period, and should reflect recent guidance from EPA Region X on institutional controls at Federal Facilities.

88) Page 11-9, Section 11.1.8, Paragraph 2

This section discusses future facilities closures. The paragraph discusses an "annual review" under CERCLA for OU 3-13, to assess impacts from facility closures. Is this proposal in addition to the 5-year reviews? If so, over what duration of time would these annual reviews occur?

89) Page 11-18, Section 11.3

In the third paragraph, the half-lives of Sr-90 and Cs-137 are reported as "approximately 300 years." The half-lives for these nuclides are "approximately" 30 years.

90) Page 12-2, Section 12.1.3

The second paragraph discusses review of closure plans for structures which are currently located on top of the Group 2 soils sites. The section states that these plans will be reviewed by INEEL Environmental Restoration. Please specify in this section that IDHW/DEQ and USEPA will also be involved in the review process to ensure that the end-state of the structure meets ARARs for the soils, and meets RAOs for surface soils and the SRPA. Also, as an editorial comment, please change "not promote" in the last sentence to "inhibit."

The third paragraph discusses the contingent approach for Group 2 soils if future closure of the buildings involves complete removal of the structure. The last sentence states that soils will be disposed under this ROD, if they are exposed. Please specify, that under this contingency, these soils would be disposed as Group 3 soils, and would meet RAOs for surface soils and the SRPA.

91) Page 12-2, Section 12.1.4, Paragraph 1

This section discusses Other Surface Soils (Group 3). The section states that all soil contaminated above remediation goals will be removed. Please revise to state that, ". . . all soils to at least residential intrusion depth (i.e., 10ft bgs) which are contaminated above remediation goals."

92) Page 12-3, Section 12.1.4

It would be appropriate to discuss stop-work conditions and cultural resource issues for construction of the ICDF in this section. Also, this again discusses removing <u>all</u> soils above RGs, which is incorrect (see previous comment).

93) Page 12-3, Section 12.1.5, Paragraph 2

This section discusses the selected remedy for perched water. The paragraph discusses replacement of the percolation ponds, but should also discuss the phased approach to recharge control, and that lawn irrigation and surface runoff controls are part of phase one. Additionally, as an editorial comment, the paragraph discusses "constructing alternative wastewater disposal facilities." Since

only the percolation ponds are proposed for replacement in Phase I, and addressing recharge from the STP lagoons would only be done if Phase II was necessary, it is suggested that the term "wastewater" is replaced with "service wastewater."

94) Page 12-5, Section 12.1.9, Paragraphs 1& 2

These two paragraphs should be edited as follows: 1) eliminate the paragraph break to combine both paragraphs into one, 2) Change the word "Three" in the second paragraph to "these" and delete the now redundant phrase, "CPP-38, CPP-65, and CPP-66," 3) change the phrase ". . . will not be forgotten" from the last sentence, to read, "is performed."

95) Page 12-5, Section 12.1.9, Paragraph 4

This paragraph explains that site CPP-65 (Sewage Treatment Plant Lagoons) will be closed under regulatory authorities other than CERCLA. Please note, in this section, that if Phase II of the Perched Water Remedies is deemed necessary, then CERCLA action to mitigate recharge from these zones may occur.

96) Page 12-6, Section 12.2.1.1, Action-Specific ARARs

In the second to the last paragraph, the text indicates that a hazardous waste determination will apply to drill cuttings produced during well construction and to purge water from development and sampling. The text also states that the media will also be evaluated using a contained-in determination to facilitate material handling and disposal options. The type of analysis is specified as TCLP. TCLP should be used to identify characteristic hazardous wastes. Listed hazardous waste that contacts environmental media should be tested for a totals analysis for a contained-in/contained-out determination based on health risk-based standards.

97) Page 12-7, Table 12-1

IDAPA 16.01.01.210 is cited as an action-specific ARAR. This section is utilized in accordance with IDAPA 16.01.01.203.03 (*Permit Requirements for New and Modified Stationary Sources*) to determine preconstruction compliance. Because of the reference to Section 203.03, this has been determined as an administrative requirement. Additional discussion on the inclusion of this citation is requested.

98) Page 12-7, Table 12-1, Compliance with ARARs for Group 1

DOE should consider the following as applicable or relative and appropriate for the

proposed Tank Farm interim action.

IDAPA 16.01.05.008 [40 CFR § 264.14] - Security. This HWMA/RCRA requirement should be relevant and appropriate for the institutional controls provision of this interim action since site access restrictions are part of the institutional controls.

IDAPA 16.01.05.008 [40 CFR § 264.15] - General Inspection Requirements. This HWMA/RCRA requirement should be a relevant and appropriate provision of this interim action since maintenance of the facility is indicated as an institutional control. Data collected during maintenance inspections could be helpful in identifying potential releases or areas of water percolation at the site.

IDAPA 16.01.05.008 [40 CFR § 264.16] - Personnel Training. This HWMA/RCRA requirement may be relevant and appropriate for the institutional controls interim action to reduce accidental exposure at the facility.

