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DEPARTMENT OF ECOLOGY

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COVERSHEET

For Letter 20-NWP-090
Dated June 3, 2020

Re: Proposed Class 3 Permit Modification 8C.2018.6D to the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste, Part V*, Closure Unit Group 27, 277-T Building; Closure Unit Group 28, 277-T Outdoor Storage Area; Closure Unit Group 29, 271-T Cage; Closure Unit Group 30, 211-T Pad; Closure Unit Group 37, 221-T Sand Filter Pad; Closure Unit Group 39, 2401-W Waste Storage Building; and Closure Unit Group 41, 221-T Railroad Cut, WA7890008967

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June 3, 2020

20-NWP-090

Brian T. Vance, Manager
Richland Operations Office
United States Department of Energy
PO Box 550, MSIN: H5-30
Richland, Washington 99352

Ty Blackford, President and CEO
CH2M HILL Plateau Remediation Company
PO Box 1600, MSIN: A7-01
Richland, Washington 99352

Re: Proposed Class 3 Permit Modification 8C.2018.6D to the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste*, Part V, Closure Unit Group 27, 277-T Building; Closure Unit Group 28, 277-T Outdoor Storage Area; Closure Unit Group 29, 271-T Cage; Closure Unit Group 30, 211-T Pad; Closure Unit Group 37, 221-T Sand Filter Pad; Closure Unit Group 39, 2401-W Waste Storage Building; and Closure Unit Group 41, 221-T Railroad Cut, WA7890008967

References: See page 12

Dear Brian T. Vance and Ty Blackford:

This letter transmits the Department of Ecology's (Ecology) proposed Class 3 Permit Modification 8C.2018.6D to Part V, Closure Unit Group 27, 277-T Building; Closure Unit Group 28, 277-T Outdoor Storage Area; Closure Unit Group 29, 271-T Cage; Closure Unit Group 30, 211-T Pad; Closure Unit Group 37, 221-T Sand Filter Pad; Closure Unit Group 39, 2401-W Waste Storage Building; and Closure Unit Group 41, 221-T Railroad Cut of the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Rev. 8C, for the Treatment, Storage, and Disposal of Dangerous Waste* (Site-wide Permit).

The Permittees are the United States Department of Energy (USDOE) as owner/operator and CH2M HILL Plateau Remediation Company (CHPRC) as co-operator.

USDOE held a public comment period regarding the Class 3 Permit Modification request (References 1 and 2) for the Closure Unit Group 27, 277-T Building; Closure Unit Group 28, 277-T Outdoor Storage Area; Closure Unit Group 29, 271-T Cage; Closure Unit Group 30, 211-T Pad; Closure Unit Group 37, 221-T Sand Filter Pad; Closure Unit Group 39, 2401-W Waste Storage Building; and Closure Unit Group 41, 221-T Railroad Cut from October 30, 2013 through January 6, 2014. They held a public meeting on December 9, 2013, at the Richland Public Library.

Ecology received 53 public comments from USDOE's comment period. As a result of the public comments received and after performing a completeness review (Reference 3), Ecology required the Permittees to make the following changes to the draft submittal, and made the following modifications to the draft Permit:

Closure Plan Schedules: Ecology found closure plan schedules were incomplete. The Permittees agreed to include closure schedules for each Dangerous Waste Management Unit (DWMU) that detail the total time required to close, and the time required for intervening closure activities in accordance with Washington Administrative Code (WAC) 173-303-610(3)(a)(vii). Complete closure schedules are now included in each DWMU closure plan.

