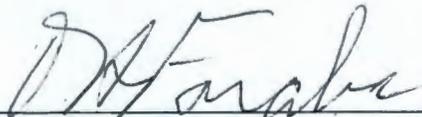


M-026 Land Disposal Restrictions Report Project Manager Meeting  
2420 Stevens Center, Room 224  
Richland, Washington  
December 13, 2017, 12:30 p.m.

Meeting Minutes – Approval

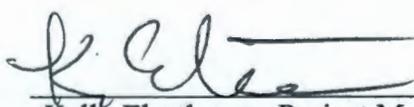
The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated meeting.

  
\_\_\_\_\_  
Al Farabee, Project Manager, DOE-RL

1/30/18  
Date

N/A  
\_\_\_\_\_  
Bryan Trimberger, TPA Lead, DOE-ORP

\_\_\_\_\_  
Date

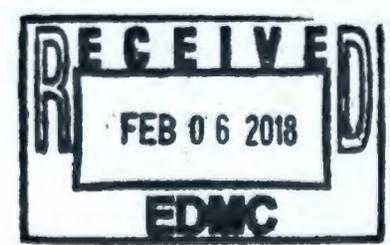
  
\_\_\_\_\_  
Kelly Elsethagen, Project Manager,  
Washington State Department of Ecology

2/5/18  
Date

Purpose: Discuss LDR Report related topics

- The attached minutes comprise the following:  
Attachment 1 – Meeting Agenda/Minutes  
Attachment 2 – Attendance List  
Attachment 3 – Handout from Ron Skinnarland  
Attachment 4 – Handout from Kelly Elsethagen

C: Admin Record, M-026-01, M-026-01Y, M-026-01AB



**M-026 Land Disposal Restrictions Report Project Manager Meeting  
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**Attachment 1  
Meeting Minutes**

1) Status of Previous Meeting Minutes

- a) DOE (Margo Voogd, delegated Project Manager) explained that the August 2017 project manager meeting minutes were signed and entered into the Administrative Record at <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0068312H>.

2) Status: TPA Milestone M-026-01 Hanford Site Mixed Waste LDR Report

- a) M-026-01Y — CY2014 LDR 5-Year Full Report comment resolution

- i) DOE (Voogd) explained that RL letter 17-AMRP-0246, which extended the comment resolution schedule to March 16, 2018, and provided that additional extensions will be evaluated mid-December, was placed in the Administrative Record at <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0068673H>.

- ii) DOE (Voogd) explained that RL letter 18-AMRP-0022, "Status and Path Forward for Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M 026, Tri-Party Agreement Action Plan Chapter 9, Primary Document Review Process for the Calendar Year 2014 Hanford Site Mixed Waste Land Disposal Restrictions Full Report, DOE/RL-2015-08, Revision 0," was transmitted to Ecology December 6, and placed in the Administrative Record at <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0067503H>.

- iii) Ecology (Waste Management Section Manager Ron Skinnarland) provided and explained handout (Attachment 3) titled, "LDR Report High Level Summary of Requirements," and suggested that the Parties work to agree on the purpose and utility of the LDR Report as it makes sense for Hanford today. The Parties discussed the handout and identified several areas for which the Parties interpret requirements differently. The Parties agreed that work is needed to reach consensus on several key issues, and agreed to meet in January to discuss.

- iv) Ecology (Project Manager Kelly Elsethagen) provided and discussed a handout titled "LDR Report Issues for Discussion." The handout listed 10 issues for discussion. Additional items were identified for further discussions during the January meeting (refer to it above), and actions established for the February PMM. Ecology committed to providing an EPA-vetted completed RCR to DOE by the end of January 2018.

- v) DOE (Voogd) acknowledged that the current comment response schedule would necessarily need to be extended. The parties agreed that the first item on the February 18, 2018, PMM will be the comment resolution path forward. In the interim, DOE committed to drafting a schedule extension letter for Ecology review.

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- b) M-026-01AB — CY2017 LDR Summary Report
  - i) DOE (Voogd) explained that change control form M-26-17-01, approved August 30, deleted milestone M-026-01AB (CY2017 LDR Summary Report), and was placed in the Administrative Record at <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0068827H>.
- 3) Action Item Status (action item table on next page)
  - a) DOE (Voogd) noted that there were no previously open PMM actions.
- 4) Documents to be submitted to the Administrative Record
  - a) None.
- 5) Next meeting (date and time): February 22, 2018, 11:00-11:30, 2420 STVNS/CR 126

M-026 Land Disposal Restrictions Report Project Manager Meeting Action Items.

