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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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May 2, 2016

16-NWP-076

Mr. Ray J. Corey
Assistant Manager of River and Plateau
Richland Operations Office
United States Department of Energy
PO Box 550, MSIN: A5-11
Richland, Washington 99352

Re: T Plant Complex Dangerous Waste Management Units 211-T Pad and 271-T Cage Closure Plan
Comments

Dear Mr. Corey:

Reference: Letter 16-NWP-012 dated February 23, 2016, from Ron Skinnarland, Department of Ecology (Ecology) to Ray Corey, United States Department of Energy, Richland Operations Office (USDOE-RL) *Dangerous Waste Management Unit (DWMU) 277-T Building Closure Plan Comment Disposition, and Performance Standards for Future Solid Waste Operations Complex (SWOC) Closure Plans*

USDOE's contractor, CH2MHILL Plateau Remediation Company (CHPRC) provided Ecology with drafts of the T-Plant Complex 211-T Pad Dangerous Waste Management Unit (DWMU) Closure Plan on February 25, 2016; and the T-Plant Complex 271-T Cage DWMU Closure Plan on March 9, 2016. Both plans were provided via email.

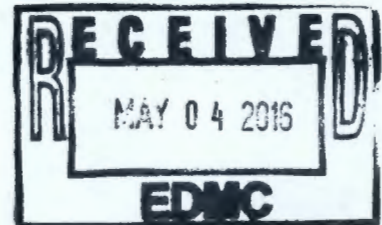
Ecology is providing comments with this letter. Ecology is not providing further comments regarding the clean closure performance standards (cleanup levels). We provided a table with cleanup levels we expect USDOE-RL and CHPRC to consider for these and future SWOC closure plans (see above reference).

We look forward to discussing these comments and the cleanup levels provided in letter 16-NWP-012. We expect future closure plans can be completed more efficiently once we reach agreement on these cleanup levels and their applicability.

Please contact Deborah Singleton at deborah.singleton@ecy.wa.gov or (509) 372-7923 if you have any questions.

Sincerely,

Ron Skinnarland
Waste Management Section Manager
Nuclear Waste Program



sl:jvs

Enclosures (2)

cc: See page 2



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cc electronic w/encs:

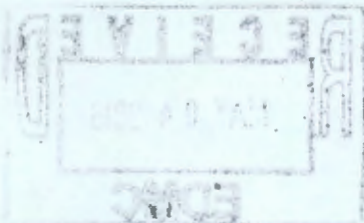
Dave Bartus, EPA
Dennis Faulk, EPA
Cliff Clark, USDOE-RL
Mike Collins, USDOE-RL
Tony McKarns, USDOE-RL
Sarah Horn, CHPRC
Stephanie Johansen, CHPRC
Paul Martin, CHPRC
Debra Alexander, Ecology
Suzanne Dahl, Ecology
Stuart Luttrell, Ecology
John Price, Ecology
Deborah Singleton, Ecology
Ron Skinnarland, Ecology
John Temple, Ecology
Nancy Ware, Ecology
Cheryl Whalen, Ecology
Environmental Portal
Hanford Facility Operating Record
USDOE-RL Correspondence Control
CHPRC Correspondence Control

cc: w/encs

Rod Skeen, CTUIR
Gabriel Bohnee, NPT
Alyssa Buck, Wanapum
Russell Jim, YN
Steve Hudson, HAB
Administrative Record
NWP Central File

cc w/o encs

NWP Reader File



Apr Review Comment Record

Washington State Department of Ecology Nuclear Waste Program

Date: April 28, 2016

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Document Title(s)/Number(s) T Plant Complex, 271-T Cage Dangerous Waste Management Unit Closure Plan