Soil Closure Performance Standards: There were several issues with determining soil closure performance standards (CPS) and they are presented below:

- WAC 173-303-610(2)(b)(i) requires the use of the Model Toxic Control Act (MTCA) regulations (WAC 173-340) to set numeric cleanup levels for soils, calculated according to MTCA Method B, or in some cases MTCA Method A. The CPS proposed by the Permittees were based on MTCA Method C, industrial cleanup standards, which is specifically excluded by WAC 173-303-610(2)(b)(i) for clean closures. Ecology's final determination on the Solid Waste Operations Complex (SWOC) CPS was transmitted to the Permittees in letter 17-NWP-022 (Reference 5). The CPS in each closure plan is now based on an evaluation of all exposure pathways, using MTCA Method B (or in some cases MTCA Method A) cleanup levels where applicable.
- Since many of the SWOC DWMUs did not have complete records of what waste had been stored within them or the waste types were unknown, it was decided that all the known waste constituents at SWOC facilities would be used on the CPS list. Most of the DWMUs will be sampled and analyzed for all the SWOC dangerous waste constituents. For DWMUs with adequate records of specific waste stored there, only those waste constituents will be addressed.
- Due to the length of time needed to get these seven closure plans ready for public comment, some changes to the information MTCA uses to calculate numeric values occurred. Until a closure plan actually becomes part of the Site-wide Permit, the calculated numeric CPS values are subject to reevaluation and potential change. The required minor changes were made to the SWOC CPS table issued in Ecology letter 17-NWP-022 (Reference 5) and discussed and shared with the Permittees. In addition, the Toxic Cleanup Program's *MTCA Cleanup Levels and Risk Calculation (CLARC) Data Tables* were updated in 2019. The CPS values in the seven closure plans going out for public comment reflect these changes.

Revised Focused Sampling Strategy: Ecology performed a closure field evaluation (i.e., a walk down to verify closure sampling locations) of the DWMUs on November 11, 2018. During the walk down, Ecology observed a number of cracks and other openings in the concrete structures through which waste, debris, or decontamination media could be released to the environment. In order to verify that the soils underlying these concrete structures meet the clean closure performance standard, Ecology determined that additional soil sampling will be necessary.

This is consistent with Ecology Publication 94-111 "Guidance for Clean Closure of Dangerous Waste Units and Facilities" (Ecology Publication 94-111), (see Sections 4.0, 7.2, and 7.3). Ecology identified additional focused soil sampling locations based on site coverage; missing coatings; location of cracks, construction joints/seams, and drainage areas/sumps; and penetrations of the concrete pads by posts and rails. These additional soil sample locations are included in the closure plans. Ecology is requiring the following changes in focused sampling:

Changes to Focused Sampling		
DWMU	Permittee 2018 Proposal (References 13, 14 & 15)	Ecology Determination
271-T Cage	No sampling	Six (6) soil samples
277-T Outdoor Storage Area	Three (3) soil samples	Ten (10) soil samples
277-T Building	One (1) soil sample	Six (6) soil samples; one (1) concrete chip sample
211-T Pad	One (1) soil sample	Twelve (12) soil samples; one (1) concrete chip sample
2401-W Waste Storage Building	No sampling	Six (6) soil samples

Ecology also added non-statistical concrete chip sampling for the 271-T Cage, 277-T Outdoor Storage Area, 277-T Building, and 211-T Pad closure plans to meet site-specific decontamination method evaluation criteria requirements (please see Closure Performance Standards for Concrete Surfaces discussion below). The basis for the revised sampling strategy for each closure plan is further detailed in Sections 4.1.1 through 4.1.7 of the Fact Sheet that accompanies this permit modification. Please note, each DWMU closure is site-specific, and decisions made for individual DWMUs may not be used as a precedent for determining closure requirements for other DWMUs.

Closure Performance Standards for Concrete Surfaces: In the Permittees’ 2013 permit modification request (References 1 and 2), the Permittees originally proposed statistical concrete chip sampling/core sampling to determine if concrete structures meet clean closure standards for the 271-T Cage, the 277-T Outdoor Storage Area, and the 211-T Pad. This proposed approach involved taking 20 concrete chip or core samples at each DWMU. For the 277-T Building and 2401-W Waste Storage Building, the Permittees originally proposed decontamination in accordance with alternative treatment standards outlined in Ecology Publication 94-111 to a “clean debris surface”; and rinsate sampling to confirm clean closure.

