0066967

Mr. John Price
Washington State Department of Ecology
3100 Port of Benton Blvd.
Richland, WA 99354-1670

June 27, 2005

RE: 216-U-12 Crib Reclassification

Dear Mr. Price:

The Washington Department of Ecology (Ecology) has not provided an adequate basis for the "reclassification" of the 216-U-12 Crib as a Resource Conservation and Recovery Act (RCRA) treatment, storage, and disposal (TSD) unit to a "RCRA past practice" (RPP) unit. As such, Ecology has not provided the legal justification for not imposing the surface impoundment standards of WAC 173-303-650, the closure performance standards of WAC 173-303-610, and the groundwater protection standards of WAC 173-303-645 to the 216-U-12 Crib as a RCRA TSD.

According to the information provided by USDOE, there is no evidence that dangerous waste was not directed to the unit after July 27, 1987 (date provided in Ecology's electronic public involvement mail message dated May 18). To the contrary, the following documents and log entries provide a strong argument that adequate controls were not in place to ensure corrosive (D002) wastes, and only corrosive wastes, were not being to the 216-U-12 Crib after July 27, 1987:

1. Document entitled "Plan and Schedule to Discontinue Disposal of Contaminated Liquids Into the Soil Column at the Hanford Site" dated March 16, 1987 indicates effluent waste stream directed to U-12 included "Process condensate wastewater (cooling water, steam condensate and chemical sewer)". The significance of this item is that the wastestream(s) directed to the 216-U-12 Crib very likely should have carried more waste codes than merely D002.
2. Document entitled "Westinghouse Hanford Company Effluent Releases and Solid Waste Management Report for 1987: 200/600/1100 Areas" dated May 1988 states "At the UO3 Plant, a neutralization system for the process condensate discharge was installed; the system is designed to maintain the pH between 5 and 10". The significance of this item is that the neutralization system for the U03 Plant was installed and operated to treat dangerous waste that very likely carried more waste codes than merely D002. Such a treatment unit should have been permitted by Ecology (i.e., a Part A permit should have been filed by USDOE for the treatment unit).
3. Pages copied from log book (page 81) indicate that "operational testing" was occurring in August 1987....these tests were designed to make sure the system worked as designed. The significance of this item is that "operational testing" was occurring in August 1987 – the system cannot be ensured of operating exactly as designed. Log entries indicate there were problems. Also of significance, there is no indication that the "operational testing" addressed any aspect of the waste except the pH to address the corrosiveness. As such, "operational testing" may be concluded to have been poorly designed and inadequate.
4. Page 82 of the log book indicates a "PDA" was being prepared to reroute waste to allow work to be done on the C-5 to U-12 discharge line. The significance of this is that changes were being made to the unit in August '87. Again, clearly the design of the system was incomplete in August '87 not providing confidence that no dangerous wastes were directed to the 216-U-12 Crib.
5. Page 86 for entry on 9/29/87 indicates the pH "probe hasn't been calibrated yet" and the pH is 3.11....this is clearly below the design of the neutralization system for maintaining pH between 5 and 10. Again, clearly the design of the system was incomplete in August '87 not providing confidence that no dangerous wastes were directed to the 216-U-12 Crib.
6. Page 90 for entry on 1/4/88 indicates the TK-C5 pH controller failed to track the TK-C5 pH. Entry states: "Erratic spikes for pH 0.5 to pH 7 occurred." The entry goes on to describe how the batch was neutralized. Again, such entries do not lend confidence that neutralization system was operating as designed and that waste streams greater than pH 2.0 were <u>always</u> directed to U-12 Crib.

