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JUL 29 2002

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Addressees:

CALENDAR YEAR (CY) 2001 LAND DISPOSAL RESTRICTIONS (LDR) REPORT COMMENT RESPONSES

In accordance with the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Section 9.0, Documentation and Records, enclosed are responses to the State of Washington Department of Ecology (Ecology) comments for the "Calendar Year 2001 Hanford Site Mixed Waste Land Disposal Restrictions Report Volumes 1 and 2" (DOE/RL-2002-21) (CY 2001 LDR Report). The U.S. Department of Energy (DOE) received Ecology's comments on June 14, 2002. This transmittal fulfills the 45-day response described in Section 9.0 of the Tri-Party Agreement to update the document and prepare a response letter. Enclosure 1 provides the responses to Ecology's comments. Enclosure 2 provides the errata sheet bullets used to change the language in the CY 2001 LDR Report.

If the enclosed responses are acceptable, DOE requests that Ecology sign the signature page contained in the CY 2001 LDR Report submitted April 30, 2002. If you have any questions, please contact Mary Jarvis, Regulatory Compliance and Analysis Division, on (509) 376-2256, Greg Sinton, RL Waste Management Division, on (509) 373-7939, or Woody Russell, ORP Environmental Management Division, on (509) 373-5227.

Sincerely,

Joel Hebdon, Director
Regulatory Compliance and Analysis Division

RCA:MFJ

Enclosures

cc: See page 2

JUL 29 2002

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Administrative Record M-026

U.S. Department of Energy (DOE) responses to
Washington State Department of Ecology's Comments
On CY2001 LDR Report
Milestone M-26-01L

Comment #1: As part of the CY2000 LDR Report Resolution of Dispute, the parties agreed that LDR commitments will be incorporated into LDR reports either through reference to TPA milestones, or as schedules within the LDR reports. As such, the CY2001 LDR report appropriately references several milestone negotiations underway at the close of this report period (December 31, 2001), e.g., M-83, M-91. Ecology's concern is that the required LDR action is in fact included in the scope of the milestone under negotiation. Ecology's project managers are working to ensure the referenced LDR requirements are included where needed. Ecology, USDOE, and contractors have agreed to discuss the level of specificity needed to ensure that LDR requirements and the specific milestones associated with completion of those requirements are clear and understood. This conversation will happen during our summer 2002 LDR workshops.

Action #1: Action is not required for approval of the CY2001 LDR Report.

DOE Response: DOE is committed to work with Ecology to ensure that appropriate references are made to TPA milestones in the LDR Report.

Comment #2: Ecology recently requested and received a copy of the USDOE-ORP's LDR Compliance Assessment of Tank Farm Double-Shell and Single-Shell Tanks, A-01-EMD-TF-09, conducted July – December 2001. Ecology is pleased with the quality and thoroughness of this report, which reflects the outcome of many rounds of discussion and negotiation between Ecology and USDOE on the scope and function of such assessments. USDOE-ORP's assessment team reported several important issues regarding RCRA compliance at the tank farms, e.g., the documentation of process knowledge used in designating tank farm waste; proper management of equipment, maintenance of an operating record. The challenge now facing USDOE-ORP is to address and resolve these important issues in a proactive manner. Ecology supports USDOE-ORP in its self-assessment program and encourages swift actions be taken to address the problems identified.

Action #2: Action is not required for approval of the CY2001 LDR Report.

DOE Response: DOE is committed to work with Ecology to ensure findings and observations arising from storage assessments are appropriately addressed.

Comment #3: The assessment schedules presented as in CY2001 report are adequate; however, Ecology, USDOE, and contractors have agreed to discuss and review the prioritization of particular assessments as part of our summer 2002 LDR workshops, e.g., 242-B, -S, and –T evaporators; 224-B, IMUSTs; 618-9 drums.

Action #3: Action is not required for approval of the CY2001 LDR Report.

DOE Response: DOE is committed to work with Ecology to ensure the storage assessment schedule addresses Ecology's expectations for when storage assessments should be performed.