From 2016 through 2018, Ecology and the Permittees had numerous workshops, meeting discussions, and letter exchanges regarding closure performance standards for concrete surfaces. During this time, the Permittees moved away from the originally proposed concrete sampling. Their reasoning was that the sampling would damage the concrete surfaces, and they wanted to reuse these areas for other non-dangerous waste management purposes after clean closure. Ecology suggested the Permittees consider a site-specific decontamination method as described in Ecology Publication 94-111. A proposed site-specific decontamination method must include evaluation criteria for determining whether decontamination was successful. The Permittees proposed the site-specific decontamination method of “high pressure steam or water sprays,” and the evaluation criterion of “clean debris surface.”

In November 2016, the Permittees stated in letter 17-AMRP-0016 (Reference 4) they disagreed with concrete sampling as they believed it was not a Resource Conservation and Recovery Act (RCRA) requirement. The Permittees also stated that no closure performance standards exist for concrete which would be used to demonstrate closure, and that soil is the only media addressed in closure performance standards. In July 2017, in letter 17-AMRP-0217 (Reference 6) the Permittees proposed to treat concrete surfaces using a physical extraction method from 40 CFR 268.45 Table 1, to meet the “clean debris surface” standard. The treatment methods listed were high pressure steam or water sprays; water washing and spraying; and liquid vapor phase solvent extraction as physical extraction methods.

In August 2017, Ecology responded in letter 17-NWP-100 (Reference 7) and clarified that only high pressure steam and water sprays are physical extraction methods; water washing and spraying, and liquid or vapor phase solvent extraction are chemical extraction methods. Ecology also identified the performance standard for physical extraction of concrete is the removal of at least 0.6 cm of the surface layer and treatment to a “clean debris surface”. In October 2017, the Permittees responded in letter 18-AMRP-0005 (Reference 8) and provided example closure plan language that included a proposed decontamination method of treating to a “clean debris surface” using high pressure steam and water sprays. They also proposed if “clean debris surface” cannot be achieved through the surface decontamination method, an extraction of 0.6 cm will be performed using physical extraction techniques according to 40 CFR 268.45 Table 1 which could include abrasive blasting; scarification, grinding, and planing; and spalling. In October 2017, Ecology responded in letter 17-NWP-150 (Reference 10) accepting modifications regarding the “clean debris surface” standard. The Permittees began moving forward with preparing the closure plans for formal submittal.

In May 2018, Ecology clarified in letter 18-NWP-070 (Reference 11) that options for decontaminating concrete include either meeting the performance standard in 40 CFR 268.45 Table 1 (which includes removal of the top 0.6 cm of the concrete surface to a “clean debris surface”), or to propose a site-specific decontamination method as described in Ecology Publication 94-111. Ecology further clarified that if Permittees propose a site-specific decontamination method as described in Ecology Publication 94-111 and include the evaluation criteria of “clean debris surface,” whether or not the area meets “clean debris surface” will fall to the Independent Qualified Registered Professional Engineer that certifies closure. The Permittees continued to move forward with preparing the closure plans for formal submittal, and submitted four of the closure plans on August 14, 2018 (18-AMRP-0150) (Reference 13). Supplemental photographs and sample figures were provided on October 16, 2018 (19-AMRP-0009) (Reference 14).

On October 31, 2018 and November 5, 2018 Ecology discussed the four closure plan submittals with Ecology’s Washington State permitting oversight program [Hazardous Waste and Toxics Reduction Program (HWTR)]. After consulting with HWTR, Ecology determined that for these closing DWMUs, “clean debris surface” is not an appropriate evaluation criterion for the site-specific decontamination method of high pressure steam and water sprays, and that some sampling to demonstrate successful decontamination of the concrete will be required. On November 5, 2018, Ecology briefed the Permittees on the issue and requested the remaining closure plan submittals be delayed until an appropriate evaluation criterion could be agreed upon. Ecology also requested a walk-down of the closing units in order to verify sampling locations. The Permittees informed Ecology that submittal of the remaining closure plans was already in progress and could not be delayed. The Permittees submitted the remaining closure plans on November 6, 2018 (19-AMRP-0021) (Reference 15).