IDAPA 16.01.05.008 [40 CFR § 264.97] - General Groundwater Monitoring Requirements. Groundwater monitoring is listed as part of the interim action for the Tank Farm Soils to evaluate contaminant concentrations in the perched water and contaminant concentrations in the Snake River Plain Aquifer (SRPA) beneath the Tank Farm.

99) Page 12-8, Section 12.2.2.2, Action Specific ARARs

The text states at the end of Section 12.2.2.2 that the requirement of 40 CFR § 264.310(4) (maintaining and monitoring the groundwater system) will be met by demonstration that no unacceptable groundwater risk will result from Group 2 soils. Groundwater monitoring should be performed to evaluate if leaching is occurring from the Group 2 soils. Since contamination is left in place, active groundwater monitoring must be performed. The statement in the text suggests that modeling will be used to demonstrate that there is no unacceptable groundwater risk. Modeling is a good tool. However, model verification through monitoring is a necessary component. Groundwater monitoring for these Group 2 soils could be performed as part of the larger groundwater monitoring effort at INTEC. General groundwater monitoring requirements under HWMA/RCRA should be added to the ARARs table.

100) Page 12-8, Section 12.2.3.1

The section states that 40 CFR 264.18(b) (RCRA Location Standards) is not applicable as an ARAR, because the ICDF is outside the 100-yr floodplain. The referenced siting standard is applicable, because the ICDF cannot be sited in the current floodplain. Further, neither the precise location of the ICDF, nor the flood

elevation at ICPP has been completed resolved. Therefore, 40 CFR 264.18(b) is an applicable requirement.

101) Page 12-9, Table 12-2

The following HWMA/RCRA ARARs should be considered relative and appropriate for the selected remedy for Soils Under Buildings:

IDAPA 16.01.05.008 [40 CFR § 264.14] - Security. This HWMA/RCRA requirement may be relevant and appropriate for the institutional controls provision of this remedy.

IDAPA 16.01.05.008 [40 CFR § 264.15] - General Inspection Requirements. This HWMA/RCRA requirement may be relevant and appropriate provision of this interim action. Data collected during maintenance inspections could be helpful in identifying potential releases at the site for future final actions.

IDAPA 16.01.05.008 [40 CFR § 264.16] - Personnel Training. This HWMA/RCRA requirement may be relevant and appropriate for the institutional controls interim action to reduce accidental exposure at the facility.

IDAPA 16.01.05.008 [40 CFR § 264.97] - General Groundwater Monitoring Requirements. Since groundwater monitoring will be performed on both the perched aquifer and the SRPA and soils under buildings are a potential source of contamination to be evaluated, the groundwater monitoring provisions are relevant and appropriate for this action.

102) Page 12-10, Table 12-3

The selected remedy for Other Surface Soils is removal and on-site disposal, via excavation and disposal at the INEEL CERCLA Disposal Facility. IDHW/DEQ agrees with the HWMA/RCRA ARARs listed in Table 12-3. The following additional ARARs issues for Group 3 Soils must also be considered in the ROD.

Site CPP-92 is included in Group 3 (other surface soils) and consists of about 640 boxes of soil contaminated with radionuclides, arsenic, and mercury. The boxed soils may be subject to LDRs if they have been managed in a separate hazardous waste management unit even though they are within the AOC. According to Superfund LDR Guides #5 and #7, Determining When LDRs are Applicable to CERCLA Response Actions and Determining when LDRs are Relevant and Appropriate to CERCLA Response Actions, "land disposal" occurs when waste from different AOCs are consolidated into one AOC; when wastes are moved outside an

AOC (for treatment or storage) and returned to the same AOC; or when wastes are excavated, placed in a separate hazardous waste management unit such as an incinerator or tank within the AOC, and then redeposited into the AOC." The Guide to Management of Investigative-Derived Wastes (IDW) (Publication 9345.3.03FS, April 1992) specifically states that returning IDW stored in containers within the AOC does not constitute land disposal, as long as containers are not managed in a way that constitutes a RCRA storage unit. Additional information on storage and management of the soil boxes will be necessary to evaluate the LDR issue with the boxed soils.

Additionally, DOE Order 435.1 should be listed as a TBC for the management and disposal of Group 3 soils. It is also appropriate to incorporate, as performance standards, components of 10 CFR 61 (Licensing Requirements for Land Disposal of Radioactive Waste). These standards should incorporate Subpart C (performance objectives) and Subpart D (Technical Requirements for Land Disposal Facilities).

103) Page 12-11, Table 12-3

At the bottom of the table, the last entry on page 12-11 listed IDAPA 16.01.05.008 (except 40 CFR 264.117-120). Please clarify this listing. Does this mean that all of 40 CFR 264 is relevant and appropriate in Group 3 for the disposal site at the ICDF? There are no entries in the description column, ARARs column, or comments column. Please explain.

In addition, please explain why 40 CFR 264.117-120 are not included. Although it does appear that 40 CFR 264.118, 119, and 120 are administrative requirements, the majority of 40 CFR 264.117 is substantive and should be included as an ARAR.