Comment #4: Prior to submittal of these formal review comments, Ecology has met with USDOE and contractors to request additional information and ask clarifying questions about the CY2001 LDR Report. These meetings resulted in the identification of issues that the parties agreed have to discuss during summer 2002 LDR workshops. In addition to those identified in comments above, the following topics will also be discussed in the workshops:

- Cross-referencing entries in the Potential Mixed Waste Table with Hanford's Waste Identification System (WIDS).
- Reporting ERDF Direct Disposal information in the annual LDR reports.
- Need schedule for repeated DOE storage assessments at units that have been assessed previously.

Action #4: Action is not required for approval of the CY2001 LDR Report.

DOE Response: This comment will be addressed during the DOE/Ecology summer workshops.

Comment #5: Questions have arisen as to the identification of waste or potential mixed waste at the 324 and 327 buildings. (Reference: Ecology letters, A. Stone to D. Templeton and J. Rasmussen, dated May 17, 1999 and July 12, 1999.)

Action #5: Within 45 days, provide Ecology with information and/or verification that all mixed waste and potential mixed waste within the 324 and 327 buildings has been identified in accordance with the requirements set forth in the Final Determination, TPA milestone M-26-01L, and the Resolution of Dispute Pertaining to the CY2000 LDR Report. If this action results in changes to the CY2001 LDR Report, submit the required text and/or page changes.

DOE Response: The process for determining what to report for the 324 and the 327 buildings in the CY 2001 LDR Report was based on the process used for all Hanford Site buildings as part of implementation of the Final Determination. DOE/FH have submitted the CY 2001 LDR Report with the understanding that the information is correct. Due to the clean up processes going on in the 324 and 327 buildings, it is possible that current information could result in either the addition or deletion of information in next year's report. The letters referenced in the comment were not factored into the CY 2001 LDR Report preparation activities. Since the 324 and the 327 buildings are scheduled for an LDR storage assessment in the CY 2002 (Reference Volume 1 Table 3-2), DOE/FH will use the assessment process to confirm that the entries for these two buildings in the LDR report are accurate. The two letters referenced in the comment will be used during the upcoming assessment. No change to the CY 2001 LDR Report is proposed.

Comment #6: 324 REC Waste. The number of tanks/containers was not provided on the Location-Specific Data Sheet, nor was a path forward identified for treatment.

Action #6: Within 45 days, update the CY2001 LDR Report to reflect the number of tanks/containers associated with the 324 REC waste. Also, update the report to include a

commitment to the treatment of this waste either through reference to an existing TPA milestone or as a schedule within the CY2001 LDR report.

DOE Response: The CY2001 LDR Report will be updated to include 6 tanks based on the 324 Building Radiochemical Engineering Cells and High-Level Vault Closure Plan (DOE/RL-96-73), Revision 1. In addition, the 324 REC Treatability Group Data Sheet (TGDS) will be revised to refer to the M-91 TPA negotiations for treatment of this waste. See the errata bullets in Enclosure 2.

Comment #7: MLLW-01, 222-S LDR Compliant Waste. USDOE's LDR Reports for both CY2000 and CY2001 identify .416 cubic meters of LDR compliant mixed waste stored at the 222-S Laboratory Complex. This waste should be moved to the Central Waste Complex for incorporation into the proper waste disposal pathway.

Action #7: Within 45 days, provide Ecology with information as to the future disposal pathway for this waste stream.

DOE Response: There are two 55-gallon drums that constitute the .416 cubic meters. The reported volume represents that size of the containers, not the waste stored inside the containers. Neither of these containers are full and still receive waste additions. When the containers are full, they will be transferred to the Central Waste Complex.

Comment #8: MLLW-04A/202-S/Redox; MLLW-08/T-Plant; MLLW-09/T-Plant. The need for further characterization was identified as "unknown," yet no schedule was provided to obtain the needed information.

Action #8: Within 45 days, update the CY2001 LDR Report with a schedule for determining if further characterization is needed for the identified waste streams.

DOE Response: Ecology clarified during follow-up discussions after receiving these comments that MLLW-09/T-Plant does not require a response. For MLLW-04A/202-S/Redox and MLLW-08/T-Plant, the CY 2001 LDR Report will be updated to add a sentence for each of these two Location-Specific Data Sheets (LSDS) in section 2.11 referring any actions to the ongoing M-91 Tri-Party Agreement dispute negotiations. See the errata bullets in Enclosure 2.