On November 11, 2018 Ecology performed a walk-down of the closing units. On December 17, 2018 Ecology shared feedback from the walk-down and requested changes to five of the Consent Agreement and Final Order (CAFO) closure plans. On January 14, 2019 Ecology placed the draft permit modification on hold until changes to the five closure plans could be resolved. On February 21, 2019 Ecology provided the Permittees a revised sampling approach for the five closure plans. On February 25, 2019 Ecology and the Permittees discussed the revised sampling approach and needed closure plan changes.

The Permittees responded that any additional changes must be made by Ecology because the closure plans have already been submitted, and that the Permittees will help provide technical support, as needed. Ecology began closure plan revisions. In a June 4, 2019 email the Permittees agreed to, change to using a physical extraction method from 40 CFR 268.45, Table 1, and remove 0.6 cm of the concrete to a “clean debris surface” for the 2401-W Waste Storage Area. On July 15, 2019 Ecology discussed needed changes for the five closure plans, and the need for technical assistance. Ecology provided an outline of needs and revised sampling figures for each of the five closure plans. On July 29, 2019 the Permittees informed Ecology they do not concur with Ecology’s changes, and offered two options: move forward with the closure plans submitted in 2018 (with minor changes), or Ecology can move forward with their changes without technical assistance from the Permittees. Ecology chose to move forward without technical assistance from the Permittees, and proceeded to develop the revised sampling strategy, adding concrete chip sampling as the evaluation criterion for determining if decontamination of concrete surfaces using high pressure steam or water sprays is successful.

The basis for this decision is as follows. Clean closure requires the removal or decontamination of all contaminated structures associated with the closing DWMU. WAC 173-303-610(2)(b)(ii) requires Ecology to establish appropriate clean closure standards for contaminated structures “on a case-by-case basis in accordance with the closure performance standards of WAC 173-303-610(2)(a)(ii) and in a manner that minimizes or eliminates post-closure escape of dangerous waste constituents.” Because WAC Chapter 173-303 does not establish specific requirements for the decontamination of structures, Ecology considers comparable treatment standards from the Land Disposal Restrictions (LDR) program in making case-by-case determinations of the appropriate clean closure requirements.

With respect to contaminated concrete structures, Ecology has determined that the LDR treatment standard for concrete “debris” is an appropriate decontamination standard for clean closure. See Ecology Publication 94-111, Section 5.3.1. This is consistent with guidance from the United States Environmental Protection Agency (USEPA) on the subject:

“Existing closure standards for hazardous waste management facilities require ‘decontamination’ of contaminated structures and equipment. See, e.g., §§ 264.114 and 265.114. The precise meaning of decontamination presently is determined on a case-by-case basis through review of the facility’s closure plan. ... The Agency believes that the treatment methods in today’s rule would always satisfy the decontamination standard in the closure provisions. After all, the purpose of these treatment methods is to decontaminate.”

[57 Fed. Reg. 37194, 31243, Land Disposal Restrictions for Newly Listed Wastes and Hazardous Debris (Aug. 18, 1992)].

Accordingly, Section 5.6 of Ecology Publication 94-111 sets forth two options for decontaminating concrete structures:

1. Use a concrete debris-specific LDR treatment standard specified in 40 CFR 268.45 Table 1 (incorporated by reference at WAC 173-303-140(2)(a)); or
2. Propose a site-specific method of decontamination and evaluation criteria.

The Permittees proposed using “high pressure steam or water sprays” to decontaminate the concrete structures at issue. This is one of the Physical Extraction methods identified in 40 CFR 268.45, Table 1. However, this method of decontamination must be accompanied by removal of at least 0.6 centimeters of the surface layer and treatment to a clean debris surface in order to meet the LDR treatment standard for concrete debris. The reason for removing 0.6 centimeters of the surface layer before applying the performance standard of “clean debris surface” is to remove any contamination that has migrated into the porous concrete surface.