Action	Origination Date	Responsible Party	Action	Response/Closure	Status
171201	12/13/17	DOE MSA	Identify DOE and Ecology items for roundtable discussion and schedule January meeting.	—	Initiated
171202	12/13/17	Ecology	Discuss LDR reporting requirements for wastes stored greater than 90 days but less than 1 year.	—	Initiated
171203	12/13/17	Ecology DOE	Discuss method/process/function for performing storage assessments (i.e., an inspection/compliance function, an M-026 or another milestone function, or 'other' function). February PMM agenda item.	—	Initiated
171204	12/31/17	DOE Ecology	Establish definitions/criteria for LDR waste, potential waste, and projected waste.	—	Initiated
171205	12/13/17	Ecology	Provide complete set of Ecology reviewed, EPA-vetted, DOE comment responses provided to date – by end of January 2018.	—	Initiated
171206	12/13/17	DOE Ecology	Establish path forward schedule for completing the TPA primary document review process for the CY2014 LDR Full Report – February PMM agenda item.	—	Initiated
171207	12/13/17	DOE	Draft schedule extension letter for Ecology review in conjunction with Action 171207 – February PMM agenda item.	—	Initiated

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Attachment 2  
Attendance Roster

Date: December 13, 2017

CHARLYN NOONAN	MSA
Lana Strickling	MSA
Wayne Toebe	CHPRC
Kelly Elsethogen	Ecology
ED SOTO	ECOLOGY
Al Farabee	DOE
for Skinnadon	Ecology
Duane Carter	DOE
Margo Voogd	DOE

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Attachment 3

DRAFT

**LDR Report**  
**High Level Summary of Requirements**

- 1) Report is required for Hanford compliance with Federal Facility Compliance Act. (Along with TPA, Hanford Dangerous Waste Permit, and CERCLA documents)
- 2) Report must include all known and potential waste that might require LDR treatment.
- 3) For each waste in a particular location (or waste stream), the report needs to provide information about what the waste is, when it was or will be generated, how much is known about its characterization, and when it was last inspected to make sure it is safely stored.
- 4) For each waste in a particular location (or waste stream), the report needs to identify when the waste will be characterized and when it will be treated. For each waste, the report can meet this requirement by pointing to a TPA milestone, or enforceable schedule in the Dangerous Waste Permit or a CERCLA document. If there is no milestone, or enforceable schedule – the parties will initiate a separate action (such as a TPA change package) to create an enforceable schedule.

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Attachment 3

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Attachment 4

LDR Report Issues for Discussion

**Characterization/Treatment Plan & Schedule Issues**

**Issue 1 – Rolling up characterization plans and schedules as part of the treatment milestone:**

Resolution of Dispute, Att. 1, #2 requires the following: *The Department of Energy (DOE) shall propose TPA milestones or schedules in the LDR report for the characterization (for storage, LDR treatment, and disposal) and for treatment of all MW where treatment and disposal cannot be accomplished within one year of generation. Milestones and schedules shall reflect the known or reasonably anticipated risks of the waste and current location, as well as overall strategic plans and priorities for the site.*

DOE's redline strikeout of the above language in the 1/9/2002 PMM minutes, #3, added the idea that characterization schedules could be "rolled up" as part of the treatment milestone. In discussions with permittees, their logic behind this change is treatment can't occur without first characterizing the waste. As a result, there are currently no distinct plans or schedules for characterization (from treatment plans and schedules) in the LDR Report. These PMM minutes pre-date the Resolution of Dispute by a few months, and differ from the Resolution of Dispute language as follows:

*DOE shall may propose TPA milestones for the characterization (for storage, LDR treatment, and disposal) of all mixed waste in storage where treatment and disposal cannot be accomplished within one year of generation. Alternatively characterization can be rolled up as part of treatment milestones since characterization is needed prior to treatment. Milestones shall reflect the known or reasonably anticipated risks of the waste and current location, as well as overall strategic plans and priorities for the site.*

Although the PMM minutes are signed by all parties, the language is marked Draft, and was provided as a DOE handout/presentation at the 1/9/2002 PMM. The agenda for the meeting indicates the attachment is "DOE's Response to Ecology's expectations," and there is no documentation of Ecology agreement. We believe this approach was rejected by Ecology as the language was not reflected in the April 2002 Resolution of Dispute.