It should be noted that the dispute resolution package approved March 14, 2002 does not contain a requirement to include a schedule when the answer "unknown at this time" is selected for question 2.11. Specifically, it states: "If the answer is unknown at this time, an explanation is necessary. The explanation needs to identify what step(s) needs to be completed before the question can be answered." The M-026 Project Manager Meeting minutes have documented that this topic, as well as changes to the TGDS and LSDS forms, will be addressed in the DOE/Ecology summer workshops.

Comment #9: Purgewater Storage and Treatment Facility. USDOE reported the current volume (as of December 31, 2001) in the purgewater tanks as zero and the only waste codes as D019, F001, and F003. Also, Ecology is very interested in the possibility of closing the PSTF and

implementing "zero purge and near zero purge" sampling techniques to minimize the amount of waste that is generated.

Action #9: Within 45 days, update the CY2001 LDR Report to accurately identify the volume of purgewater in this unit and the associated waste codes.

DOE Response: The CY2001 LDR Report will be updated to revise the TGDS and LSDS for Purgewater Storage and Treatment Facility to change the stored volume from 0 to 3,700 m^3 and to include waste codes F002, F004, and F005 in the contaminant table. See the errata bullets in Enclosure 2.

The permitting path forward for this TSD unit will be established as part of the Hanford Facility RCRA Permit Revision 7 settlement agreement. The outcome of the decision will be incorporated into the CY 2003 LDR Report following approval by the parties. DOE is ready to discuss any waste minimization techniques for sampling of wells as part of the ongoing discussions to revise the purgewater agreement.

Comment #10: TRUM-CH, CWC. The need for further characterization was identified, yet no schedule was provided and no milestone was referenced.

Action #10: Within 45 days, update the report to include a commitment to characterize this waste either through reference to an existing TPA milestone or as a schedule within the CY2001 LDR report.

DOE Response: The CY 2001 LDR Report will be updated to add a sentence for this LSDS in section 2.11 referring any characterization actions to the ongoing M-91 Tri-Party Agreement dispute negotiations. See the errata bullet in Enclosure 2.

Comment #11: Hexone Storage and Treatment Facility. Section 1.1 of the Location-Specific Data Sheets identifies two tanks, yet Section 2.2 identifies one.

Action #11: Within 45 days, update the report to accurately reflect the number of tanks at this unit.

DOE Response: The CY 2001 LDR Report will be updated for the Hexone Storage and Treatment Facility LSDS to add tank 276-S-141 to the inventory locations. See the errata bullet in Enclosure 2.

Comment #12: 222-S T-8 Tunnel Waste. The LDR reports states that the 222-S Laboratory will undergo closure in 2035; however, the Part B permit for this unit states that the date for closure has not been identified.

Action #12: Within 45 days, update the CY2001 LDR report to be consistent with the permit language.

DOE Response: The CY 2001 LDR Report will be updated in this LSDS to delete reference to the 2035 date. See the errata bullet in Enclosure 2.

Comment #13: Cesium and Strontium Capsules, page B-77, Section 3.3.2. The "basis" column identifies footnotes, yet the description of the footnote is not provided.

Action #13: Within 45 days, update the CY2001 LDR report to include the missing footnote information.

DOE Response: The CY 2001 LDR Report will be updated in this LSDS to add back in the footnotes that were inadvertently omitted. The footnotes from the CY 2000 LDR Report will be used. See the errata bullet in Enclosure 2.

Comment #14: MLLW-02, 222-S DMWSA, Sections 1.3.1 and 1.3.3. These sections state that the source of the waste may be "unused samples" and "K-Basin samples," yet the LDR Report Treatability Group Data Sheet states that this waste does not contain PCBs.

Action #14: Within 45 days, provide Ecology with information and/or verification as to whether or not this waste stream contains PCBs. If this action results in changes to the CY2001 LDR Report, submit the required text and/or page changes.