As described by the USEPA in the preamble to the final rule for LDR for Newly Listed Wastes and Hazardous Debris:

“(b) Brick, Cloth, Concrete, Paper, Rock, Pavement, and Wood. The performance standard for these types of debris requires: (1) Removal of at least 0.6 centimeters of the surface layer, and (2) treatment to a “clean debris surface.” Removal of 0.6 centimeters of the surface layer is required for these types of debris because they may be porous and toxic contaminants may [be] absorbed within the debris.”
[57 Fed. Reg. at 37230].

Additionally, USEPA explained that for some debris types, the performance standard cannot be met using certain treatment technologies and gives as an example of high pressure steam and water sprays used to treat brick or concrete.

“An example of where the performance standard cannot be met for a technology/debris combination is high pressure steam and water spray used to treat brick or concrete. As discussed below, because these debris types are porous and toxic contaminants may be adsorbed below the surface of the debris, the performance standard requires removal of at least the outer 0.6 centimeter surface layer. This technology cannot meet that performance standard for those types of debris. Rather than explicitly prohibiting such practices, however, such practices will be precluded because of the inability to comply with the standards.”
[57 Fed. Reg. at 37229].

For 271-T Cage, the 277-T Outdoor Storage Area, the 277-T Building, and the 211-T Pad DWMUs, the Permittees did not want to remove 0.6 centimeters of the surface layer of the concrete structures that need to be decontaminated, as they plan to reuse these areas for other purposes after clean closure. As a result, the Permittees cannot demonstrate compliance with the LDR treatment standard for concrete debris using high pressure steam or water sprays. Ecology requested the Permittees propose appropriate evaluation criteria (e.g., concrete chip sampling). The Permittees declined to propose an evaluation criterion other than “clean debris surface.”

Ecology has agreed the Permittees may continue to use high pressure steam or water sprays as a site-specific method of decontamination for concrete structures. Ecology has also determined that “clean debris surface” cannot be used as the evaluation criterion to determine clean closure unless at least 0.6 centimeters of the surface layer is first removed, for the reasons described above. As such, Ecology is requiring non-statistical chip sampling to be used as the evaluation criterion to demonstrate successful decontamination of the concrete structures.

The following table outlines changes in the concrete closure performance standards from the Permittees' original submittal, their second submittal, and Ecology's final determination.

Changes to Closure Performance Standards for Concrete Surfaces			
DWMU	Permittee 2013 Original Proposal (References 1 and 2)	Permittee 2018 Proposal (References 13, 14, and 15)	Ecology Determination
271-T Cage	No decontamination; twenty (20) statistical concrete chip/core samples to confirm clean closure.	Decontaminate using high pressure steam or water sprays to a "clean debris surface."	Decontaminate using high pressure steam or water sprays; confirm clean closure by taking five (5) non-statistical concrete chip samples.
277-T Outdoor Storage Area	No decontamination; twenty (20) statistical gravel/soil samples, and concrete chip/core samples to confirm clean closure. (Note: asphalt areas and concrete pads were combined into one area, and Ecology was unable to differentiate gravel/soil samples from concrete samples).	Decontaminate concrete pads using high pressure steam or water sprays to a "clean debris surface." (Note: Statistical soil sampling is proposed to confirm clean closure of the gravel/asphalt area).	Decontaminate concrete pads using high pressure steam or water sprays; confirm clean closure by taking nine (9) non-statistical concrete chip samples. (Note: Ecology agrees with statistical soil sampling of the gravel/asphalt area to confirm clean closure).
277-T Building	Decontaminate using alternative treatment standards in Ecology Publication 94-111 to a "clean debris surface"; sample decontamination rinsate to confirm clean closure.	Decontaminate using high pressure steam or water sprays to a "clean debris surface."	Decontaminate using high pressure steam or water sprays; confirm clean closure by taking six (6) non-statistical concrete chip samples.
211-T Pad	No decontamination; twenty (20) statistical concrete chip/core samples to confirm clean closure.	Decontaminate using high pressure steam or water sprays to a "clean debris surface."	Decontaminate using high pressure steam or water sprays; confirm clean closure by taking six (6) non-statistical concrete chip samples.
2401-W Waste Storage Building	Decontaminate using alternative treatment standards in Ecology Publication 94-111 to a "clean debris surface"; sample decontamination rinsate to confirm clean closure.	Decontaminate using high pressure steam or water sprays to a "clean debris surface." If "clean debris surface" is not met, follow with removal of 0.6 cm of the surface layer using physical extraction methods from 40 CFR 268.45, Table 1.	Decontaminate using physical extraction method of abrasive blasting; scarification, grinding, and planing; and/or spalling to remove at least 0.6 cm of the concrete surface layer to a "clean debris surface."

