



SIERRA CLUB

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May 17, 1979

Charles J. Haughney
Reprocessing and Recycle Branch
Division of Fuel Cycle and Material Safety
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

50-201

Dear Mr. Haughney:

Thank you for sending the NRC "Evaluation of the Safety Associated With the Defect in the Pan 8D-2 at West Valley, New York" dated March 29, 1979. We find the document entirely inadequate in assessing the safety of the present condition of tank 8D-2. Several statements in the "evaluation" have not yet been substantiated and therefore assurance cannot be provided that the high level waste facility is safe. No seismic analysis provided to the public has shown that the tank can withstand a 0.2g earthquake. No credible scenario has been laid out in the event the tank does leak.

Concerning seismic competence of the high level waste tank, there is reason to believe that the tank cannot withstand a 0.2g earthquake. As you are aware, the tank is free-standing on perlite blocks; the entire vault sits on a concrete slab on mud, without piles to bedrock. It is expected that the entire facility would shake severely under a 0.2g earthquake. The vault is already cracked since the flotation incident. We expect that the tank would shift around on the perlite blocks until it struck one of the internal vault support columns. It seems unlikely to us that this movement would not split the tank. Your report alludes to a report, not yet published, which shows that the facility can withstand a 0.2g earthquake. We eagerly await your analysis which was due this Spring.

In the event of a tank leak, it cannot be presumed that the leak would be small simply because leaks at Savannah River have been small. The conditions are not identical. At Savannah River, the space between the vault and the tank is ventilated, allowing the high level waste to dry to a salt cake, and each hole to self-heal. At Nuclear Fuel Services, this space is humid. Were a leak to occur, the supernate could be pumped to tank 8D-1 within a two week time period. But then, what would happen to the remaining sludge in tank 8D-2? As you know, this sludge contains the bulk of the radioactivity in a much smaller volume. We believe that it would heat up, possibly to 400°C, drive off the remaining water and degrade the tank and concrete vault. We have seen no analysis by the NRC staff of the detailed scenario, including decommissioning, for the case of a leaking tank.

We have thought for some time now that this high level waste situation is bordering on the edge of a major catastrophe. Properly based findings concerning the safety of the high level waste facility were not made by the AEC when the

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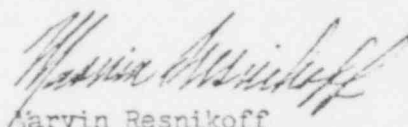
construction permit and license were issued, and are not being made now by the NRC. There is a difference between providing, with words, "added assurance regarding the safety" (your memo of Jan. 23, 1979), and actually providing that safety.

We believe that a proper regulatory body would require NYS to remove and solidify the material from the high level waste tank as soon as possible. Since NYS, the AEC and the State of New York, have set up this potential hazard, the costs to remedy this situation ought to be shared.

If the points raised in this letter concerning the safety of the high level waste situation are without merit, we expect a careful analysis showing why this is so. Otherwise, we expect that your analysis will take these points into account. If the situation is hazardous, we expect you to take immediate action to protect the health and safety of the public.

cc: Lundine
Nowak
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LaFalce
Ambro

Sincerely,



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