



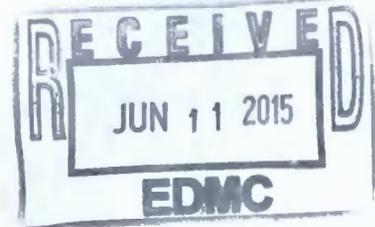
Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

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15-AMRP-0213

JUN 08 2015

Mr. D. A. Faulk, Program Manager
Office of Environmental Cleanup
Hanford Project Office
U.S. Environmental Protection Agency
309 Bradley Boulevard, Suite 115
Richland, Washington 99352



Dear Mr. Faulk:

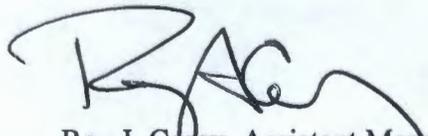
INTEGRATED REMEDIAL DESIGN REPORT/REMEDIAL ACTION WORK PLAN FOR
100-F-IU, DOE/RL-2014-44, DRAFT A

This letter responds to the U.S. Environmental Protection Agency's (EPA) May 6, 2015, (1229739) comments regarding the Integrated Remedial Design Report/Remedial Action Work Plan for 100-F-IU, DOE/RL-2014-44, Draft A. Resolution of these comments is being discussed with Chris Guzzetti of your staff and there is tentative agreement on resolution of the majority of the comments as indicated by the attached comment response document.

In addition to updates completed based on the May 6, 2015, letter, the section 5.4 language concerning cultural resources, and language in the waste management plan, was updated based on separate communications with EPA. At this time it is anticipated that the updated Revision 0 document that incorporates resolution of EPA's comments, will be delivered for EPA's approval by August 31, 2015.

If you have any questions, please contact me, or your staff may contact Mike Cline, of my staff, on (509) 376-6070.

Sincerely,


Ray J. Corey, Assistant Manager
for the River and Plateau

AMRP:GLS

Attachment

cc: See page 2

5

Mr. D. A. Faulk
15-AMRP-0213

-2-

JUN 08 2015

cc w/attach:

G. Bohnee, NPT

R. Buck, Wanapum

P. A. Burke, CHPRC

J. V. Borghese, CHPRC

M. H. Doornbos, CHPRC

C. J. Guzzetti, EPA

S. Harris, CTUIR

J. A. Hedges, Ecology

S. Hudson, HAB

R. Jim, YN

N. M. Menard, Ecology

K. Niles, ODOE

C. P. Noonan, MSA

R. E. Piippo, MSA

D. Rowland, YN

M. J. Turner, MSA

Administrative Record (100-FR-1, 100-FR-2, 100-FR-3, 100-IU-2, 100-IU-6)

Environmental Portal

EPA Comments 100-F/IU RDR/RAWP
DOE/RL-2014-44 Draft A

Tracking ID	Comment	Chapter	Page (from Review Dft)	Disposition	Response to Comment
EPA-RDRAWP-01	EPA expects that a Change Notice will accompany the Final RDR/RAWP when it comes over for signature to add a milestone for completing the Phase 1 well installation by the end of FY 2016 (according to the schedule described in Section 7.2 and Figure 7-1 of the GW Addendum).	General	General	Accept	Discussion ongoing regarding TPA change request.
EPA-RDRAWP-02	Throughout the entire document, the use of the acronym "CUL" is highly inconsistent. The Integrated WP section of the document and the GW Addendum use it constantly while the Soil Addenda uses it sparingly. Pick one and be consistent (EPA would prefer that it is just spelled out instead of creating another acronym).	General	General	Accept	Changed CUL to "cleanup level" globally in the integrated work plan, groundwater addendum, and DQO document (SGW-58291).
EPA-RDRAWP-03	Capitalize "river corridor" ?	Int RDR/RAWP Specific	1-1, line 14	Accept	Capitalized term.
EPA-RDRAWP-04	Delete. Already stated this on page 1-1	Int RDR/RAWP Specific	1-6, line 3-4	Accept	Deleted sentence.
EPA-RDRAWP-05	Delete "ROD= Record of Decision" from bottom of table since the term is not used in the table.	Soil Addendum	1-4, Table 1-1	Accept	Deleted.
EPA-RDRAWP-06	Capitalize "river corridor baseline risk assessment" ?	Soil Addendum	2-1, last paragraph	Accept	Revised.
EPA-RDRAWP-07	Change "Collocate" to "Co-located" ?	Soil Addendum	4-8, Section 4.4.3	Accept	Revised.
EPA-RDRAWP-08	Spell out "AOC" for first use	Soil Addendum	5-8, Section 5.3, second para	Accept	Agreed, but first use of "AOC" was on Page 4-3, third bullet. No further change.
EPA-RDRAWP-09	Spell out "SPA" for first use	Soil Addendum	5-9, 5.4.3 third bullet	Accept	Agreed, but first use of "SPA" was on Page 4-2, first paragraph of Section 4.3.2. No further change.
EPA-RDRAWP-10	Capitalize "river corridor" ?	GW Addendum	1-1, line 3	Accept	Revised.
EPA-RDRAWP-11	Would be helpful to the reader to reference the Section number as well.	GW Addendum	1-3, line 17-18	Accept	Added text " <u>Section 1.3 of the Integrated RDR/RAWP.</u> "
EPA-RDRAWP-12	The timeframe listed for the Five Year Review is incorrect. The FYR was completed in 2011 so the next one (Fourth FYR) will be completed in 2016, the Fifth FYR will cover the years from 2016 to 2021.	GW Addendum	3-1, Table 3-1, third column, fourth row	Accept	Changed "2015 to 2020 Hanford Site 5 year CERCLA review" to "2016 to 2021 Hanford Site 5 year CERCLA review"
EPA-RDRAWP-13	Incorrect.(see comment above). Fourth FYR - 2011-2016, Fifth FYR - 2016-2021	GW Addendum	3-10, line 28-29	Accept	Changed time periods per comment.
EPA-RDRAWP-14	Change "Phase I" to Phase 1 for consistency.	GW Addendum	6-2, Table 6-1, first row, first bullet	Accept	Revised.