104) Page 12-14, Section 12.2.3.2, Paragraph 5

The paragraph states, "Treatment of any WAG 3 Remediation Waste to meet LDRs prior to ICDF disposal is therefore not required." Additionally, this paragraph implies that hazardous waste determinations are not necessary for any soil excavated at OU 3-13. Please note that soil boxes at site CPP-92, and sites CPP-97, CPP-98, and CPP-99 have generated hazardous waste. Additionally, any other soils containerized and stored prior to disposal in the ICDF will be subject to Hazardous Waste Determinations and Land Disposal Restrictions. Please revise the paragraph.

105) Page 12-15, Section 12.2.3.3

The section states that no chemical-specific ARARs are associated with alternative 4A. This is inconsistent with Table 12-3, page 12-12, which lists several chemical-specific ARARs for PCBs as applicable requirements.

106) Page 12-16, Table 12-4

The selected remedy for the perched water is institutional controls with aquifer recharge control. The following ARARs are relevant and appropriate for this action, and should be included in Table 12-4.

IDAPA 16.01.05.006 [40 CFR § 262.11] - Hazardous Waste Determination. This HWMA/RCRA ARAR should be applicable for characterization of the drill cuttings and water produced during drilling and contamination of drill pads with contaminated water.

IDAPA 16.01.05.008 [40 CFR § 264.14] - Security. This HWMA/RCRA requirement should be relevant and appropriate for the institutional controls provision of this interim action since site access restrictions are part of the institutional controls.

IDAPA 16.01.05.008 [40 CFR § 264.97] - General Groundwater Monitoring Requirements. This HWMA/RCRA requirement should be relevant and appropriate for groundwater monitoring provision of the selected remedy.

IDAPA 16.01.05.008 [40 CFR § 264.98] - Releases from Solid Waste Management Units - Detection Monitoring Program. This HWMA/RCRA requirement should be relevant and appropriate for the groundwater monitoring provision of the selected remedy and the detection and tracking of contaminant concentrations in the perched aquifer.

IDAPA 16.01.05.008 [40 CFR § 264.99] - Releases from Solid Waste Management Units - Compliance Monitoring Program. This HWMA/RCRA requirement should be relevant and appropriate for the groundwater monitoring provision of the selected remedy.

IDAPA 37.03.09 - Idaho Well Construction Standards Rules. These rules should be applicable for the drilling and construction of additional wells for the monitoring associated with a perched aquifer selected remedy.

107) Page 12-18, Table 12-5

The selected SRPA interim action is institutional controls with monitoring and contingent remediation. Table 12-5 lists ARARs for this action. The following additional ARARs should be included as relevant and appropriate:

IDAPA 16.01.05.008 [40 CFR § 264.92] - Releases from Solid Waste Management Units - Groundwater Protection Standard. This HWMA/RCRA requirement should be relevant and appropriate for the groundwater protection provision of the selected remedy.

IDAPA 16.01.05.008 [40 CFR § 264.93] - Releases from Solid Waste Management Units - Hazardous Constituents Requirements. This HWMA/RCRA requirement should be relevant and appropriate for the groundwater monitoring provision of the selected remedy to monitor and evaluate the presence of hazardous constituents in the aquifer.

IDAPA 16.01.05.008 [40 CFR § 264.95] - Releases from Solid Waste Management Units - Point of Compliance. This HWMA/RCRA ARAR should be included as applicable for monitoring and contingent remediation associated with the SRPA selected remedy.

IDAPA 16.01.05.008 [40 CFR § 264.97] - Releases from Solid Waste Management Units - General Groundwater Monitoring Requirements. This HWMA/RCRA requirement should be relevant and appropriate for the groundwater monitoring provision of the selected remedy.

IDAPA 16.01.05.008 [40 CFR § 264.98] - Releases from Solid Waste Management Units - Detection Monitoring Program. This HWMA/RCRA requirement should be relevant and appropriate for the groundwater monitoring provision of the selected remedy to monitor and evaluate the detection of hazardous constituents in the aquifer.

IDAPA 16.01.05.008 [40 CFR § 264.114] - Equipment Decontamination. This HWMA/RCRA ARAR should be included as applicable for any equipment used in sampling of wells or equipment used in any contingent remediation performed at the site.

IDAPA 37.03.09 - Idaho Well Construction Standards Rules. These state rules should be applicable for the drilling and construction of additional wells for the monitoring associated with the SRPA selected remedy.

108) Page 12-21, Table 12-6

The selected alternative for the buried gas cylinders consists of removal of the gas cylinders, treatment of cylinder contents if necessary, and recycling or disposal of the empty gas cylinder containers. IDHW/DEQ agrees with the ARARs listed for remediation of the buried gas cylinders.

109) Page 12-25, Table 12-7

IDHW/DEQ is in general agreement with the ARARs cited for applicability or relevant and appropriateness for the SFE-20 Hot Waste Tank remedy, with the following exceptions:

Land Disposal Restrictions are listed as relevant and appropriate for this action. The comment section states that LDRs will not be met for PEW residuals. IDHW/DEQ is in disagreement with that particular provision. Please explain why LDRs are not relevant and appropriate for the PEW residuals.