The concrete chip samples will be analyzed and compared against the closure performance standards for soils (per guidance found in Ecology Publication 94-111, Sections 5.5 and 5.6), as originally proposed in the Permittees' 2013 permit modification request (References 1 and 2). If closure performance standards are met, the concrete will be considered clean.

Where a site-specific decontamination method is used, non-statistical concrete chip sampling and standards for evaluating the samples are now included in the DWMU closure plans. The decontamination method and associated evaluation criteria that have been selected for these closures are consistent with Ecology Publication 94-111 (see Section 5.6) as well as other Washington State dangerous waste permits.

Data Quality Objectives (DQO): Ecology found the DQO information supporting the Sampling and Analysis Plans was insufficient, as it relied heavily on the 200-MG-1 Operable Unit DQO. Ecology transmitted letter 17-NWP-148 (Reference 9) to the Permittees explaining the need for site-specific DQOs, and for the removal of the 200-MG-1 DQO information. In response letter 18-AMRP-0100 (Reference 12), the Permittees agreed to remove the 200-MG-1 DQO information from the closure plans and agreed to add site-specific DQO information. Site-specific DQO information is now included in each DWMU closure plan. This includes a complete evaluation of all environmental pathways and associated closure performance standards. Each DWMU closure plan was reevaluated and changes made to the sampling and analysis plans as necessary, to reflect the new DQO information.

Ecology issued a *Response to Comments* document from the public comment period. Ecology's *Response to Comments* document is on the enclosed DVD (Ecology Publication 20-05-012) and on Ecology's website at <https://fortress.wa.gov/ecy/publications/SummaryPages/2005012.html>.

The permit modification can be accessed at the Ecology website:
<https://fortress.wa.gov/ecy/nwp/permitting/8C.2018.6D>.

WAC 173-303-840(3)(d) requires at least a 45-day public comment period for the draft permit modification. Ecology will hold this public comment period from June 8, 2020 to July 24, 2020. This comment period initiates the second portion of the Class 3 Permit Modification. A public hearing is not scheduled, but Ecology will consider holding one if there is enough interest.

This proposed Class 3 Permit Modification would add Closure Unit Group 27, 277-T Building; Closure Unit Group 28, 277-T Outdoor Storage Area; Closure Unit Group 29, 271-T Cage; Closure Unit Group 30, 211-T Pad; Closure Unit Group 37, 221-T Sand Filter Pad; Closure Unit Group 39, 2401-W Waste Storage Building; and Closure Unit Group 41, 221-T Railroad Cut to Part V of the Site-wide Permit.

In June 2013, the USEPA issued a CAFO (Reference 15) against the USDOE for violations of the RCRA of 1976 program at the Hanford Facility's SWOC. The SWOC includes the T Plant Complex, the Central Waste Complex-Waste Receiving and Processing Facility (CWC-WRAP), and Low-level Burial Grounds (LLBG) Trenches 31, 34, and 94. The USEPA CAFO was based on information collected during a 2011 USEPA inspection.