DOE Response: The matrices managed under this TGDS do not contain PCBs, including the matrices from the unused samples and the K-Basin samples. The CY 2001 LDR Report will be updated in this LSDS to delete the parenthetical listing of Hanford Site generating locations. MLLW-02 does not provide for organic destruction, so waste matrices reported under MLLW-02 do not contain PCBs as a hazardous constituent. TGDS MLLW-03 is the correct location for addressing organic destruction of PCBs in non-debris matrices. See the errata bullet in Enclosure 2.

Comment #15: MLLW-04A, 222-S DMWSA, Section 1.3.3. This section states that the source of this waste is mostly Tank Farm samples resulting in the waste being listed as F001 through F005. F039 is on the Part A Form 3 and should also be associated with this waste.

Action #15: Within 45 days, provide Ecology with information and/or verification as to whether or not F039 applies to this waste stream. If this action results in changes to the CY2001 LDR Report, submit the required text and/or page changes.

DOE Response: The CY 2001 LDR Report will be updated in the corresponding TGDS to add waste code F039 to the table since F039 waste samples from non-tank farm sources have been analyzed in the 222-S Laboratory. See the errata bullet in Enclosure 2.

Comment #16: LERF/ETF Liquid Waste. The Part A for this unit includes the WT01 and WT02 waste codes, yet these codes do not appear on the Treatability Group Data Sheets.

Action #16: Within 45 days, provide Ecology with information and/or verification as to whether or not the WT01 and WT02 codes apply to this waste stream. If this action results in changes to the CY2001 LDR Report, submit the required text and/or page changes.

DOE Response: The CY 2001 LDR Report will be updated in the corresponding TGDS to add waste codes WT01 and WT02 to the table in order to be consistent with the Part A, Form 3 for these two TSD units. See the errata bullet in Enclosure 2.

Comment #17: ERDF Treatment, CERCLA Resin: The Location Specific Data Sheet reports 14 tanks/containers of this waste, yet the volume was reported as zero.

Action #17: Within 45 days, provide revise the CY2001 LDR Report to reflect the accurate volume of waste associated with these 14 tanks/containers.

DOE Response: The CY 2001 LDR Report will be updated for the CERCLA Resin LSDS to change the stored volume from 0 to 80 m^3. The annual forecast volumes will be changed from 8 m^3 /yr to 80 m^3 /yr. See the errata bullet in Enclosure 2.

Enclosure 2
CY2001 LDR Report Errata Sheet Bullets

This enclosure provides the changes to the *Calendar Year 2001 Hanford Site Mixed Waste Land Disposal Restrictions Report Volumes 1 and 2* (DOE/RL-2002-21) (CY 2001 LDR Report). The changes are presented in order of appearance in the CY 2001 LDR Report.

Note that the contractor identified with particular Hanford Site locations is based on contractor responsibilities as of December 31, 2001. Transition activities effective during CY 2002 between BHI and FH will be reflected in the CY2002 LDR Report. Where the errata bullet changes information in the TGDS or the LSDS, it will also change the same information if it appears elsewhere in the CY 2001 LDR Report (e.g., storage volume in tables).

- Volume 1, Appendix B, page B-29, Section 4.4: Delete the words "in 2035" from the end of the sentence. [FH Treatability Group Data Sheet (TGDS) concerning 222-S T-8 Tunnel waste. See Enclosure 1 comment #12]

- Volume 1, Appendix B, page B-45, Section 4.4: Add the sentence to the end that reads: "Treatment will be performed as necessary by the TRU program to support the results of the active M-91 TPA negotiations." [FH TGDS concerning 324 REC waste. See Enclosure 1 comment #6]

- Volume 1, Appendix B, page B-48, Section 2.2: Add the phrase "6 tanks" under Number of containers/tanks. [FH Location-Specific Data Sheet (LSDS) concerning 324 REC waste. See Enclosure 1 comment #6]

- Volume 1, Appendix B, page B-77, Section 3.3.2: Add the following footnotes to the end of the table: "(1) Cesium Capsules, (2) Process knowledge (flowsheets and history), and (3) Strontium Capsules." [FH TGDS concerning Cesium and Strontium Capsules waste. See Enclosure 1 comment #13]

- Volume 1, Appendix B, page B-131, Section 2.3 – Change the Total volume from 0 m^3 to 80 m^3 [BHI LSDS concerning 100-HR-3 Spent Resin/CERCLA Resin waste. See Enclosure 1 comment #17]