The description provided indicates that the waste material will be removed from the tank and placed into containers. The containers will be stored in a hazardous waste storage facility as indicated in Table 12-7 [40 CFR 264.173]. The containerized waste materials will be subject to LDRs if they are managed in a separate hazardous waste management unit even though they are within the AOC. According to Superfund LDR Guides #5 and #7, Determining When LDRs are Applicable to CERCLA Response Actions and Determining when LDRs are Relevant and Appropriate to CERCLA Response Actions, "land disposal" occurs when waste from different AOCs are consolidated into one AOC; when wastes are moved outside an AOC (for treatment or storage) and returned to the same AOC; <u>or when wastes are excavated, placed in a separate hazardous waste management unit such as an incinerator or tank within the AOC, and then redeposited into the AOC</u>." The Guide to Management of Investigative-Derived Wastes (IDW) (Publication 9345.3.03FS, April 1992) specifically states that returning IDW stored in containers within the AOC does not constitute land disposal, as long as containers are not managed in such a manner as to constitute a RCRA storage unit.

The asbestos national emission standard for hazardous air pollutants (NESHAPs), 40 CFR 61.145 and 61.150 are cited as chemical-specific ARARs. In addition to these two citations, 40 CFR 61.156 is also applicable in the citation of other cross-reference citations from OSHA (29 CFR 1910.1001 and 29 CFR 1926.58) and DOT 49 (CFR 171 and 172), which regulate the safety of the worker and the transportation of waste, respectively.

110) Page 13-2, Section 13.3

The second bullet states that, "A wastewater land application permit will be submitted for the new percolation ponds on, or before September 17, 2000, and the existing ponds will stop receiving water by September 17, 2003." IDHW/DEQ does not concur with this statement and is unsure if the sentence is intended to bind the State to issuing a permit on 9/17/00, or if the sentence was intended to imply a permit application will be submitted by DOE-ID to the State by this date. Regardless, the existing permit expires on 9/17/00, and DOE-ID must obtain a permit extension from the WLAP program to continue use of the existing ponds, or open an alternative service waste disposal system. Concurrence on the provisions of this bullet must be obtained during the comment resolution period for the ROD.

111) Page 13-3, Section 13.3

The bullet describes inclusion of the closed Old WCF building into the WAG 3 ROD as a new site to eliminate duplication of effort and minimize costs associated with long-term maintenance and monitoring. IDHW/DEQ has not concurred upon this means of administratively addressing the challenges of HWMA/RCRA/CERCLA integration. The specific administrative means of integrating these programs should be resolved during the comment resolution period for the Draft OU 3-13 ROD.

112) Page 13-3, Section 13.3

Regarding Group 2 sites, the last bullet states, "Re-evaluation of the RI/FS and groundwater modeling for the BRA indicate that these sites do not contribute enough contamination to the Snake River Plain Aquifer to exceed risk-based levels or MCLs." There is insufficient information regarding the release inventories of contaminants from these sites to reach this conclusion. Please delete the sentence.

113) Page A-6, Lines 16-28

This comment is too terse and should be rewritten. Additionally, the comment that offsite disposal would exceed the entire DOE-ID annual budget could be misconstrued, since the total cost would approximate the budget of DOE-ID for one complete year, while the removal project would proceed over many years.

114) Page A-8, Lines 15-18

This response should also briefly discuss activities to be addressed under Operable Unit 3-14.

115) Page A-8, Line 27

This response discusses 5-year reviews. A sentence should be added at the end of the response which states, "These reviews will continue until the agencies determine that they are no longer necessary.

116) Page A-9, Line 9

At the end of the response, it should state, "Additionally, for those CERCLA sites where HWMA/RCRA constituents are present, HWMA/RCRA requirements will be addressed if they are applicable or relevant and appropriate requirements.

117) Page A-9, Line 22

Please rephrase the line to state, " . . . responsible for assessing the risk from releases *and potential releases of hazardous substances* on the INEEL that are includ*ed* or added to the FFA/CO."

118) Page A-12, Line 25

This response should be the same as the response to BB's comment on line 19, page A-2, since the question is the same.

119) Page A-14, Lines 17,23, and 24

Please delete the sentences which state, "It appears that we were successful." While many would agree with this statement, other commentors clearly did not feel this way.

120) Page A-26, Lines 1-3

The statement is made, "In addition, some of the values presented in the Proposed Plan are less than presented in the RI/BRA report." To avoid wild speculation, it is suggested that more specifics about these values are provided in the response.

121) Page A-32, Line 7

The first sentence of the response is too terse. Please replace with, "We are sorry for the difficulty the commentor had with understanding the plan. WAG 3 is a very complex site. Great effort was made to simplify and summarize highly technical concepts in laypersons terms. Since the readership of the proposed plan has a wide range of backgrounds, the tradeoffs between too much information, versus too

little detail, makes meeting the needs of all readers quite challenging."