The violations included:

- Storage of hazardous waste without a permit.
- Failure to meet closure plan requirements.
- Failure to submit closure notice and closure plans.
- Failure to comply with land disposal restriction requirements.

Changes to the Site-wide Permit are required by the USEPA CAFO issued against USDOE. These changes are summarized as follows:

- Stop receiving waste in the dangerous waste management units listed in the CAFO.
- Submit closure plans to Ecology within 120 days of the effective date of the CAFO, for the following units: 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; CWC Outside Storage Area A; CWC Outside Storage Area B; and LLBG FS-1 Outdoor Container Storage Area.
- Immediately comply with all applicable final facility standards for the management of dangerous waste found in WAC 173-303-600(l) for the units listed in the CAFO.
- Submit closure plans to Ecology for the T Plant 221-T Railroad Tunnel and CWC 2401-W Building within 120 days of the effective date of the CAFO, unless prior to that date Ecology approves an extension pursuant to 40 Code of Federal Regulations (CFR) 265.112(d)(2), as incorporated and modified by reference in WAC 173-303-400.
- Immediately stop the placement of prohibited dangerous waste in LLBG Trenches 31 and 34, unless the waste meets land disposal treatment standards found in WAC 173-303-140.

The 211-T Pad, 221-T Sand Filter Pad, 271-T Cage, 277-T Outdoor Storage Area, and the 2401-W Waste Storage Building DWMUs are part of the Hanford Facility's SWOC, and are included in the USEPA CAFO list of DWMUs that require a closure plan. USDOE has agreed with USEPA to close these DWMUs, as they were never authorized for hazardous/dangerous waste storage. The 221-T Railroad Cut and the 277-T Building DWMUs, which are not part of the CAFO (non-CAFO), will also be closed.

Brian T. Vance and Ty Blackford
June 3, 2020
Page 11 of 13

20-NWP-090

The proposed permit modification is on the enclosed DVD and on Ecology's website at <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>. A DVD is also at the Hanford Public Information Repositories in Richland, Spokane, and Seattle, Washington, as well as Portland, Oregon. A hard copy is on file at the locations listed below:


Department of Ecology
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, Washington 99354

United States Department of Energy
Administrative Record
2440 Stevens Center Place
Richland, Washington 99354

Individuals can request copies of the DVD by contacting Ecology's Resource Center at (509) 372-7950.

If there are any questions regarding this permit modification, please contact Morgan Baker, Acting SWOC Project Lead, at morgan.baker@ecy.wa.gov or (509) 372-7923 or Debra Alexander, Hanford Facility Dangerous Waste Permit Coordinator, Revision 8c, at debra.alexander@ecy.wa.gov or (509) 372-7896.

Sincerely,

 Digitally signed
by Schleif,
Stephanie (ECY)

Stephanie Schleif
Deputy Program Manager
Nuclear Waste Program

mb/jlg
Enclosure

cc: See page 13

References:

