



START

Department of Energy

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

9103488

0015340

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

-2-

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,

E. A. Bracken

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

ERD:CEC

R. E. Lerch

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, EPA~~

T. M. Michelena, Ecology

P. R. Stasch, Ecology

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 Ref. #9154195

Subject: INITIAL NOTIFICATION FOR SEEKING A RESEARCH, DEVELOPMENT, AND
 DEMONSTRATION PERMIT FOR PILOT PLANT OPERATIONS

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