122) Page A-51, Line 27

The response addresses a comment about the regulatory status of the CPP-92 boxes. Please add the following two sentences at the end of the response which states, "Lastly, the boxed soils are subject to HWMA/RCRA ARARs, particularly Hazardous Waste Determinations and Land Disposal Restrictions. No RCRA requirements are 'circumvented'."

123) Page A-55, Line 25

The response addresses a question about transuranic constituents in the Tank Farm area soils. Please insert the words, "americium-241, uranium-235, and plutonium isotopes" between "to" and "of."

124) Page A-56, Lines 10-29

In the response to this comment, the "definition of clean" is not specifically addressed. It might be helpful to explain the concept of an acceptable risk level, and explain that Superfund remedies are based on achieving acceptable risk rather than on achieving a "clean" state.

Lines 27 and 28 do not clearly identify that risk-based decisions on closure of interim status facilities will be made in the HWMA/RCRA closure plans (rather than under the CERCLA ROD for OU 3-13), and will be evaluated in the HLW&FDEIS.

125) Page A-57, Line 1

Line 1 on page A-57 could be revised: It is true that, for some facility closures with implosion, the amount of contaminants remaining . . .

126) Page A-58, Line 1

The response should agree that much of the uncertainty cannot be quantified, as discussed in Section 7.1.5.6.

127) Page A-59, Line 9

The response addresses a comment about risk evaluations for the ICDF. Please add a sentence at the end of the response which states, "The specific Waste Acceptance Criteria will be developed with agency concurrence during RD.

128) Page A-63, Line 13

In the response it is stated that sites with potential ecological risk, but without an unacceptable human health risk are being remediated to human health standards. This is unclear. To what human health standards are they being remediated if they already had acceptable human health risk? It would be more appropriate to remediate them to levels of acceptable ecological risk.

129) Page A-65, Lines 10-25

Please revise the references to "restoration" of the SRPA, in accordance with editorial comments #30 and 37, regarding the usage of this term (see also, page A-67, line 13). Additionally, this response addresses a commentor's concerns on the agencies' application of the NCP acceptable risk range, which questions the use of 2E-4 carcinogenic risk from surface and groundwater pathways. The commentor's use of the risk range is not in accordance with the NCP, which specifies this range as 10^{-4} to 10^{-6}, not 1E-4 to 1E-6. Thus, under the letter of the NCP, acceptable risk values placed anywhere between 1.0×10^{-6} to 9.9×10^{-4} are all "consistent" with the NCP.

130) Page A-68, Lines 14-21

The commentor indicates that the definition of AOC has been conveniently used by the agencies to support whatever the position is at the time. The response defines the AOC to correspond with areal contamination from CPP-95. This is the only place where an attempt to define the AOC has been made. Pleas define the AOC, explain the logic behind the delineation of the AOC, and provide a definitive location of the ICDF in the final ROD so that these issues are clear to the agencies and the public. In addition, line 26 suggests that an "unacceptable risk" is present for site CPP-95, even though the site is proposed for no further action. Please clarify that the area delineated by the boundaries of site CPP-95 is an area which would make the site unsuitable for free release and unrestricted use. Existing institutional controls (access controls, land use restrictions, and radiological monitoring) for site CPP-95 must remain in effect for the next 100 years for the site to be suitable for free release. Lastly, please note that the word, "include" on line 28, should be "includes."

131) Page A-69, Paragraph 5

Concerning Water Quality Standards ARARs, the response states that, "Waters of the State are defined as navigable water bodies. The perched water does not meet the definition of a navigable water body." This statement is inaccurate. Ground

waters are considered waters of the state as defined in the Water Quality Standards and Wastewater Treatment Standards IDAPA 16.01.02. Definition number 116 states, "Waters and waters of the State. All the accumulation of water, surface and underground, natural and artificial, public and private or parts thereof which are wholly or partially within, which flow through or border upon the state (7-1-93).

132) Page A-71, Line 13

The response addresses a commentor's questions about disturbance of cultural resources. The response states that the location of the ICDF is in already disturbed areas. Since the precise location of the ICDF has not yet been defined, and one current proposal is for location in the undisturbed area between the current percolation ponds and Lincoln Boulevard, this sentence should be revised.

133) Page A-73, Lines 1-10

The words "with" and "in" should be one word, "within." Also, this section should note that LDRs will be have to be met for OU3-13 soils and debris which trigger "placement" under the AOC guidelines (see also page A-73, lines 16-20).

134) Page A-81, Line 6

The line states that the RI/FS on the Tank Farm soils (OU 3-14) is expected in the year 2006. This is inconsistent with section 12.1.2, pages 12-1 and 2 which states that a final risk management decision is expected in the year 2004.

135) Page A-89, Line 10

The response indicates that spent fuel from the GFSF is not expected to be "completed prior to 2035." Since the fuel must be ready to leave the State by 2035 to meet commitments under the Settlement Agreement, please revise the sentence to state that the fuel <u>is</u> expected to be removed from the facility prior to 2035.