**Decision:** PMM meeting minutes that pre-date the 2002 Final Resolution cannot be referenced as a justification for rolling up characterization as part of the treatment milestone. Assuming characterization is implicit in treatment does not satisfy LDR report requirements. Milestones for characterization and treatment can be combined, however characterization requirements must be specified in the milestone. For characterization, Ecology will develop a list of milestones needing modification and milestones that need to be developed, in concert with DOE.

**Issue 2 – Pointing to future documents to satisfy the requirement for characterization/treatment plans and schedules**

Can the characterization/treatment plans and schedules requirement be met by pointing to future closure plan/canyon disposition/CERCLA documents? This is really a Canyon Facility issue, for old tank systems, etc. that are storing waste and wanting to point to the future canyon disposition and future closure plan for satisfying characterization/treatment plans and schedules. For canyon facilities we do have milestones to submit an RI/FS work plan.

**Decision:** The requirement for characterization/treatment plans and schedules can be met by either proposing new milestones through the LDR Report, or modifying existing milestones to provide more detail to satisfy LDR Report requirements.

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Attachment 4

LDR Report Issues for Discussion

**Treatability Group Issues**

**Issue 3 – Presentation of treatability groups**

Treatability groups sometimes have very different waste streams requiring very different LDR treatment. Treatability groups are based on the storage unit (e.g., PUREX Plant, PUREX Tunnels), LDR Treatment required (e.g., radioactive lead), or waste stream (e.g., TRUM CH-Large). Within each of these treatability groups, there are different waste streams with different LDR treatability requirements. As a result, it is difficult to identify what treatment capacity is needed vs. what is available, and what the supporting bases for the calculations are.

**Decision:** Ecology is basically ok with organization of treatability groups, contingent on expanding some of the groups to ensure waste streams with specific LDR treatment requirements are addressed. This will be achieved through a revised Table(s).

**Issue 4 – Specifying LDR treatment technology when available**

There are several instances throughout the LDR report where a treatment technology is available, but has not been selected because the “technology assessment has not been performed”. In many cases there is no schedule for performing the technology assessment. Ecology has stated if a treatment technology is known (e.g., alternative treatment standard for hazardous debris), it must be specified. DOE is concerned with the ability to change a specified treatment technology if a different treatment is selected in the future.

**Decision:** For future reports, for categories of waste that have available treatment options (e.g., debris waste), a LDR treatment must be identified, even if DOE hasn’t decided on a treatment. Future changes to the treatment technology selected would be reflected in the next annual LDR Report.

**Storage Assessment Issues**

**Issue 5 – Ongoing storage assessments**

The need for ongoing or new storage assessments is required to be evaluated each year. There is no criteria around when an area should have ongoing assessments, or be reassessed. The April 2002 Resolution of Dispute specifically exempts “Key facilities in the surveillance and maintenance phase” from storage assessments (Att. 3, #8). However, ongoing assessments for areas in surveillance and maintenance mode, or in areas where water intrusion is an issue (e.g., IMUSTs located outside buildings) should be considered each year, especially where waste in storage has changed over time due to evaporation (e.g., 221-T Tank System), potentially leaving hazardous conditions that haven’t been considered. Perhaps evaluating changing tank contents is part of the surveillance and maintenance program?

**Decision:** An evaluation of ongoing storage assessment needs for all areas must occur each year. There may not be any areas that require a storage assessment for that year. For storage areas that are in the RCRA Permit, the LDR Report could reference the Permit for compliance. This will be a change for the next report. For storage areas not yet in the Permit, Ecology will have projects/compliance evaluate current conditions and waste in storage in concert with DOE to determine whether or not there is a need for a storage assessment.

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**LDR Report Issues for Discussion**

**Issue 6 – Storage assessment report availability in the AR**

Storage assessments have been completed for all identified areas, and are referenced in the LDR Report in most cases. Most of the assessments are available in the TPA Administrative Record (AR) and can be found by searching the referenced number. However, many storage assessments completed in the early 2000 timeframe were attached to PMM minutes, and can only be found by going through all of the minutes in the AR. We do not consider this situation “publicly available.” In addition, the March 29, 2000 Director’s Determination requires the LDR Report to include the results of the storage method compliance assessments (Pg. 17, Final Determination to NOC Violation #2 under Section IV. Findings and Final Determination).

