



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

12-AMRP-0123

AUG 17 2012

Ms. J. A. Hedges, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton
Richland, Washington 99354

Dear Ms. Hedges:

RESPONSE TO "NOTIFICATION OF NON-COMPLIANCE OF THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT, PART VI POST CLOSURE UNIT 2, 183-H SOLAR EVAPORATION BASINS, DANGEROUS WASTE PORTION, REVISION 8C, ID NO. WA 7890008967," DATED JULY 2, 2012, AND RESPONSE TO HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT, PART VI POST CLOSURE UNIT 2, 183-H SOLAR EVAPORATION BASINS, DANGEROUS WASTE PORTION, REVISION 8C, ID NO. WA 7890008967," DATED AUGUST 2, 2012

The U.S. Department of Energy Richland Operations Office (RL) would like to thank the State of Washington Department of Ecology (Ecology) for the constructive working sessions during the two formal meetings and four informal meetings. We believe resolution of the permit ambiguities is attainable through continued collaboration. RL would like to clarify its position on this issue for the benefit of Ecology and interested stakeholders and tribes. RL is in full compliance with the 183-H permit requirements.

The July 2, 2012, Non-Compliance letter identified exceedances both in nitrate and uranium. The nitrate and uranium measurements that exceeded the concentration limits cited by Ecology in its Notice of Non-Compliance were reported by RL in its second semiannual report on the corrective actions at 183-H. These fluctuations above the concentration limits do not represent a Non-Compliance because the unit is already in corrective action in accordance with the permit and Washington Administrative Code (WAC) 173-303-645(11). The unit will remain in corrective action until the groundwater contamination is fully remediated under the Comprehensive Environmental Response, Compensation, and Liability Act. During the period of remediation it is expected that contaminants will occasionally exceed the permit concentration limits due to changes in river stage, or as contaminant distribution is affected by remediation activities. As a result, there were no legitimate reasons for the issuance of this Notice of Non-Compliance.

Ms. J. A. Hedges
12-AMRP-0123

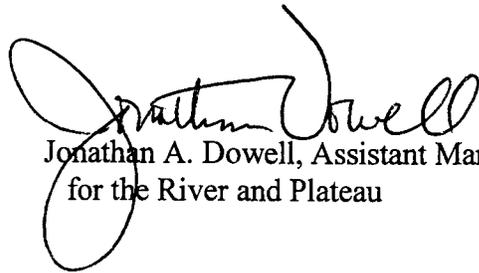
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Attached are the "Refutation of Statements Regarding Non-Compliance at 183-H" and the "Recommendation to Resolve Ambiguities Related to the 183-H Solar Evaporation Basins." The attachments discuss the situation in more detail.

If you have any questions, please contact me or you may contact Briant Charboneau, of my staff, on (509) 373-6137.

Sincerely,



Jonathan A. Dowell, Assistant Manager
for the River and Plateau

AMRP:RDH

Attachments (2)

cc w/attachs:

D. B. Bartus, EPA
F. H. Biebesheimer, CHPRC
G. Bohnee, NPT
L. Buck, Wanapum
K. A. Conaway, Ecology
L. M. Dittmer, CHPRC
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S. L. Leckband, HAB
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K. Niles, ODOE
J. B. Price, Ecology
D. Rowland, YN
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Administrative Record
Environmental Portal

REFUTATION OF STATEMENT REGARDING NON-COMPLIANCE AT 183-H

The nitrate and uranium measurements that exceeded the concentration limits cited by the State of Washington Department of Ecology (Ecology) in its Notice of Non-Compliance (NON) were reported by the U.S. Department of Energy Richland Operations Office (RL) in its second semiannual report on the corrective actions at 183-H. This unit is currently in corrective action in accordance with the permit and Washington Administrative Code (WAC) 173-303-645(11). Once a corrective action program (CAP) is initiated a non-compliance issue can only result from failure to comply with the CAP. Ecology has not identified any failure on RL's part to comply with the current CAP. Ecology's identification of the exceedance may be seen as support for the continuation of the groundwater CAP, but is not a violation. Therefore, these fluctuations above the concentration limits do not represent a non-compliance issue because the unit is already in corrective action in accordance with the permit and Washington Administrative Code (WAC) 173-303-645(11) and RL is in compliance with the requirements of the CAP. Further discussion of these points is provided below.