136) Page A-102, Lines 15 and 16

The response discusses the presence of contaminated soils in the environment. Line 16 talks about these soils being in a "less restrictive pathway in the current configuration." This is confusing. The sentence should be revised to state, ". . . Aquifer . . . since the contamination is in an uncontrolled environment."

137) Page A-113, Line 25

The response attempts to answer a commentor's concern regarding 10 CFR 61.12(h). The line should be revised to state, "There are no known natural resources, that if exploited . . . ."

138) Page A-117, Lines 1-10

The response does not adequately address the commentor's concern. The response should discuss the presence of faults near the base of the Lemhi range and aquifer recharge occurrence on those INEEL areas which are not located directly above the SRPA. In addition, it is suggested that the assessment of this issue for the NRC licensing of the new Three Mile Island Dry Storage Area is cited as a reference.

139) Page A-121, Line 13

The commentor's facts are correct. Apparently the 3,000 people referred to in the comment are site workers. The statement, "the commentor is apparently confused" should be deleted. This response should be rewritten to acknowledge the facts of the comment, but explain why they are irrelevant to the siting of the ICDF.

140) Page A-124, Lines 4-10

The response addresses the location of the Area of Contamination within the area of site CPP-95. The response states that, "Part of this area is contaminated to unacceptable levels . . . " Since risks to a future resident at site CPP-95 are deemed acceptable and no further action is planned for site CPP-95 under the ROD, this explanation needs revision. The response should state that the area contaminated by windblown contamination in the INTEC area (site CPP-95) will not be suitable for free release for 100 yrs and will need to be institutionally controlled with access and use restrictions and radiological surveillance.

141) Page A-124, Line 15

The response states that a map of the AOC is included in this ROD. The response does not need to be changed, however, it should be pointed out that an AOC map is not in the Draft ROD. The AOC map will need to be included in the Draft Final ROD.

142) Page A-128, Line 3

The response states that the IDHW/DEQ does not administer municipal landfill requirements or permits is incorrect. The sentence should be deleted. The IDHW/DEQ does administer MSWLF siting and design requirements. However, operational issues with MSWLFs are administered by local health districts.

143) Page A-132, Line 9

The response addresses disposal of OU 3-13 soils and debris in the ICDF. Please discuss, in this section, that OU 3-13 CERCLA waste which has triggered "placement" will be subject to Land Disposal Restrictions.

144) Page A-133, Lines 4-7

The response addresses a commentor's concern that Tank Farm soils may be acceptable for disposal in the ICDF. The response fails to acknowledge that boxed soils at sites CPP-92, -98, and -99, along with stockpiles at site CPP-97 are from the Tank Farm area, and are planned for disposal at ICDF, but are subject to Hazardous Waste Determinations and Land Disposal Restrictions. Please discuss the disposal of these sites at the ICDF in the response, and further specify that the OU 3-14 ROD will address the soils contained within the new Operable Unit. Also, the response should discuss that the ICDF will be able to accept any INEEL CERCLA waste which meets the WAC.

145) Page A-167, Lines 10-13

The response addresses a comment regarding using potential lessons-learned from removal of the SFE-20 Hot Waste Tank for closure of tanks in the Tank Farm area. The response states that decisions for tank closure in the Tank Farm area will be made by the HLW&FDEIS. Please note that decisions on the Tank Closure will be made under the HWMA/RCRA closure documentation. In addition, as an editorial comment, the word "were" in line 12, should be "if."

146) Page A-175, Lines 11-12

The response is to a comment regarding an anecdotal report of a flood threat near the INTEC "about 10 years ago." The response states, "We are unaware of this information." While no flooding threat has occurred at the facility in the last 10 years, it would seem that the events referred to by the commentor are the flood threats during '83-'84, or '57-'58. It would be prudent to discuss these events in the response, along with the measures DOE took following those events to mitigate the

flood threat (i.e., constructing, then raising the diversion).

EDITORIAL COMMENTS

1) Page v

The last sentence of the first paragraph, under Perched Water, states that, "a response action Is necessary to minimize or eliminate the leaching and transport of contaminants from the perched water to the SRPA. . . ." Since most of the contamination is adsorbed to sediments in the vadose zone, rather than mobilized in the water itself, it is suggested that "perched water" is replaced with ". . . perching zones to the SRPA and. . . ."

2) Page vii

On the last sentence of the 1st paragraph of Sites Managed . . . , please delete the word "is" from ". . . and is will . . . " In the second paragraph of this section, please change ". . . includes four sites that were determined to be no further action . . ." to ". . . encompasses four sites. . . ." In the third paragraph of this section, the sentence states 5-yr reviews will ensure work does not get forgotten by other programs. It is suggested that the sentence is shortened to simply state, "All of these sites will be included under the CERCLA 5-yr review process."

3) Page xvii

Please place a period after the number 9, for chapter 9.

4) Pages xxv-xxviii

These pages define acronyms used in the ROD. The acronym COPC is unnecessarily listed twice. The term O&M should be "operation and maintenance." The acronym for upper tolerance level should be "UTL." And, it is suggested that the acronyms IRIS (integrated risk information system) and HEAST (health effects advisory summary tables) are added to the list.

