



July 24, 1991

0025073

Reply To  
Attn Of: HW-074

Elizabeth A. Bracken, Director  
Environmental Restoration Division  
Department of Energy  
Richland Operations Office  
P.O. Box 550 (A5-19)  
Richland, Washington 99352

Re: Hanford Federal Facility Research, Development and  
Demonstration Permit

Dear Ms. Bracken:

The U.S. Environmental Protection Agency (EPA) Region 10 recently held discussions during July 1991 with the Department of Energy-Richland Operations Office (Energy) and the Washington State Department of Ecology (Ecology) regarding the Hanford Federal Facility Research, Development and Demonstration (RD&D) Permit. Energy has indicated that this RD&D Permit is required to support the 242-A Evaporator/PUREX Condensate Treatment Facility, Project C-018H. Energy has also stated that if the RD&D Permit is not issued by January 1992, its ability to cease untreated discharge of certain Phase I liquid effluent streams to the soil by June 1995 will be in jeopardy.

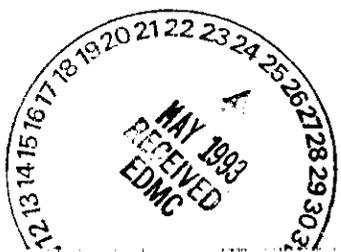
EPA is required to follow a specified process to issue any permit, including a RD&D Permit. As we have stated to your staff on recent meetings on this subject (July 9, July 19) we cannot begin that process until we receive the RD&D Application. If we had the RD&D Permit Application in hand we believe the earliest we could issue a final permit would be May 1992. Therefore Energy should submit the RD&D Permit Application as soon as possible.

In addition EPA strongly recommends that Energy submit a Research Proposal as outlined in the OWSER Policy Directive 9527.00-1A, Guidance Manual for Research, Development, and Demonstration Permits Under 40 CFR Section 270.65, EPA/530-SW-86-008, July 1986. The Research Proposal should address the following: (1) purpose of the research, (2) explanation as to why the proposed activity is experimental or innovative (reference other similar or approved technologies or processes for treating hazardous or non-hazardous waste and how the proposal differs from these), and (3) description of the research (the level of detail will vary depending on the type and scope of the research). Please provide a copy of all correspondence on this

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issue including the Research Proposal and RD&D Permit Application to Ecology.

If any additional information is required, please contact Daniel Duncan, Hanford RCRA Program Manager, at (206) 553-6693/ FTS 399-6693.

Sincerely,



Michael E. Gearheard, Chief  
Waste Management Branch

cc:

Paul Day, EPA  
Cathy Massimino, EPA  
Timothy Nord, Ecology  
Paul Stasch, Ecology

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Department of Energy

Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

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91-EAB-185

Mr. Dan L. Duncan  
U.S. Environmental Protection Agency  
Region 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Mr. Duncan:

INITIAL NOTIFICATION FOR SEEKING A RESEARCH, DEVELOPMENT, AND DEMONSTRATION (RD&D) PERMIT FOR THE PILOT PLANT OPERATIONS

To expedite the determination of requirements to obtain a RD&D permit for pilot plant operations, the U.S. Environmental Protection Agency (EPA) is requested to review the following information. If the EPA agrees that the project meets the criteria for an RD&D permit, please notify the State of Washington Department of Ecology of your decision as detailed in the "Guidance Manual for Research Development and Demonstration Permits Under 40 CFR Section 270.65" (EPA/530-SW-86-008). It is critical that this pilot plant have an approved RD&D permit in place by the earliest possible date.

A flexible, permitted pilot plant will have a broad range of uses for evaluating advanced technologies needed in the treatment of the site-wide effluent streams. Future uses of the pilot plant could include developing the treatment technology for groundwater remediation and aquifer testing efforts for the 300 Area effluents, for purgewater treatment, and for the remaining 16 phase one effluents. Additional pilot scale testing could also help in the determination of filtration system upgrades for existing facilities.

Initial pilot plant testing activities are required to support the process design and the delisting of the wastewater stream of the 242-A Evaporator/PUREX Plant Condensate Treatment Facility which will be operational in late 1994. The treatment facility will use treatment technologies combined in a non-standard configuration to treat wastes with unique characteristics. Prior to disposal, the effluent must meet federal delisting criteria. Therefore, the pilot scale testing is essential to the successful design and operation of the treatment facility.

This phase of the pilot plant work will evaluate the treatment facility unit operations using a synthetic feed and switching to actual process condensate after the restart of the 242-A Evaporator, scheduled for January 1992. PUREX process condensate will not be available during this testing program because the PUREX plant is on standby status. Details of the test program can be found in the "Treatability Test Program Plan for C-018H Project" (WHC-SD-C018H-PPT-001 REV 0) (Attachment). Please note that the majority of the pilot plant equipment will be sized at 5 gpm. This volume is necessary because it is the minimum size of commercially available equipment. Also, the 5 gpm rate is necessary to obtain reliable engineering data to fulfill the intent of the testing.

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Mr. Dan L. Duncan

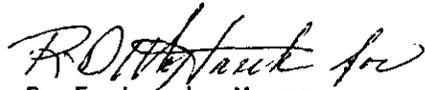
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If you have any questions regarding this action, please contact  
Mr. C. E. Clark of DOE Field Office, Richland, on (509) 376-9333, or  
Ms. S. M. Price of the Westinghouse Hanford Company on (509) 376-1653.

Sincerely,

ERD:CEC

E. A. Bracken, Director  
Environmental Restorations Division  
DOE Field Office, Richland



R. E. Lerch, Manager  
Environmental Division  
Westinghouse Hanford Company

Attachment  
Treatability Test Program Plan  
for C-018H Project

cc w/o att:

P. T. Day, EPA  
R. E. Lerch, WHC  
T. M. Michelena, Ecology  
P. R. Stasch, Ecology

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