EPA Comments 100-F/IU RDR/RAWP
DOE/RL-2014-44 Draft A

Tracking ID	Comment	Chapter	Page (from Review Dft)	Disposition	Response to Comment
EPA-RDRAWP-15	"as needed" ?? Plume maps are generated annually for the Annual GW Report correct?	GW Addendum	6-4, line 18-19	Accept	Plume maps will continue to be presented in the annual report. Once the sample frequency changes to biennial, new plume maps will be generated when new data is available. Text clarified.
EPA-RDRAWP-16	Suggest just spelling out CI instead of creating another acronym.	GW Addendum	6-7, line 14	Accept	Revised.
EPA-RDRAWP-17	This section is the perfect example of why the preference for not using the CUL acronym and just spelling it out. Having CUL, UCL, and LCL in the same section makes it difficult to follow.	GW Addendum	6-8, Section 6.4.1	Accept	"CUL" replaced with "cleanup level" globally in Integrated Work Plan and Groundwater Addendum. Also replaced "CI" with "confidence interval" on p. 6-8.
EPA-RDRAWP-18	Once all wells have completed the attainment monitoring phase, is there a final sampling event of all wells to confirm RA completion? If not, suggest that this step is added in to the process so that confirmation is obtained especially for those wells that reach attainment early on in the process.	GW Addendum	6-8 and 6-9, Section 6.4.2	No Change Needed	Sampling beyond the successful completion of the attainment monitoring phase is not proposed in the plan. Section 3.1.1, Implementation Approach, discusses the performance monitoring design basis. Cleanup level attainment is evaluated for each COC, on a well-by-well basis, in a two phase approach (remediation and attainment monitoring). The design follows guidance from multiple EPA documents, including OSWER 9355.0-129, <i>Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions</i> . After the remediation monitoring result evaluations demonstrate the cleanup level is attained, the 5 year attainment monitoring phase commences. To complete attainment monitoring, the data must demonstrate 1) the cleanup level has been met and 2) groundwater will continue to meet the cleanup level in the future. This plan requires statistical evaluation of the data using the 95% UCL (to demonstrate the cleanup level is met) and a statistically significant negative or zero concentration trend (to demonstrate the cleanup level will continue to be met). Attainment monitoring evaluations will be documented via the 5 year report and EPA approval is required to discontinue monitoring. Another practical consideration for obtaining a sample after attainment monitoring completion is aging and deterioration of the wells. As an example, for Sr-90 with a 150 year attenuation timeframe, this could mean wells that complete attainment monitoring early (e.g., after 50 years) would probably require replacement to obtain a sample at the end of the 150-year Sr-90 remedial action.
EPA-RDRAWP-19	Spell out confidence levels, do not make another acronym.	GW Addendum	6-9, line 28	Accept	"CL" changed to "confidence level."
EPA-RDRAWP-20	Incomplete sentence, should end like this? " described above."	GW Addendum	5-3 (see p. 6-9), line 13-14	Accept	p. 6-9 revised. Added "above".

EPA Comments 100-F/IU RDR/RAWP
DOE/RL-2014-44 Draft A

Tracking ID	Comment	Chapter	Page (from Review Dft)	Disposition	Response to Comment
EPA-RDRAWP-21	This statement is really confusing. GW migrating from 200 Area has always been said to not be part of 100-FR-3 but this is the first time "upgradient contaminated groundwater from other areas, including other 100 Areas" has been mentioned. Please explain.	GW Addendum	A-4, line 1-2	Accept	Several wells upgradient of 100-F (between 100-K and 100-F) have elevated chromium and one has elevated TCE, not related to 100-F sources. However, the sentence is not really needed in this context and will be deleted.
EPA-RDRAWP-22	Is included where? Reference the section.	GW Addendum	A-4, line 7-8	Accept	Added section numbers.
EPA-RDRAWP-23	These statements are confusing, and the use of the word "probably" is bothersome especially since the next paragraph (lines 28-32) seems to provide more information on vertical gradients. Please clarify.	GW Addendum	A-5, line 26-27	Accept	Lines 26 and 27 pertain to vertical gradient within the thin unconfined aquifer. The next paragraph pertains to gradients between the unconfined and confined aquifers. Revised text to make that clearer.
EPA-RDRAWP-24	Who at EPA has agreed to this? Can you provide the documentation where EPA has agreed or approved of this?	GW Addendum	C-7, line 36-37	No Change Needed	The language is consistent with the Waste Control Plan for the 100-FR-3 Operable Unit as modified by TPA-CN-507 approved April 23, 2012.
EPA-RDRAWP-25	Because IDW is related to RI/FS activities and the GW Addendum addresses final ROD actions, EPA requests that "IDW" be removed from Appendix C and replaced with "waste".	GW Addendum, Appendix C	throughout Appendix C	Accept with Modification	IDW removed from most sections of Appendix C. Certain activities, especially purgewater management, will be conducted under the IDW strategy. New text for Appendix C drafted (based on separate communication with EPA).