



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

November 19, 1990



START

Steven H. Wisness, Hanford Project Manager
U.S. Department of Energy
P.O. Box 550
Richland, Washington 99352

Re: Tank Integrity Assessment

Dear Mr. Wisness

We have reviewed the "Integrity Assessment Plan for 241-AW Tank Farm and Designated Ancillary Equipment" (Document 1) and "Double Shell Tank Ancillary Equipment Secondary Containment Evaluation" (Document 2). The significant items that we feel are deficient are as follows:

Document 2 states that engineering change notices (ECNs) were not reviewed in identifying the various ancillary items to be evaluated. Our experience with construction at Hanford so far indicates to us that the basic construction plans are too sketchy for any use. It would appear that the only significant documents relating to the actual makeup of a project are the ECNs.

We feel that a better seal of the various lids on the process pits could be obtained by using something other than aluminum tape (duct tape?). (Document 1)

It is not clear to us how many penetrations to the annular tank spaces are actually present. Document 1 proposes the use of two of these penetrations for CCTV testing. The furnished plans of the double shell tanks show three penetrations on one plan view. Page 4 of Document 1 mentions annular penetrations for six functional uses without saying if some of these functions use the same penetration.

It does seem possible to use more than the proposed pair of annulus access risers to inspect the annular space.

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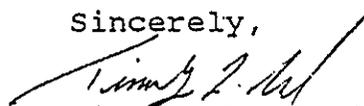
Given the serious consequences of a leak in the inner tank wall it would seem that the proposed CCTV inspection is both limited in coverage and superficial in significance. The purpose of an integrity assessment is to anticipate failure rather than to react to catastrophe.

We have seen literature describing one device that would allow ultrasonic testing of the tank wall and have a reputable report of another device to do the same thing. Since DOE undoubtedly has access to the most knowledgeable robotics engineers in the world, surely they can solve the problem of access to the annular space for 100 percent ultrasonic testing of the tank walls.

The rest of these reports are thorough, well conceived and technically correct. We agree that literal compliance with the regulations might entail unacceptable risks from radiation exposure.

Should you have any questions regarding this letter, please contact Mr. Gary Anderson of my staff at (206) 438-7558.

Sincerely,



Timothy L. Nord
Hanford Project Manager

TLN:ga

cc: Dan Duncan, EPA
Tim Veneziano, Westinghouse



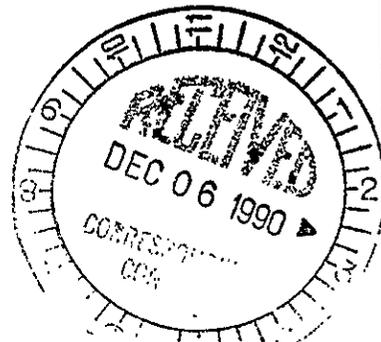
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