1. Letter 13-ESQ-0074, dated October 11, 2013, "Response to Consent Agreement and Final Order Concerning (CAFO) the Submittal of Closure Plans for Closing Dangerous Waste Management Units (DWMUs)"
2. Letter 14-ESQ-0003, dated October 18, 2013, "Submittal of Additional Closure Plans for Closing Dangerous Waste Management Units (DWMUs) at the T-Plant Complex"
3. Letter 15-NWP-145, dated July 29, 2015, "Completeness Determination for Closure Plans Submitted for Dangerous Waste Management Units (DWMUs) in the Solid Waste Operations Complex (SWOC), Received October 24, 2013"
4. Letter 17-AMRP-0016, dated November 14, 2016, "Dangerous Waste Management Unit (DWMU) 277-T Building Closure Plan Comment Disposition, and Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans"
5. Letter 17-NWP-022, dated March 7, 2017, "Dangerous Waste Management Unit (DWMU) 277-T Building Closure Plan Comment Disposition, and Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans"
6. Letter 17-AMRP-0217, dated July 12, 2017, "Dangerous Waste Management Unit (DWMU) 277-T Building Closure Plan Comment Disposition, and Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans" Letter 17-NWP-100, dated August
7. Letter 17-NWP-100, dated August 14, 2017, "Dangerous Waste Management Unit (DWMU) 277-T Building Closure Plan Comment Disposition and Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans"
8. Letter 18-AMRP-0005, dated October 11, 2017, "Dangerous Waste Management Unit (DWMU) 277-T Building Closure Plan Comment Disposition, and Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans"
9. Letter 17-NWP-148, dated October 18, 2017, "Site-Specific Data Quality Objectives (DQO) for Solid Waste Operations Complex (SWOC) Dangerous Waste Management Units (DWMU)"
10. Letter 17-NWP-150, dated October 26, 2017, "Ecology Response to Dangerous Waste Management Unit (DWMU) 277-T Building Closure Plan Comment Disposition, and Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans"
11. Letter 18-NWP-070, dated May 1, 2018, "Reevaluation of Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans"
12. Letter 18-AMRP-0100, dated May 22, 2018, "Response to Site-Specific Data Quality Objectives (DQO) for Solid Waste Operations Complex (SWOC) Dangerous Waste Management Units (DWMU)"
13. Letter 18-AMRP-0150, dated August 9, 2018, "Response to Review Comment Records (RCRs) for Hanford Facility Dangerous Waste Class 3 Permit Modification Request for the Solid Waste Operations Complex (SWOC) Dangerous Waste Management Units Closure Plans"
14. Letter 19-AMRP-0009, dated October 15, 2018, "Supplemental Information to Support the Solid Waste Operations Complex (SWOC) Dangerous Waste Management Unit Closure Plans"
15. Letter 19-AMRP-0021, dated November 1, 2018, "Submittal of Hanford Facility Dangerous Waste Class 3 Permit Modification Request for Solid Waste Operations Complex (SWOC) Dangerous Waste Management Units Closure Plans Part Two"
16. In the Matter of: U.S. Department of Energy, Docket Number: RCRA-10-2013-0113, Consent Agreement and Final Order, Before the United States Environmental Protection Agency, June 26, 2013

cc electronic w/o enc:

Dave Bartus, USEPA
Dave Einan, USEPA
Mary Beth Burandt, USDOE-ORP
Lori Huffman, USDOE-ORP
Christopher Kemp, USDOE-ORP
Glyn Trenchard, USDOE-ORP
Duane Carter, USDOE-RL
Joe Franco, USDOE-RL
Mostafa Kamal, USDOE-RL
Tony McKarns, USDO-RL
Brittany Sparks, BNI
Robert Bullock, CHPR
Erika Garcia, CHPRC
Sarah Horn, CHPRC
Moussa Jaraysi, CHPRC
Hayley McClendon, CHPRC
Curt Clement, MSA
Jon Perry, MSA
Darci Teel, MSA

ERWM Staff, YN
Michael Stephenson, PNNL
Eric Van Mason, WRPS
Debra Alexander, Ecology
Morgan Baker, Ecology
Jennifer Cantu, Ecology
Annette Carlson, Ecology
Kathy Conaway, Ecology
Suzanne Dahl, Ecology
Kelly Elsethagen, Ecology
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Mandy Jones, Ecology
Jared Mathey, Ecology
Nina Menard, Ecology
Laura Morgan, Ecology
John Price, Ecology
Stephanie Schleif, Ecology
Ed Soto, Ecology
Dan Thompson, Ecology

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Tony McKarns, USDOE-RL
Lori Huffman, USDOE-ORP
Brittany Sparks, BNI
Mason Murphy, CTUIR
Jack Bell, NPT
Rex Buck, Jr., Wanapum
Laurene Contreras, YN
Susan Leckband, HAB
Ken Niles, ODOE
Robin Priddy, BCAA
Matthew Drumheller, USACE
Trevor Fox, USFW
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