



State of Idaho

DEPARTMENT OF WATER RESOURCES

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DIRK KEMPTHORNE
 Governor

KARL J. DREHER
 Director

April 3, 2001

C. Stephen Allred, Director
 Department of Environmental Quality
 1410 North Hilton Drive
 Boise, ID 83706

Re: Injection of amendments and treated ground water into the Eastern Snake Plain Aquifer ("ESPA") in support of remedial actions at Test Area North ("TAN") OU 1-07B, INEEL

~~Steve~~
 Dear Mr. Allred:

This letter responds to the request from the Idaho Department of Environmental Quality ("IDEQ") for review of the continued remediation of ground water, under a CERCLA corrective action, at the TAN Facility on the INEEL. As a result of our review of the Draft Proposed Plan for Operable Unit 1-07B ("Proposed Plan") together with discussions with IDEQ personnel, the Idaho Department of Water Resources ("IDWR") has made the determinations described below. These determinations were made under the Waste Disposal and Injection Well provision of Chapter 39, Title 42, Idaho Code; IDWR's primacy responsibilities for the Underground Injection Control program with EPA; and in accordance with the Idaho Ground Water Quality Rule (IDAPA 16.01.11).

Extended Use of Remediation Wells for Injection of Amendments

In accordance with IDAPA 37.03.03.045.01, IDWR agrees to extending the use of remediation wells in the Hot Spot and Medial Zone for the injection of amendments to support in-situ bioremediation ("ISB") activities in accordance with the provisions of the Proposed Plan. IDWR and IDEQ concur that based on analytical simulations, the use of these wells for the extended injection of amendments in accordance with the Proposed Plan will not impact future beneficial uses of the ground water.

Extended Use of the New Injection Well for the New Proposed Treatment Facility ("NPTF")

IDWR and IDEQ concur that the proposed construction and use of a new injection well to re-inject treated water from the NPTF is needed to support continued remedial activities if the following criteria are met:

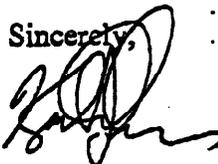
- Chemical contaminants will not be injected into the ESPA at concentrations greater than existing concentrations in the receiving aquifer or the MCL for each chemical contaminant in accordance with Rule 50.02.a.i. of the Waste Disposal and Injection Well Rules (IDAPA 37.03.03);
- Contaminants of radionuclides to be re-injected into the ESPA, which remain in the treated water from the NPTF, will not exceed the MCL for these constituents;
- Purge water and/or well construction water, which may be above MCL for chemical contaminants and/or radionuclides, will be blended over time into the NPTF flow stream such that MCLs for these constituents will not be exceeded at the point of injection;
- Should radionuclides increase significantly in the monitoring wells immediately upgradient of the NPTF extraction well(s), the frequency of the sampling cycle of the monitoring wells will be re-evaluated and increased to determine potential modifications to use of the re-injection well;
- DOE will monitor for radionuclides at the injection port on a monthly basis, and if radionuclides are detected at 75 percent of MCL at the injection port, monitoring well TAN 48 will be sampled monthly and wells TAN 47 and TAN 50 will be sampled quarterly for a minimum of one year.

Understanding of Remedial Action Requirements

- (1) This agreement for the extended use of remediation wells for the long-term injection of amendments to support remedial action activities, and the use of the new re-injection well to dispose of water extracted from Medial Zone extraction wells, is based on the understanding that DOE will continue to comply with the monitoring plan in accordance with the Record of Decision (ROD) and that concentrations of hazardous constituents and radionuclides will not exceed MCLs beyond the remediation time frame as defined in the ROD (2095).
- (2) Institutional controls will be established by DOE around the plume boundary, as determined by the present 5µg/l isocontour, and will be extended to account for an approximate 30 percent expansion along the leading edge of the plume to prevent potential exposure to current and future beneficial uses. These institutional controls shall remain in place for the duration of the remediation activities.

- (3) IDEQ agrees to provide copies of pertinent ground water monitoring documents to IDWR related to injectate sampling and associated monitoring wells.
- (4) It has been determined that the proposed injection well will be classified as a Class V well. This determination is based on the premise that no hazardous waste or radioactive waste as defined in 40 CFR, Part 261, or 40 CFR, Part 20, respectively, will be placed into the injection well.

This response is based on information DOE has submitted in accordance with the criteria set forth in the INEEL Federal Facilities Agreement and Consent Order and CERCLA, 42.U.S.C. 9621 (e)(1). Under these criteria, DOE's uses of injection wells associated with the aforementioned remedial activities are exempt from the procedural requirements of the Idaho Waste Disposal and Injection Well Program and the Underground Injection Control Program, for which Idaho has been granted primacy by the EPA. This agreement recognizes that provided DOE satisfies the conditions stated herein, DOE will have satisfied all applicable, relevant, and appropriate standards, requirements, criteria, and limitations which would have been required under the Idaho Waste Disposal and Injection Well Program and Underground Injection Control Program.

Sincerely,


Karl J. Dreher
Director

c: W. Pierre, EPA Region 10
K. Hain, DOE - ID
D. Nygard, DEQ - WMRD
M. Jeffers, DEQ - Tech. Services
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