5) Page 2-1, Section 2.1, Paragraph 1

In the second sentence, the word "conducted" has a typographical error.

6) Page 4-5, Table 4-1

The acronym "INTEC" under the listing for CPP-83, is spelled "INTE."

7) Page 4-8, Section 4.5, Paragraph 1

The fourth line from the bottom uses the wrong tense. The verb "posed" should be placed in present tense as pose. The threat is in the future and is not a historical threat.

8) Page 4-9, Section 4.5, Paragraph 1

Please insert the words, "due to" between "However," and "the high uncertainty."

9) Page 5-1, Section 5.1.1, Paragraph 2

The seventh line states "in the sedimentary to form . . . " It appears that the correct term is sediments.

10) Page 5-5, Section 5.1.1.1, Paragraph 1

The eighth line states "ulined surface . . . " The correct term is unlined.

11) Page 5-7, Section 5.2, Paragraph 3

The radionuclide Sr-90 has a typographical error.

12) Page 5-10, Section 5.3.2, Third Bullet

A comma should be inserted after the word "removed" in the last sentence.

13) Page 5-20, Section 5.3.3.8, Paragraph 1

The first word on this page Theremainder, should be two words.

14) Page, 5-35, Section 5.3.3.19, Paragraph 2

The radionuclide Cs-137 has a typographical error.

15) Page 5-36, Section 5.3.5, Paragraph 2

The third line appears to be in error as it states that "at general location" but it is understood that location is plural and not singular. Please correct as needed.

16) Page 6-3, Section 6.5, Paragraph 1

The word "There," should be "These."

17) Page 7-9, Section 7.2.4, Paragraph 2

The word "ore" should be "or."

18) Page 7-9, Section 7.2.5, Paragraph 3

In the first sentence, the word *the* appears once too often: "It is accepted in the risk assessment process that ~~the~~ many of the input parameters . . . "

19) Page 7-10, Section 7.2.5, Paragraph 2

Site CPP-7A should be CPP-37A.

20) Page 7-11,Table 7-3

The title of the table should specify that the listed sites and groups of sites are "ecological" sites for consideration in the FS.

21) Page 8-3, Section 8.1, Last Paragraph

In the last sentence, the phrase 'will be established' appears twice. In addition, please add the word, "Groundwater" before the phrase "Remediation goals. . . ."

22) Page 8-5, Section 8.1.3.1, First Bullet

In the fourth sentence, " . . . worker would ~~be~~ remain during a normal work shift."

23) Page 8-7, Section 8.1.4, Paragraph 1

In the first sentence, " . . . contaminated soils beneath ~~of~~ the INTEC."

24) Page 9-3, Section 9.4.1.4, Paragraph 3

It is suggested that the word "estimated" is inserted between "total" and "capacity."

25) Page 10-5, Section 10.2.7

The word "protection" should be "protective."

26) Page 12-3, Section 12.1.5, Paragraph 3

In the last sentence: "...consultation with the Fish and Wildlife Service is not **thought to** be necessary."

27) Page A-vi, Line 9

The response suggests that there was no "outcry" against any of the preferred alternatives. This seems subjective. Some of the commentors were strongly against alternative 4A. It is suggested that lines 9-11 are deleted.

28) Page A-1, Line 12

"The" should be inserted between "from" and "formal."

29) Page A-2, Line 25

The word "sealed" should be "seal." "The" should be inserted between "in" and "calciner."

30) Page A-3, Line 23

The word "restore" should be replaced with, "ensure the aquifer meets acceptable risk concentrations and drinking water MCLs for future residents, and workers are protected from drinking water which exceeds MCLs, or risk-based concentrations."

31) Page A-4, Line 8 and 9

The response again refers to aquifer "restoration." See previous comment.

32) Page A-4, Line 16

See previous comment.

33) Page A-25, Line 15

The word "document" should be plural.

34) Page A-30, Line 2

The word "spatial" is misspelled.

35) Page A-32, Line 10

The word "simplifying" should be "simplify."

36) Page A-33, Line 2

The word "an" should be "and."

37) Page A-36, Line 6

The line should be replaced with, "ensure the aquifer meets acceptable risk concentrations and drinking water MCLs for future residents, and workers are protected from drinking water which exceeds MCLs, or risk-based concentrations."

38) Page A-36, Lines 9, 18, and 19

The building the commentor referred to was CPP-601, not CPP-691.

39) Page A-37, Line 1

The response should state that "contaminated soils" will remain after cleanup at INTEC, but not "waste." Using the term "waste" has implications other than what will be left behind as media at acceptable risk concentrations.

40) Page A-37, Line 25

The word "no" should be "not."

41) Page A-49, Lines 11-14

For the comment, the word "later" should be "latter." The word demonstrate should be plural. The word "over" should begin with a capital "O."

42) Page A-50, Line 15

The sentence should be revised to state, "Sites CPP-65 and -66 are not being remediated under this ROD, but sites -37a and -37b are addressed in this ROD."