- Volume 1, Appendix B, page B-131, Section 2.6 – Change the annual projected generation rates from 8 m^3/year to 80 m^3/year in all five years. [BHI LSDS concerning 100-HR-3 Spent Resin/CERCLA Resin waste. See Enclosure 1 comment #17]

- Volume 1, Appendix B, page B-149, Section 2.2 – Add "276-S-141, 1 Tank" as a second inventory location. [BHI LSDS concerning REDOX/276-S-141/142 waste. See Enclosure 1 comment #11]

- Volume 1, Appendix B, page B-153, Section 3.3.2 – After the F039 entry, add WT01 and WT02 waste codes to the regulated contaminant table. For WT01, waste description = Toxic EHW, LDR subcategory = NA, Concentration (typical or range)** = ***, Basis =

knowledge/analysis, LDR Treatment Concentration Standard or Technology Code = None(2). For WT02, waste description = Toxic DW, LDR subcategory = NA, Concentration (typical or range)** = ***, Basis = knowledge/analysis, LDR Treatment Concentration Standard or Technology Code = None. Identify existing footnote paragraph as footnote (1) and add a new footnote (2) to the table to read "(2) Mixed extremely hazardous wastes can be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050(2)." [FH TGDS concerning LERF/ETF liquid waste. See Enclosure 1 comment #16]

- Volume 1, Appendix B, page B-221, Section 1.3.3: Delete the parenthetical from the sentence that identifies various Hanford Site locations. [FH LSDS concerning 222-S inorganic non-debris waste under MLLW-02. See Enclosure 1 comment #14]

- Volume 1, Appendix B, page B-306, Section 3.3.2 – After the F005 entry, add F039 waste code to the regulated contaminant table. For F039, waste description = various, LDR subcategory = NA, Concentration (typical or range)** = ***, Basis = ***, LDR Treatment Concentration Standard or Technology Code = Alternate treatment Stds. for Haz. Debris (40 CFR 268.45). [FH TGDS concerning MLLW-04A waste. See Enclosure 1 comment #15]

- Volume 1, Appendix B, page B-357, Section 2.11: Add the following sentence to the text. "Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations." [BHI LSDS concerning REDOX/202-S Organic Debris waste under MLLW-04A. See Enclosure 1 comment #8]

- Volume 1, Appendix B, page B-481, Section 2.11: Add the following sentence to the text. "Further characterization of mixed waste containers, if needed, will be performed as necessary to support the results of the active M-91 TPA negotiations." [FH LSDS concerning T Plant Complex waste under MLLW-08. See Enclosure 1 comment #8]

- Volume 1, Appendix B, page B-544, Section 2.1: Change Total volume from 0 m^3 to 3,700 m^3. [BHI TGDS concerning Purgewater Storage and Treatment Facility waste. See Enclosure 1 comment #9]

- Volume 1, Appendix B, page B-545, Section 3.3.2 – Add F002, F004, and F005 waste codes to the regulated contaminant table. For F002, waste description = Methylene Chloride, LDR subcategory = Spent Solvent, Concentration (typical or range)** = **, Basis = analytical data, and LDR Treatment Concentration Standard or Technology Code = 0.089. For F004, waste description = o-Cresol, LDR subcategory = Spent Solvent, Concentration (typical or range)** = **, Basis = analytical data, and LDR Treatment Concentration Standard or Technology Code =0.11. For F005, waste description =Methyl Ethyl Ketone, LDR subcategory = Spent Solvent, Concentration (typical or range)** = **, Basis = analytical data, and LDR Treatment Concentration Standard or Technology Code = 0.28. [BHI TGDS concerning Purgewater Storage and Treatment Facility waste. See Enclosure 1 comment #9]

- Volume 1, Appendix B, page B-548, Section 2.3 – Change Total volume from 0 m^3 to 3,700 m^3. [BHI LSDS concerning Purgewater Storage and Treatment Facility waste. See Enclosure 1 comment #9]

- Volume 1, Appendix B, page B-591, Section 2.11: Add the following sentence to the text. "Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations." [FH LSDS concerning CWC waste under TRUM-CH. See Enclosure 1 comment #10]

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