**Decision:** Storage assessments may be included by reference in the LDR Report, however the assessments must be readily available in the TPA AR.

**Potential Mixed Waste Table Issues**

**Issue 7 – Including known mixed waste in the Potential Mixed Waste (PMW) table**

Some T Plant and B Plant tanks are storing waste in what DOE claims are past practice tanks that have been isolated and have not been actively managed. DOE justification for this determination are AG discussion tied to the 200-IS-1 OU. The waste in these tanks shows up in the PMW table, even though information in the LDR Report indicates based on process knowledge the waste will designate as mixed waste. Ecology’s position is this waste is not disposed (it’s located in tanks located in buildings), and is subject to RCRA closure, and the waste should be included in the LDR Report as mixed waste already identified, not PMW, as process knowledge indicates it is mixed waste (especially if containing listed waste codes).

DOE is also proposing changes to the LDR Report to move Retrievably Stored Waste (RSW) from currently identified treatability groups, to the PMW table based on the same logic provided in the M-091 Project Management Plan.

**Decision:** For waste in canyon tanks, cells, sumps etc., it is still in active storage (it is not considered disposed or in past practice due to lack of active management). For example, in the U Plant ROD, the D-10 tank was identified as actively storing waste, which is why it was removed to CWC. Tanks have to be listed in TPA Action Plan App. C as past practice in order to be accepted by Ecology as past practice.

The M-091 milestone series was negotiated based on the underlying assumption that TRUM and MLLW had not been disposed of permanently; rather, they were in storage and therefore are RCRA wastes. For that reason, M-091 explicitly defines “MLLW” as “LLW that is subject to RCRA or 70.105 RCW” and “TRUM Waste” as “TRU waste that is subject to RCRA or 70.105 RCW. All M-091 waste is presumed to be mixed waste unless proven otherwise. The RSW waste must be restored to previously identified treatability groups, and deleted from the PMW table.

**Issue 8 – Not all identified mixed waste is included in the LDR Report**

Not all identified mixed waste has been included in the LDR Report. Problem areas seem to be tanks or other waste storage areas located outside the canyon facilities. For example, B Plant’s 276-BA container and PUREX tanks TK-P4 and TK-40 are not included in a treatability group, even though they were identified prior to the 2014 reporting period. The container/tanks have all been flushed and only heels remain.

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LDR Report Issues for Discussion

**Decision:** Any waste identified in the 2014 LDR Report review that was not identified, but in existence at the time of the report must be included in the revised report. In addition, for the next LDR Report, Ecology recommends DOE closely evaluate all outside canyon facility areas for waste that has not been included in the LDR Report.

**LDR Report Information Proposed for Removal**

**Issue 9 – Projected Treatment Volumes**

One of the major issues identified in the 8/13/2015 Ecology letter to DOE, is the LDR Report does not document specific projected volumes of waste streams to be treated during the next 5-year period. DOE has stated there are no requirements for this information, and is proposing to delete it from the LDR Report.

**Decision:** Projected waste treatment volumes must be included in the LDR Report. The requirement to include projected volumes of waste to be treated is inherent to understanding how DOE will meet its LDR Report obligations (i.e., treat waste on a schedule that brings them back into compliance with the storage prohibition as soon as possible. The LDR Report is basically a compliance schedule for rectifying a storage prohibition violation, and providing the projected treatment volumes is a way for DOE to justify continued storage beyond one year.

**Issue 10 –LDR compliant waste – MLLW-01**

The March 2000 Director's Determination refers to the Roger Stanley letter (dated January 25, 2000) in defining what "All waste" means in regards to the draft final resolution. This letter required DOE to include LDR compliant waste. Ecology's Compliance Team and EPA provided DOE comments to remove LDR compliant waste from the report. DOE is in agreement with the comments, and is proposing to leave it out of future reports.

**Decision:** Waste that has been treated to meet LDR disposal standards no longer needs to be included in the LDR report. Please note the M-091 waste that is certified to go to WIPP has not been treated to meet LDR standards, and must continue to be addressed in the LDR Report. Ecology retains the authority to require LDR treatment of M-091 waste is for some reason it can't go to WIPP.