United States Government **Department of Energy**

memorandum

Idaho Operations Office

Date: March 16, 2006

Subject: Response to the Nuclear Regulatory Commission's Request for Additional Information for the Idaho Draft 3116 Determination Review (FMDP-MTPP-06-006)

References:

(1) Letter, Scott Flanders to Mark. A. Gilbertson, *Request for Additional Information on the Draft Section 3116 Determination for Idaho Nuclear and Engineering Center Tank Farm Facility (DOE/NE-ID-11226)*, dated January 10, 2006
(2) *ICP, 2006,* Response to Request for Additional Information on the Draft Section 3116 Determination Idaho Nuclear Technology and Engineering Center Tank Farm Facility, *ICP/EXT-06-01204, March 2006.*
(3) Letter, M. D. Johnson to R. B. Provencher, *Contract No. DE-AC07-05ID14516 – Idaho National Laboratory Responses to Nuclear Regulatory Commission Review of the Tank Farm Closure Draft 3116 Determination*, CCN 302318, dated March 16, 2006

To: Mark A. Gilbertson, Deputy Assistant Secretary for Environmental Cleanup and Acceleration

In close coordination with your office, responses have been prepared to a significant number of requests for additional information (RAIs) contained in Reference 1. Attachment 1 is a list of the responses that are forwarded with this memorandum. Attachment 2 contains the specific responses for your transmittal to the Nuclear Regulatory Commission (NRC), as detailed in Reference 2. The remaining responses are under development as described in Attachment 3, and my staff will continue to work closely with your office to complete these items within the next few weeks.

Also attached to this transmittal is a reference disk that provides references requested by the NRC in Reference 1, and an additional reference disk that contains new references that are cited in these responses. The RAI responses herein, and the supporting references, have been subjected to an external release review as documented in Reference 3.

Richard Provencher, Assistant Manager
Idaho Cleanup Project

Attachments

Attachment 1

List of RAI Responses Included

RAI Number
2
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Clarifying Question Number
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Attachment 2

First Set of DOE Responses to NRC Requests for Additional Information and Clarifying Questions

Attachment 3

Status of Remaining Responses Under Development

Request for Additional Information Items 1, 3, and 4, and Clarifying Requests 1 and 19

These items deal with the source term estimation for the contaminated sandpads under tanks WM-185 and WM-187 and the release modeling for these contaminated sandpads. Rather extensive additional analysis is being completed to provide an adequate response. It is planned that the results of that analysis, and the resulting draft responses, will be provided to EM by April 7, 2006.

Request for Additional Information Item 16

This RAI item requested additional sensitivity/uncertainty analysis regarding intruder scenarios. It is planned that the results of that analysis, and the resulting draft response, will be provided to EM by April 7, 2006.

Request for Additional Information Item 17

This RAI item requested DOE to calculate final waste form concentrations and declare whether they are within Class C concentrations. A draft response was sent to HQ on March 7, 2006. The draft response is currently under EM and GC review. Due to the sensitivity surrounding this response, it will likely require additional coordination with EM/GC/other field sites, and possibly the NRC, prior to transmittal to the NRC. DOE has not yet provided comments to the NRC's draft concentration averaging guidance, which has been used in developing the response, per NRC's request. It is not clear that DOE is prepared to transmit the RAI response prior to submittal of their comments on the guidance.

Clarifying Request 3

This item deals with the reducing properties of the grout mixture as described in the draft 3116 Determination, and requests additional information regarding the grout mixture constituents. Additional evaluation is being performed to allow an adequate response, which is not yet complete. It is planned that the results of that evaluation, and the resulting draft response, will be provided to EM by March 31, 2006.