Reviewer: Stuart Luttrell (509) 373-7883

Document Manager

Project Manager

Facility Site ID

Cleanup Site ID

CH2M HILL PRC

Deborah Singleton

(509) 372-7923

Item No.	Pg. # Sec. # Para./Sent.	Comment or Question	Modification Needed	Basis/Justification	Ecology Response	Open/Closed	Reviewer Initials
1	A-1, Sec A1	This section is organized differently in different closure plans.	Review these sections to see if any revisions are necessary.				
2	A-1, Sec A1 Line 11	The meaning of "establish" is different than "achieve." Establish would be to create clean closure levels, while achieve means to reach clean closure levels.	Suggest rewording the sentence to say, "...closure activities which are necessary to <u>establish</u> <u>achieve</u> clean closure levels..."				
3	A-2, Sec A2, line 14	The reference to Section A3.13 does not seem to be correct.	Review this, and identify the correct section.				
4	A-3, Sec A2.1, Lines 9-14	The information on cleanup levels may need to be revisited. The basis for not including groundwater and ecological receptors is currently inadequate.	Revise this discussion as needed based on future agreements. The basis for eco and groundwater receptors will in any case require more specific information.	The cleanup levels and basis will be determined in discussions between Ecology, DOE, and CHPRC			
5	A-3, Sec A2.1, Lines 22, 23	I question whether the concrete would be identified as contaminated environmental media, and how it would be managed. Should this be identified and managed as a newly generated waste in accordance with Section A3.8?	Review, and revise as necessary.				
6	A-3, Sec A3, Line 27	Editorial.	Remove the word "a" after the phrase "is based on."				

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7	A-4, Sec A3.1, Lines 20-24, and Pg. A-5, Table A-1	Does the training matrix intentionally leave sample training off the column of "Training Category Course Description?" Samplers are required to be qualified to perform sampling, but there is no training specified.	Add the sampling training to this Table. If not, explain why it is not on the matrix.				
8	A-5, Sec A3.2, Lines 6-9	What does it mean to maintain the 271-T Cage "in accordance with WAC 173-303-610, in a manner that demonstrates...?" Is this relevant to a unit undergoing closure with no remaining waste?	Clarify what this means or what the intent is, or remove it.				
9	A-6, Sec A3.3, Lines 14-15	The sentence does not correctly communicate the intent of the inspection. The purpose was <u>to identify waste related staining, etc.</u> , in order to plan for focused sampling	Revise this to, "...on June 1, 2015, to identify any dangerous waste-related staining, cracks, or crevices in the 271-T Cage. This information provides the basis for focused sampling."				
10	A-6, Sec A3.5, Lines 34-36	I believe the sentence could be written more clearly.	Suggest ending the sentence after "is accepted by Ecology." Then start a new sentence that reads, "Inspections will verify the following."				
11	A-8, Sec A3.6, Lines 4-5	Clarify here, or make reference to the 3-part rule in Section A.3.10.5.	Recommend a reference to the section that discusses how the evaluation is performed (Section A.3.10.5).				
12	A-8, Sec A3.6, Line 11	The extent of concrete removal is unclear.	Suggest this be revised to, "...surface layer, and a minimum of one foot surrounding the identified contamination."				
13	A-8, Sec A3.7, Line 24	The acronym MLLW is not (as far as I can tell) used other places in the plan.	Change this to mixed waste or dangerous waste.				

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14	A-9, Sec A3.10.2, Line 39	The sentence as written does not accurately communicate the information provided on Table A-3.	Revise the sentence to something like, "Table A-3 provides the target analyte list and each chemical abstract service (CAS) number, and the waste codes associated with each analyte."	The CAS is not a waste code.			
15	A-13, Sec A3.10.5, Lines 41, 42	What action or response is required if focused sample results exceed the MTCA Method B clean closure standards? This is not clearly stated.	If exceedance of MTCA B is the decision criteria, is the location considered contaminated? Provide this explanation more clearly.				
16	A-14, General	The table numbers appear incorrect.	Review table numbers and table call-outs, and revise as necessary.				
17	A-16, Sec A3.10.5, Lines 11, 12	I suggest a statement that clearly says here that no focused samples will be collected.	Add a statement to the effect that no focused samples will be collected.				
18	A-17, Table A-5	Does EPA have new temperature preservation requirements? Are all samples now required to be cooled? Question on the footnote * I believe the (≤ 7 C and ≥ 20 C) is incorrect for 8260 and 8015. I cannot understand what this range signifies.	Review this and verify if the temperature requirements for each of these is correct. Also review specifically methods 6020, 7471, and 8082, which did not previously require samples to be kept cool. Please clarify these and revise the table as necessary.				
19	A-18, general	Fix the table numbers and call-outs.	Revise as necessary.				
20	A-18, Sec A3.10.8, Lines 34, 35	Is laboratory QC mistakenly mentioned in this sentence? The samples listed below this sentence are field QC samples.	Delete the words "and laboratory" if none of these is associated directly with laboratory QC.				
21	Table A-6	This table of analytical performance requirements is probably not final.	Wait until agreements are reached on the performance standards to use at the SWOC facilities. Then revise the table accordingly.				
22	A-22, Sec A3.10.8, Line 5	There is a mistake on this line in reference to the section numbers.	Provide the correct section numbers.				