Groundwater concentration limits were exceeded in the 183-H Solar Evaporation Basins for the dangerous waste constituent chromium on September 27, 1996. WAC 173-303-645(11) requires a CAP for such an exceedance, which was established on December 27, 1996, to address the contamination and monitor the effectiveness of the action. The groundwater CAP established at that time reflected the consensus of RL, Ecology, and the U.S. Environmental Protection Agency. That consensus included the objectives, wells to be sampled, constituents for analysis, sampling frequency, and water level measurements to include in the groundwater CAP. Subsequently, the CAP was incorporated into the Dangerous Waste Permit.

The goal of the CAP was to: (1) address the contamination and (2) monitor the effectiveness of the action.¹ The primary treatment target was chromium and it was preferentially retained by the interim action pump-and-treat system's ion exchange columns.² Nitrate was included in the corrective action/ CERCLA process because it is an applicable or relevant and appropriate requirement within the Clean Water Act.³ Compliance with the CAP required that the RL: (1) address the contamination and (2) monitor the effectiveness of the action. A violation of the CAP is only appropriate if the CAP is: (1) not addressing the contamination or (2) fails to monitor the effectiveness of the program. In this instance, RL has met the goals of the CAP and shown the efficacy of the program by addressing the contamination. Due to the anomalously high water level this year, there was a spike in nitrate that resulted in an exceedance of the permit concentration limit. Capturing this concentration spike illustrates the effectiveness of the second goal, which is to accurately monitor the contamination. Therefore, RL maintains the position that it has fully complied with the CAP, and Ecology has no basis for issuance of a NON.

The current CAP has been in place since 1996 and the compliance period of the CAP is for the duration of the groundwater extraction operations.⁴ The CAP may be revised to reflect

¹ 183-H Solar Evaporation Basins Postclosure Plan DOE/RL-97-48 Rev. 0 at 11.

² *id.*

³ Nitrate is not considered a dangerous waste constituent under RCRA. WAC 173-303-9905.

⁴ DOE/RL-97-48 Rev. 0 at 13

discussions between RL and Ecology through a permit modification, as necessary.⁵ Ecology has indicated some changes that it would like to occur in the current groundwater monitoring plan. It has been clear from the beginning of the plan that any changes to the plan should occur as a permit modification. Therefore, RL views Ecology's letter and subsequent meetings as an opportunity to modify the current CAP through the permit modification process rather than as an attempt to impose compliance actions that are unnecessary.⁶

Ecology wrote the NON in a fashion where the reader is led to infer the uranium exceedance reported by RL is a non-compliance. RL would like to note that there cannot be a Resource Conservation and Recovery Act (RCRA) violation for exceeding the concentration limit of uranium. Uranium is not a dangerous waste, it is a waste indicator. A waste indicator is only appropriate for use when the dangerous waste constituent of concern itself is undetectable and uranium itself cannot be the basis of a violation. Additionally, the permit and case law⁷ make it abundantly clear that Ecology has no authority to regulate or take enforcement action related to radionuclides. Therefore, an exceedance of the Uranium indicator concentration is not a violation of the State Hazardous Waste Management Act and cannot be a basis for the NON.

Two concerns were also expressed in the NON written by Ecology. First, Ecology raised a concern regarding the new SIR-700 resin's capacity for removing the dangerous waste constituents. Ecology has been informed of the SIR-700's exceptional performance in chromium removal in many forums, including annual reports and Unit Managers Meetings. As discussed above, the goal of the groundwater CAP is to remove chromium preferentially. The SIR-700 accomplishes the goal of the CAP.

Secondly, the groundwater CAP also states that final remediation alternatives for soil and groundwater contamination would be addressed through the CERCLA Remedial Investigation/Feasibility Study process. RL will reiterate that the CERCLA Remedial Investigation/Feasibility Study process currently underway is addressing soil and groundwater contamination in the vicinity of the 183-H Solar Evaporation Basins in a manner consistent with its obligations under the permit and the Tri-Party Agreement. Therefore, it may be more appropriate for Ecology to address its concerns regarding the SIR-700 resin through the mechanisms in the Tri-Party Agreement since this is a CERCLA Operable Unit.

The second concern expressed by Ecology was that RL would improperly decommission wells in the 183-H RCRA groundwater monitoring network without the required permit modification request. The wells in question are to be removed as a part of source area remediation activities in the vicinity of the 183-H location. Due to RL's continued collaboration with Ecology to plan for the decommissioning of these wells it is unclear why this issue was raised in a forum such as a NON. RL restates its awareness of the permitting procedures in WAC 173-303-830, and that it would not authorize the decommissioning of the wells prior to submittal of an appropriate permit modification request.

