

Draft Advice on the Class 3 Modifications to the Hanford Site RCRA Permit for the Low-Level Burial Grounds Trenches 31, 34 and 94, the Central Waste Complex and Waste Receiving and Processing Facility (CWC-WRAP) and the T-Plant Complex (T-Plant).

Background Class III Permit Modifications:

The Hanford Facility Dangerous Waste Permit for the treatment, storage, and disposal of dangerous waste (Permit) is the Washington Department of Ecology's (Ecology) tool for regulating hazardous waste at Hanford. The Permit establishes conditions that the U.S. Department of Energy (DOE) and its contractors must meet to protect human health and the environment during the construction, operation, cleanup, closure, and post-closure of Hanford Site facilities.

The proposed modifications to Hanford RCRA Permit Rev. 8C are in part the result of actions required by the Consent Agreement and Final Order (CAFO) executed by the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) on June 26, 2013, where DOE was found to be conducting storage of RCRA regulated dangerous waste in units (listed below) without a permit or an interim status in violation of Section 3005 of RCRA, and Condition I.A. of the Permit:

- T-Plant 271-T cage
- T-Plant 211-T pad
- T-Plant 221-T sand filter pad
- T-Plant 221-T - R5 waste storage area
- T-Plant 277-T outdoor storage area
- Central Waste Complex (CWC) outside storage A
- CWC outside storage area B
- CWC 2401-W
- Low Level Burial Grounds (LLBG), FS 1, south of Trench 34, outdoor container storage area

DOE also failed to submit Closure Notice and Closure Plans for units subject to interim status closure requirements including the 221-T Plant Railroad Tunnel TSD unit and Building 2401-W at CWC. Furthermore, EPA found DOE failed to comply with Land Disposal Restrictions in the 12/17/2010 disposal of fifty-two mixed dangerous waste/low-level waste (MLLW) high-temperature gas reactor (HGTR) drums in Trench 34, and subsequent 3/3/2011 disposal of eight (MLLW) high-temperature gas reactor boxes and two MLLW drums in Trench 34 without first satisfying applicable treatment standards.

As a consequence of these actions, DOE submitted closure plans for the units listed in the CAFO and CWC Building 2401W on October 11, 2013. DOE subsequently identified five additional dangerous waste management units at the T-Plant Complex which no longer had a future use and then submitted closure plans on October 18, 2013 for:

- 277-T Building
- 2706-TB Tank System
- 221-T Railroad Cut
- 221-T Pipe Gallery Storage
- 221-T Tank System

DOE requested from Ecology, and was granted, an extension for the submittal of a closure plan for the 221-T Railroad Tunnel and the CWC-WRAP units and three other buildings. Ecology noted that the 221-T Railroad Tunnel and the WRAP facility are currently shut down due to budget constraints. Not having received dangerous waste in more than a year, these units are candidates for closure. DOE has determined these dangerous waste management units will be needed for future Hanford waste management activities.

Based on the submitted information, Ecology granted an extension to September 30, 2014 to begin closure of the 221-T Railroad Tunnel and the CWC-WRAP Facility. Any approval of an extension request is contingent upon information to be provided with a permit modification request.

HAB discussions/concerns:

The Board suggests that Ecology review HAB Advice # 262 regarding the draft RCRA Permit Revision 9 as that advice is relevant to many of the concerns identified with the proposed Class III RCRA permit modifications. The Board appreciates efforts by the DOE's identification of five dangerous waste management units at the T-Plant Complex which no longer have a future use and the submittals of closure plans for these units.

Many of the Hanford Site Treat-Store-Disposal (TSD) units are operating under interim status standards while permitted as a final status facility. It has never been the intent of state or federal regulations to extend use of interim status standards for prolonged periods or when these standards have been violated. Application of WAC 173-303-806 requirements would establish standards which would reduce risk to human health and the environment (HHE) while not affecting current budget constraints. It is the opinion of the Board that continued operation of facilities under interim status standards is unwarranted.

The Board is concerned with the delay of closure and deferral of closure subject to TPA milestone schedules. The current proposed schedule extends beyond the next Permit re-application cycle and there are no details provided for monitoring or characterization for the decades of proposed storage. The 231-ZDR-11 container¹ which was identified in Outside Storage Area A (CWC Area A) closure plan is an example of high risk and provides a reason to support early removal/closure actions.

The Board is further concerned that the information provided in the closure documents seems to be considered as establishing permit conditions and that future actions are to be taken outside the Permit where public involvement opportunities are diminished. An example of this would be placement of (or storing) containers next to LLBG trenches. Language such as this is not in compliance with the dangerous waste regulations, which require the use of a RCRA-compliant storage facility.

Advice²:

1. The Board advises DOE and Ecology that sections in the Part A must not be taken to provide any changes in authorization for any dangerous waste management unit that may be operating under the Permit.
2. The Board advises DOE and Ecology that the Closure Plans, Training Plans, and Inspection Plans (and support documents) should fully comply with WAC 173-303 requirements. Closing units which are easily and safely accessible should not be delayed or deferred subject to TPA Milestones.
3. The Board advises DOE and Ecology that the Sampling and Analysis Plans (and Waste Analysis Plans) and criteria for waste acceptance at the LLBG should be informed by the results of the Risk Budget Tool.

¹ Ecology letter 12-NWP-039

² PLEASE NOTE: These advice bullets are numbered for ease of editing; they do not reflect order of importance and will be revised to a bulleted list following the editing process.

4. The Board advises that no units should be designated as “in safe configuration”, and facility inspections per WAC 173-303 should continue until the unit is closed (e.g. daily inspections of spill areas; tanks require daily visual inspections).
5. The Board advises Ecology that when any further proposals for modifying the Permit are issued for this Class III modification’s units and facilities, the results of Ecology’s review of the USDOE’s proposal are made available. Specifically, the notice for comment and hearings should specifically include a summary of the EPA Findings and access to the current Rev 8C.
6. The Board advises DOE and Ecology that TSD operations under interim status standards should cease. Ecology should require Final Facility Permits under WAC 173-303-806 for each TSD Unit.

DRAFT