43) Page A-52, Line 8

Please insert the word "Landfill" after "Subtitle C."

44) Page A-53, Line 19

Delete the sentence, "The commentor is apparently confused."

45) Page A-57, Line 18

In the response to this comment, on line 25, " . . . area release site that individually . . . " should be: ...**are** release site**s** that individually . . .

Also, it might be better to address the risk fractionation issue as discussing the risk assessment assumption that an individual will chronically have exposure to soil at only one location, but that individual will breathe air and drink groundwater that potentially can be affected by contaminants from all of the sites. So essentially the risk assessment did look at cumulative risk from all of the sites.

46) Page A-59, Lines 21 and 25

In the comment on line 21, "con-conservative" should be "non-conservative." In the response, on line 25: "...that exceed~~ing~~ the maximum contaminant levels (MCLs)."

47) Page A-62, Line 10

In the response, on line 10, "fist full paragraph" should be: **first** full paragraph. On line 22, "worker are additional protected" should be **workers** are **additionally** protected.

48) Page A-63, Line 3

The word "area" on line 3 should be plural.

49) Page A-63, Line 23

Both usages of the word "a" should be "an."

50) Page A-72, Line 18

The word "prescriptive" is misspelled.

51) Page A-80, Line 27

The words "In" and "sufficient" should be one word, "Insufficient."

52) Page A-81, Line 2

The word "document" should be plural.

53) Page A-82, Line 27

Please delete the sentence, "The commentor is apparently confused."

54) Page A-83, Line 7

Please insert the word "be" at the end of line 7.

55) Page A-84, Lines 10 and 15

Please replace "surface sealing" on line 10 with "sealing the surface." In addition, the word "tank" on line 15, should be "tanks."

56) Page A-91, Line 2

Please revise the line to state, " . . . alternatives for these. . . ."

57) Page A-93, Line 17

The word "receptor" should be plural (see also, page A-95, line 27 and page A-97, lines 8 and 25).

58) Page A-94, Line 6

Please revise, " . . . without increased risk to the aquifer . . ." to ". . . without presenting unacceptable risk to the aquifer. . . ."

59) Page A-96, Line 22

There are too many spaces before "A-94."

60) Page A-98, Lines 19 and 20

Please place a comma after the work "ground" on line 19. Please change the word "be" on line 20, to "to."

61) Page A-102, Line 4

The word "potential" should be "potentially."

62) Page A-104, Line 27

The word "be" should be changed to "to."

63) Page A-106, Line 11

Please insert the words, "was performed" between "evaluation" and "concerning."

64) Page A-107, Line 2

The word "include" should be "includes."

65) Page A-109, Line 1

The word "potential" should be "potentially."

66) Page A-111, Lines 25 and 26

On line 25, the word "errosion" should be "erosion." On line 26, the word "location" should be plural.

67) Page A-112, Lines 13-18

The word "Additional," on line 13 should be changed to "Potential." The response would be more concise and easy to follow if line 15 was ended at "closure." and everything else through line 18 was simply deleted.

68) Page A-113, Line 1

Please delete, "The commentor is apparently confused."

69) Page A-113, Line 27

The word "will" should be "well."

70) Page A-127, Lines 3, 4, 5, 9, and 14

The word "leachant" in these lines should be "leachate" (see also page A-128, Line

1; page A-129, Line 24; page A-133, Line 25; and page A-135, Line 1).

71) Page A-129, Line 1

The word "effect" should be "effects."

72) Page A-141, Line 7

The sentence uses the term "contaminate" but contaminant is more appropriate.

73) Page A-142, Responses 1 and 2

Both responses start off by downgrading the comment. More suitable language should be used without appearing confrontational.

74) Page A-143, Response 2

Please rephrase the next to last sentence as it is not well worded.

75) Page A-145, Response 1

The last sentence would be more accurate to refer to alternatives (plural) in both locations.

76) Page A-157, Line 1

Please delete "No."

77) Page A-157, Lines 12 and 14

The word "exceed" should be "exceeds." The word "alternative" should be "alternatives." In addition, the word "to" should be inserted between "addition" and "and."

78) Page A-158, Lines 3 and 4

The word "alternative" should be "alternatives." In addition, the word "to" should be inserted between "addition" and "and."

79) Page A-165, Line 8

Please delete, "The commentor is apparently confused concerning the cost

estimates." Merely respond to the question.

80) Page A-168, Lines 7, 9, and 10

Please insert the phrase, "for the Tank Farm soils" after "conducted." on line 7. And the word "implement" on line 9 should be "implementation." Lastly, please change the word "will" on line 10 to "may" since decisions on remedial action for the Tank Farm soils have not yet been made.

81) Page A-170, Line 12

The word "be" should be "to" (see also, page A-170, line 26).

82) Page A-174, Line 26

The word "alternative" should be "alternatives."

83) Page A-175, Lines 2 and 3

The last sentence of this response is confusing and does not add value to the response. Please delete the sentence.

84) Page A-179, Line 7

The word "consider" should be "considers."