⁵ *id.* at 14

⁶ RL does not believe it is the proper regulatory approach to create an alternative CAP in addition to the one currently in place. Therefore stating that "Ecology is willing to hold the corrective actions identified in the July 2, 2012, letter in suspension" does not conform with principles of administrative law which state that an agency cannot pursue successive enforcement actions for the same violation.

RL and Ecology have made great progress on resolving ambiguities in the permit and amending the current Groundwater Monitoring plan for the 183-H Solar Evaporation Basins. A second attachment includes a draft recommendation to resolve ambiguities. While RL does not agree that Ecology has grounds to issue a NON, it is certainly willing to collaborate on an amendment to the groundwater monitoring plan and a permit modification to the CAP. RL looks forward to our continued progress on this issue.

RECOMMENDATION TO RESOLVE AMBIGUITIES RELATED TO THE 183-H SOLAR EVAPORATION BASINS

The U.S. Department of Energy Richland Operations Office (RL) and State of Washington Department of Ecology (Ecology) have agreed in principle to a path forward which will be addressed in the following 9 points:

1. Update the HR-3 Operable Unit Sampling and Analysis Plan (DOE/RL-2009-57) to include sampling and monitoring aspects of 183-H groundwater monitoring wells with an amended 100-HR-3 Remedial Design/Removal Action Work Plan (DOE/RL-2009-56, Draft A) for an integrated monitoring plan under Dangerous Waste Permit General Condition II.F. These documents will meet the substantive parts of WAC 173-303-645(11), WAC 173-303-645(3) and WAC 173-303-645(8) using the alternative requirements of WAC 173-303-645(1)(e) to tailor the requirements to the unit. To commence this process, RL and Ecology agree to hold a workshop to address the nature of the Remedial Design/Removal Action Work Plan revisions, and the resolution of informal comments submitted by Ecology in previous informal reviews. The workshop will be held prior to January 15, 2013.
2. Ecology needs information from RL that supports areas of concern in relationship to 183-H. Information needs to show that 183-H Treatment, Storage, and Disposal (TSD) is situated among Solid Waste Management Unit(s) (SWMU), a release has occurred, and both TSD and SWMU have likely contributed to the release. This information will allow the use of the alternative requirements under WAC 173-303-645(1)(e).
3. Update the post-closure plan to reflect current post-closure status care (i.e., Close of WIDS sites 116-H-6 (Resource Conservation and Recovery Act [RCRA] component) and 100-H-33 (rad component) through a permit modification request (Step 7). Based on post-closure care status provide an integrated groundwater monitoring plan, and a corrective action program (see WAC 173-303-645(11) appropriate for the unit as required to address the modification to the permit. Security, training, inspection, and maintenance requirements need to be discussed for deletion from the permit because RL does not believe these requirements should apply to the 183-H.
4. RL requests a Director's determination for alternative requirements giving the information that shows it is not necessary to apply the requirements of WAC 173-303-645(11) because the alternative requirements will protect human health and the environment.
5. Ecology obtains a Director's determination to implement item 4.

6. Ecology incorporates enforceable aspects of the Remedial Design Report/Removal Action Work Plan and Sampling and Analysis Plan documents from bullet 1 into the permit by reference through permit conditions. Permit conditions under the groundwater monitoring requirements for regulated units will be linked to Tri-Party Agreement Milestones M-015-70-T01 (interim Record of Decision Remedial Investigation/ Feasibility Study and Proposed Plan), M-016-110-T01 (protective of river), M-016-110-T02 (protective of human health and environment).
7. Ecology modifies Revision 8C/9 of the permit after RL submits a complete permit modification request (i.e., Depends on timing of the documents and Director's determination) to include the new integrated groundwater monitoring plan that integrates 100-HR-3 Operable Unit with 183-H new HR-3 Operable Unit Sampling and Analysis Plan would be referenced in the permit in Addendum D.
8. RL submits public comments on Revision 9 consistent to the extent practical with the Revision 8 approach.
9. Vadose Zone: Revise the permit (either Revision 8C or 9) pending the outcome of the Comprehensive Environmental Response, Compensation, and Liability Act Remedial Investigation/Feasibility Study process and a Record of Decision.