



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

24772

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor  
C. Stephen Allred, Director

February 10, 2003

Ms. Kathleen Hain, Team Leader  
Environmental Restoration Program  
Idaho Operations Office  
Department of Energy  
850 Energy Drive  
Idaho Falls, Idaho 83401-1563

RE: Groundwater Monitoring Plan for the Waste Area Group 5 Remedial Action (Draft Final)

Dear Ms. Hain:

The Idaho Department of Environmental Quality (IDEQ) has completed its review of the above-referenced document and provides the enclosed comments. Both general and specific comments are provided. IDEQ received the Groundwater Monitoring Plan on January 10, 2003.

We look forward to working with your staff to address these concerns during the comment resolution period. If you have any questions regarding these remarks please contact me at (208) 373-0217.

Sincerely,

A handwritten signature in black ink, appearing to read "Ted Livieratos".

Ted Livieratos  
WAG 5 Project Manager  
IDEQ Technical Services Group

TL/jc

Enclosure

cc: Carol Hathaway, DOE-ID  
Rick Poeton, EPA Region 10  
Daryl Koch, DEQ-WMRD  
CERCLA Source File  
COF

### **GENERAL COMMENT**

- 1) The recent transmittal of the Waste Area Group 5 Fiscal Year 2003 Groundwater Monitoring Analytical Data indicates that tetrachloroethene was detected in the groundwater samples from wells ARA-MON-A-004 and PBF-MON-A-004 at concentrations of 5.1 µg/L and 5.4 µg/L, respectively. This may or may not indicate a new contaminant of concern, only future monitoring will be able to determine this fact. There is a general concern that the current WAG 5 monitoring wells are not positioned to accurately capture contaminants that may migrate from the known release sites in WAG 5. If for some reason additional monitoring wells are required, this document should include that possibility and provide some information regarding the decision logic in locating these new wells.
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### **SPECIFIC COMMENTS**

- 1) **Section 2, Paragraph 4, Page 2-7**

This paragraph incorrectly states a concentration for “the MCL and Idaho standard of 50 µg/L” for arsenic. The value is 0.01 mg/L or 10 µg/L for arsenic.

- 2) **Section 2.3, Page 2-7**

The wells being used for ground water elevation measurements should be evaluated to assess the need for additional or new borehole deviation surveys. Refined data may lead to a different interpretation of isocontours and hence ground water flow paths. After this evaluation, the appropriateness of the existing monitoring wells should be assessed. The current understanding of ground water flow directions indicates that some contaminated sites may not be adequately covered by existing monitoring wells. This understanding by IDEQ is based on assumed longitudinal and transverse dispersivities and analytical modeling to assess the potential portion of contaminant plume(s) that might be intercepted by the monitoring wells in relation to the locations of the waste sites. Post remediation data pertaining to the effectiveness of the remedial actions will factor into this evaluation of the efficacy of the current monitoring well locations as will an assessment of the need for new or additional borehole deviation surveys.

- 3) **Section 3.1.4.2, Last Sentence, Page 3-5**

Given that sufficient data are collected to demonstrate that lead levels are constant or decreasing and that no other contaminants pose a potential threat to the groundwater, the monitoring frequency may be modified or discontinued.

**4) Section 3.1.5, Second Sentence, Page 3-6**

There are five decision statements and five decision rules. Please correct the sentence.

**5) Table 3-4, Page 3-7**

Decision rules 2, 4, and 5 should include the wording in specific comment 3; i.e. monitoring may be modified or discontinued.

**6) Section 6.1.3, Table 6-2, Page 6-3**

This table indicates samples collected for NO<sub>2</sub>, NO<sub>3</sub>, and PO<sub>4</sub> analysis will not be acidified which results in a 48-hour holding time. Because some samples collected at WAG 3 exceeded the 48-hour holding time, sample acidification is recommended to extend the holding time. Please consider acidifying these samples.

**7) Appendix B, Page B-11**

As noted in the text, this well is not really suitable for use as a monitoring well. All data obtained from sampling this well should be used with discretion because of the multiple perforated sections of casing that extend over 100 feet of the aquifer below the water table. Sample results are very apt to be diluted and detections, if they occur, of contaminants should be viewed with concern. The lack of detections should not be construed, as indicating the ground water is free of contaminants at that location.