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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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June 16, 1992

Mr. Ron D. Izatt
United States Department of Energy
P.O. Box 550
Richland, WA 99352



Re: 200 Area Treated Effluent Disposal Site Characterization Work Plan,
Project W-049H (M-17-08)

Dear Mr. Izatt:

We have reviewed your "200 Area Treated Effluent Disposal Site Characterization Work Plan, (Project W-049H)". This is a well prepared report. We need only a few modifications to satisfy our needs. We have the following comments:

The groundwater modeling has produced the maps on pages 37-40, that assume the extremes of discharge. These maps indicate that groundwater flow is affected by aquifer characteristics alone, without any influence from the rate of discharge. We would suggest that intermediate discharge volumes be modeled, to confirm that discharge is without influence in the characteristics of the groundwater mound.

An accelerated testing program (monthly sampling) needs to be implemented now to fully characterize the chemical makeup of the groundwater beneath the disposal site. Past data from the nearby wells is outdated. Special attention should be given to tritium content, the critical element in this disposal stream. If necessary to obtain rapid results, an outside laboratory should be used.

We believe that only two of the three proposed test wells be drilled initially. These two wells should be taken to bedrock as proposed. The remaining well or wells would be better postponed until significant data have been obtained from the first two wells. After significant data has been obtained from these wells, two additional shallow wells should be drilled for the primary purpose of locating and measuring the depth of the clay or caliche layer above the bedrock. Should any questions remain after this program, additional wells should be drilled to answer them.

An aquifer testing plan should be submitted to address such issues as purge water disposal, possible spread of contaminants, and the establishment of observation wells.

Ron D. Izatt
Page 2
June 16, 1992

Each step of this work plan should be taken in close cooperation with the staff hydrogeologist from Ecology's RCRA Unit. This will allow maximum flexibility of approach as the exploration continues.

To complete this study, sampling should be done in wells near the old Hanford townsite to demonstrate that the effluent plume from this disposal facility does not move toward the river by the shortest distance (toward the townsite).

If you have any questions about this letter, please call Krystyna Kowalik at (206) 438-7526.

Sincerely,


Gary Anderson, P.E.
Environmental Engineer 3
Nuclear and Mixed Waste Management

GA:jw

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Subject: 200 AREA TREATED EFFLUENT DISPOSAL SITE CHARACTERIZATION WORK PLAN,
PROJECT W-049H (M-17-08)

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