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Item No.	Pg. # Sec. # Para./Sent.	Comment or Question	Modification Needed	Basis/Justification		Ecology Response	Open/Closed	Reviewer Initials
23	A-26, Section A4	Correct the table numbers and callouts.	Make the corrections to table numbers and table call-outs.					
24	A-26, Table A-8	The second row under closure activities mistakenly identifies inspection of "Building Containment System." This row was broken at the page break, so that "Identify focused sampling locations" was not kept with that primary activity.	Correct the table to address the comments.					
25	A-27, Figure A-3	The figure is missing information I believe is important to include.	Add the activity, "Data Validation and Verification" with a schedule if possible, and identify a schedule associated with "Confirm Clean Closure," if possible.					

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Document Title(s)/Number(s) T Plant Complex, 211-T Pad Dangerous Waste Management Unit Closure Plan

Reviewer: Stuart Luttrell (509) 373-7883

Document Manager

Project Manager

Facility Site ID

Cleanup Site ID

CH2M HILL PRC

Deborah Singleton

(509) 372-7923

Item No.	Pg. # Sec. # Para./Sent.	Comment or Question	Modification Needed	Basis/Justification	Ecology Response	Open/Closed	Reviewer Initials
1	H2-B-1, Sect B1	This section is organized differently in different closure plans.	Review these sections to see if any revisions are necessary.				
2	H2-B-1, Sect B1 First line	The meaning of "establish" is different than "achieve". Establish would be to create clean closure levels, while achieve means to reach clean closure levels.	Suggest rewording the sentence to say, "...closure activities which are necessary to establish <u>achieve</u> clean closure levels..."				
3	H2-B-1, Section B1.1, line 29	The sentence is grammatically incorrect.	Remove the words, "are not authorized" at the end of line 29.	This will correct the sentence.			
4	H2-B-1, Section B1.1.1, line 35, 36	The sentence says waste storage occurred from October 1985 through April 2006. Are these correct? The first logbook date shown in the inspection records provided (from Box 135357) have a "start" date of 1/2/87 and an "end" date of 12/31/85. One of these dates is in error.	Double check these dates. Make corrections as necessary.	The NEIC inspection, conducted March 14-25, 2011 and documented in February 2012, also suggest discrepancies in the dates that the 211-T Pad was in place and used.			
5	H2-B-3, Sec B2, Line 13	This sentence says that performance standards are addressed in Section B3.10.5, which is Sampling Design.	Check the reference to the section and correct if necessary.				

