



0050343

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 HANFORD PROJECT OFFICE
712 SWIFT BOULEVARD, SUITE 5
RICHLAND, WASHINGTON 99352

February 25, 1999

Alisa D. Huckaby
1524 Ridgeview Ct.
Richland, WA 99352



Re: Your Letter "Response to Public Comments on Hanford's K Basins M-34 Milestones"
Dated February 15, 1999.

Dear Ms. Huckaby:

Thank you for the subject follow-up comment letter and our phone conversation on this topic on February 18th. It was clear during our discussion that you share a common concern regarding K Basins releasing hazardous substances to the environment with USDOE, EPA, and your management at Ecology who have approved and signed the M-34 change package. It is also evident that you fundamentally disagree with USDOE, EPA, and your management at Ecology over the appropriate response to those releases. The EPA does not view the questions and challenges in your letters as providing basis for changes in the remedial strategy set forth in the M-34 milestone package. In the subject letter you ask for statements or information, some of which EPA is able to address in this response letter.

In the subject letter you request that I acknowledge the existence of an assessment plan entitled "Groundwater Monitoring and Assessment Plan for the 100-K Area Fuel Storage Basins". Yes I acknowledge its existence. I have worked with its main author, Vern Johnson, for a number of years. I have also worked with the second author (Charissa Chou) on groundwater monitoring needs. Vern Johnson is an expert on groundwater in the 100-K Area. You requested "when, or if, the plan [Vern Johnson et. al.'s Groundwater Monitoring and Assessment Plan] will be required to be implemented". In fact the groundwater monitoring and evaluation prescribed in that plan was implemented, and the results are contained in Johnson et al. "Groundwater Monitoring for the 100-K Area Fuel-Storage Basins: July 1996 Through April 1998", PNNL-12023, October 1998. Your Ecology co-worker Stan Leja was on distribution for this document.

Your letter states that "considering the omission of actions to address the on-going and alarming significant environmental insult to the vadose zone, groundwater, and likely, surface water". Regarding the "omission of actions" portion of your comment, I disagree. The M-34 change control proposal is action oriented, requiring the removal of approximately 55 million curies of radioactivity from the basins, and stabilizing this material for storage and/or disposal. The radioactivity in the basins, and the basin water that carries this radioactivity into the environment towards groundwater is the cause and the problem that is remediated under M-34. M-34 remediates the contaminants in the basin. Other remedial actions will address the contaminants that have been released from the basins. Where I believe you disagree with the Tri-Parties approach, and this became very evident during our phone conversation, is that the M-34 change

package does not contain all the remedial activities for this site, and you think it should. The Tri-Parties have determined that the remaining actions for remediation of this geographic area will be in a separate legal decision document, namely the CERCLA Record of Decision for the 100 Area "Remaining Sites", in which the 100-K East and 100-K West are two of the "Remaining Sites". That was a regulatory and documentation efficiency decision that has no bearing on how or when the remedial actions at the 100-K Basins will occur.

The subject letter states "that the TPA change control proposal fails to satisfy the most fundamental ARARs". Because you expect the M-34 actions to achieve remediation of this geographic area your comment is appropriate. However because the Tri-Parties are expecting the M-34 actions to only address the contents of the basins, we have a fundamentally different concept of the ARARs that need to be met. We expect to meet all the ARARs that apply to this action as scoped in the M-34 change package.

In the subject letter you request "a copy of all documentation of the 'extensive discussions' which address inclusion of the vadose, groundwater, and/or surface water characterization and/or remediation in the work scope of the change package". I am aware of three forums for discussion of this topic, namely, (1) with USDOE and Bechtel contractors regarding if or how the K Basins should be addressed as waste sites in the "Remaining Sites" proposed plan and Record of Decision, (2) with USDOE and Bechtel contractors regarding how the K Basins should be addressed as waste sites for the update of Appendix C of the Tri-Party Agreement, and (3) with USDOE and Fluor Spent Nuclear Fuel project staff during the negotiations and dispute resolution process for the M-34 scope and schedule. Your co-workers Wayne Soper and Keith Holliday were involved in the first two of these, and Mr. Stanley was involved in the third. The product of all three of those discussions are reflected, respectively, in (1) the "Remaining Sites" Proposed Plan, (2) page C-46 of the December 1998 version of the Tri-Party Agreement, and (3) the M-34 public comment package on which you commented. EPA does not maintain "a copy of all documentation of the 'extensive discussions'" but some of the discussions are captured in meeting minutes recorded by USDOE and their contractors.

In the subject letter you request "a copy of all documentation identifying the 'cons' of addressing the above referenced on-going and alarmingly significant environmental insult to the vadose zone, groundwater, and likely, surface water in this milestone change package". Again EPA does not maintain "a copy of all" the requested information, however some of this would be available from the USDOE. The primary con was a less efficient regulatory process, which is slower and/or more expensive for no better cleanup.

In the subject letter you "request to better understand" "when the gross environmental insult to the groundwater, vadose zone, and surface water will be addressed". The single best remedial action we can do to address the issues you highlight is to conduct the work directed by the M-34 change package. In-the-field work to achieve M-34 has been under way for several years. The key milestone is the November 2000 date for start of fuel movement out of the K West Basin. Other key dates are in the milestone package.

Reflected in your letter is a correct understanding that remediation of contamination that has been released from the basins is not planned until completion of M-34 activities to remove the

contents of the basins. It is impractical and not cost effective to attempt remediation of the vadose zone directly under the K Basin(s) while they are still in use. It is also environmentally threatening to conduct earth-disturbing activities under the basins and risk rupture of drain pipes that lead out of the basins or other consequences that could accelerate leaks to the environment and confound a bad situation. I understand from your letter that you are "adamantly opposed to this prioritization of activities", namely remediation of basins prior to the releases from the basin. The EPA disagrees with your conclusion.

In the subject letter you request "an acknowledgment that the gross vadose and groundwater contamination is currently impacting what many define as 'the Hanford Reach'". The basins have leaked contaminated water into the environment. The USDOE acknowledges the two largest leaks and were mentioned in the M-34 public comment package on which you have commented. The resulting spikes in contaminant concentrations in down gradient groundwater wells (between the basins and the Columbia River) has been documented in numerous Hanford documents. This groundwater discharges to the Columbia River and carries the mobile contaminant tritium with it. Regarding "currently impacting" the Hanford Reach, the only K Basin contaminant that EPA believes may be entering the river at concentrations approaching drinking water standards, ambient water quality criteria, or other ecological or human health risk thresholds is tritium. As you know, the only practical remedial approach to tritium in groundwater is stopping the source, i.e. perform the actions directed by M-34.

The last point of the subject letter is that "statutory duties to protect the environment are not satisfied by TPA Milestone M-34". Again our different perspectives on how much scope should be included in M-34 gives rise to your conclusion. M-34 activities fulfill part of our statutory duties. The remainder will be fulfilled via other legally enforceable actions.

If you have any questions regarding this letter, please contact me at (509) 376-9884.

Sincerely,

Laurence E. Gadbois

Laurence E. Gadbois
Environmental Scientist

Enclosure: Letter, dated February 15, 1999 titled "Response to Public Comments on Hanford's K Basins M-34 Milestones", from Alisa Huckaby to Larry Gadbois, EPA.

Cc w/ enclosure:

Stan Leja, Ecology
George Sanders, DOE
Beth Sellers, DOE
Roger Stanley, Ecology
Mike Wilson, Ecology
Administrative Record; 100-KR-2