7. Page 91 for entry on 1/6/88 indicates the hydrogen phosphate metering pump failed and states "it took a lot of hammering to free up a stuck check valve". Again, such entries do not lend confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.
8. Page 98 for entry on 2/4/88 indicates "TK-x37 pH is running ~0.4". The entry goes on to indicate that sampling is being done of "TK-x37 when TK-C5 pumps out". Clearly, the log entries indicate the difficulty in maintaining pH between 5 and 10 of the neutralization unit.
9. Page 99 entry for 2-4-88 indicates intent to take samples every day from C-5. Where are the analytical results?
10. Page 99 entry for 2-4-88 states "no sample results from midway thru graveyard – stopped neutralization discharge 2230." Clearly, discharges were occurring without ensuring pH was maintained below 2.0. Again, such entries do not lend confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.
11. Second log book entry of 8/28/87 states "C5 pH problem" and goes on to describe "pH results from Environmental lab on weekly for 8/7/87. The Environmental compliance group called us and said they were going to notify DOE because of pH < 2. Results from process sampler, tank pH meter and portable probe all showed pH> 3.0. Re notified DOE of error Environmental lab results are for their internal use only, not official." Where are the analytical results? Why would Ecology dismiss such analytical results? Again, such entries do not lend confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.
12. Second log book entry of 9/25/87 describes a "neutralization upgrade". It appears that a "neutralization upgrade" in September '87 was necessary due to the many problems documented in the log book. Again, such entries do not lend confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.
13. Page 285 of second log book indicates an organic layer. The significance of this item is that the wastestream(s) directed to the 216-U-12 Crib very likely should have carried more waste codes than merely D002.
14. Page 291 of second log book indicates packaging of methlyene chloride. The significance of this item is that the wastestream(s) directed to the 216-U-12 Crib very likely should have carried more waste codes than merely D002
15. Page 293 indicates that the "neutralization system ATP continued". Again, because the "neutralization system" was undergoing so much testing, there is not high confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.
16. Page 295 of second log book states "caustic metering pumps would not work properly when tested by meter." Again, such entries do not lend confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.
17. Page 296 of second log book states "Started OTP on new neutralization system". Again, because the "neutralization system" was undergoing so much testing, there is not high confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.
18. See pages 299, 300, 301, 302, and 303 regarding OTP and problems associated with new neutralization system. Again, because the "neutralization system" was undergoing so much testing, there is not high confidence that the neutralization system was operating as designed and that wastestreams greater than pH 2.0 were always directed to U-12 Crib after July 27, 1987.

Clearly, from the information provided by USDOE, there is little confidence that no corrosive (D002) wastes were directed to the 216-U-12 Crib after July 27, 1987. In addition, no analytical data has been provided to support the assertion that no corrosive wastes were directed to the 216-U-12 Crib after July 27, 1987. To the contrary, there are log entries indicating that analytical data does exist which indicate non-compliance. Due to the significance of the above 18 items, it is requested that Ecology address the

numerous contradictions, concerns, and questions associated with the above 18 items in your response to this letter.

Considering the nature of the wastestream(s) directed to the 216-U-12 Crib (treated uranium oxide waste) and as described as "process condensate wastewater (cooling water, steam condensate and chemical sewer)", no evidence of proper waste designation (as per WAC 173-303-070) has been provided by USDOE to substantiate the claim that the waste was only corrosive (D002). It could be argued that USDOE's claim that the treated uranium oxide waste was only corrosive (D002) is not only ludicrous but indefensible. Considering the toxicity of the uranium oxide wastestream(s) directed to the 216-U-12 Crib, USDOE's assertion that "no dangerous wastes were directed to the 216-U-12 Crib after July 27, 1987" and Ecology's acceptance of that assertion is of significant concern. Part A permits for other Hanford Site surface impoundments include waste codes that indicate proper waste designation. Specifically, the Washington State-only waste codes of WC02, WT02, and WT01 are included on the following Part A permits: 1301-N Liquid Waste Disposal Facility lists WC02, 1325-N Liquid Waste Disposal Facility lists WC02 and WT02, and 216-S-10 Pond & Ditch lists WT01 and WT02. USDOE has not provided the basis for 216-U-12 Crib waste designation. Without USDOE's provision of proper waste designation documentation associated with wastes directed to the 216-U-12 Crib as per WAC 173-303-070, Ecology's "reclassification" of the unit as a non-RCRA-TSD is indefensible and inappropriate. Due to the significance of the very likely improper waste designation, it is requested that Ecology address waste designation associated with wastestream(s) directed to the 216-U-12 Crib in your response to this letter.

According to the information provided by USDOE, there is no evidence that the pipeline was cut and capped in 1988 as stated in Ecology's May 2 public notice. Although it can easily be argued that dangerous waste was directed to the 216-U-12 Crib after July 27, 1987, the salient point for Ecology to appreciate is that it appears Ecology is willing to accept all assertions made by the USDOE without question. Decision-making without evidence and/or basis is indefensible. Furthermore, decision-making based on contradictory information and/or blatantly erroneous information is indefensible and inappropriate.

In conclusion, Ecology's proposed "reclassification" of the 216-U-12 Crib as a "RPP" is clearly based on contradicting, deficient, incomplete, and inaccurate information and is therefore, indefensible and inappropriate. If Ecology proceeds with this classification, it may be concluded that Ecology simply does not have the will to implement the RCRA program for which it is authorized.

If you have any questions or would like to discuss this letter, I may be reached at (509) 627-1162.

Sincerely and with great concern,

Alisa D. Huckaby

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c: Todd Martin, HAB
Lea Mitchell, PEER
216-U-12 Crib Administrative Record