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6	H2-B-3, Sec B2.1, Lines 23-28	The information on cleanup levels may need to be revisited. The basis for not including groundwater and ecological receptors is currently inadequate.	Revise this discussion as needed based on future agreements. The basis for eco and groundwater receptors will in any case require more specific information.	The cleanup levels and basis for these levels will be determined after discussions between Ecology, DOE, and CHPRC			
7	H2-B-4, Sec B3, Line 4	The sentence seems to be grammatically incorrect	Remove the word "a" after the phrase "is based on."				
8	H2-B-4, Sec B3, Lines 20, 21	The statement regarding removal of contaminated environmental media should be reviewed and may need to be revised.	I believe this should address decontamination of concrete (by removal if necessary). This same bullet in the 271-T Cage closure plan states that as the action.	This bullet needs to line up with the planned activities			
9	H2-B-5, Table B-1 and Lines 2-5	Does the training matrix intentionally leave sample training off the column of "Training Category Course Description?" Samplers are required to be qualified to perform sampling, but there is no training specified.	Add the sampling training to this Table. If not, explain why it is not on the matrix.	Completeness, clarity.			
10	H2-B-6, Sec B3.2, Lines 16-19	What does it mean to maintain the 211-T Pad in accordance with WAC 173-303-610, in a manner that demonstrates...?" Is this relevant to a unit undergoing closure with no remaining waste?	Clarify what this means or what the intent is, or remove it.				
11	H2-B-6, Sec B3.3, Line 38	Where is the SAP?	Provide the section where the SAP is located.	Clarity			
12	H2-B-6, Sec B3.3, Line 39-40	The sentence does not correctly communicate the intent of the inspection. The purpose was to <u>identify waste related staining, etc.</u> , in order to plan for focused sampling.	Revise this to, "...on June 1, 2015, to identify any dangerous waste-related staining, cracks, or crevices, low areas, and seams on the 211-T Pad. This information provides the basis for locations for focused sampling."				

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13	H2-B-8, Sec B3.4, Line 9-11	There is inadequate information in this section.	Provide information on the sump itself (is it a blind sump, are there pipelines connected to the sump, can you provide documentation of this?). Will there be any future use of the 211-T Pad?				
14	H2-B-8, Sec B3.6, Line 30	The extent of concrete removal is unclear.	Suggest this be revised to, "...surface layer, and a minimum of one foot surrounding the identified contamination."				
15	H2-B-9, Sec B3.7, Line 3	The acronym MLLW is not (as far as I can tell) used other places in the plan.	Change this to mixed waste or dangerous waste.				
16	H2-B-10, Sec B3.10.2, Line 25	The acronym MLLW is used again here.	Change this also.				
17	H2-B-10, Sec B3.10.2, Line 28, 29	The sentence as written does not accurately communicate the information provided on Table B-4.	Revise the sentence to, "Table B-4 provides the target analyte list and each chemical abstract service (CAS) number, and the waste codes associated with each analyte.	The CAS is not a waste code.			
18	H2-B-10, Sec B3.10	Table B-4 is many pages after this discussion on the analytes.	Move Table B-4 to the page after this section.				
19	H2-B-14, Sec B3.10.5, Lines 13, 14	What action or response is required if focused sample results exceed the MTCA Method B clean closure standards? This is not clearly stated.	If exceedance of MTCA B is the decision criteria, is the location considered contaminated? Provide this explanation more clearly.				
20	H2-B-17, Table B-6	Does EPA have new temperature preservation requirements? Are all samples now required to be cooled? Question on the footnote * I believe the (≤ 7 C and ≥ 20 C) is incorrect for 8260 and 8015. I cannot understand what this range signifies.	Review this and verify if the temperature requirements for each of these is correct. Also review specifically methods 6020, 7471, and 8082, which did not previously require samples to be kept cool. Please clarify these and revise the table as necessary.				

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21	H2-B-17, Lines 18-21	This paragraph is repeated on the next page after the table.	Delete this paragraph or the one just after the table on the next page.				
22	H2-B-19, Sec B3.10.8, Lines 6, 7	Is laboratory QC mistakenly mentioned in this sentence? The samples listed below this sentence are field QC samples.	Delete the words "and laboratory" if none of these is associated directly with laboratory QC.				
23	Table B-7	This table of analytical performance requirements is probably not final.	Wait until agreements are reached on the performance standards to use at the SWOC facilities. Then revise the table accordingly.				
24	H2-B-24, Sec B3.10.11, Line 9	The acronym for MTCA is incorrect.	Correct the acronym to MTCA.				
25	H2-B-28, Figure B-4	The figure is missing information I believe is important to include.	Add the activity, "Data Validation and Verification" with a schedule if possible, and identify a schedule associated with "Confirm Clean Closure," if possible.				