



March 27, 2009

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I. INTRODUCTION AND SUMMARY

The purpose of this letter is to ask some questions about the 2007 and 2006 Hanford Site Environmental Reports (II. below) and explain the position of the Washington Chapter of Republicans for Environmental Protection (WAREP) with respect to Hanford Clean-up Priorities (III. below). WAREP has adopted Hanford Clean-up as our number one focus. It is important, however, that we have a clear understanding of the activity flow to decide how to pursue that focus and, thus, the questions in Section II. below. Our primary present concern is that the transfer of dangerous waste from single shell to double shell tanks is taking place too slowly to assure the public that a catastrophic discharge into the Columbia River of such waste is remote. We hope you can provide verifiable evidence that is not the case so we can redirect our efforts if so.

II. QUESTIONS ABOUT 2007 AND 2006 REPORTS

A. Overall Approach

Exhibit II-A to this letter is a copy of the 2007 Hanford Site Waste Summary with 2006 report results entered by me in the far right column for comparison purposes. Most of the questions below are based on this summary, as I believe it is the best single page in both reports. While there is always some danger in summarization, working with summaries does allow those with less technical backgrounds to reflect on the progress evident and flow of activity. I want to take this opportunity to commend your efforts in providing the annual site reports and state that the comments in this letter should in no way be interpreted to detract from the diligent efforts of the many professionals who collaborate to produce them.



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B. Questions Regarding Waste Summary

1. The waste volume in single shell tanks at the end of 2006 was 30.0 million gallons. The 2007 report shows 1.1 million gallons pumped into double shell tanks from single shell tanks, so I would have expected 28.9 million gallons left in single shell tanks. However, the 2007 report indicates there are 29.8 million gallons in single shell tanks at the end of 2009. Are other materials going into the single shell tanks (if so, please describe), is there a typo in the report or is there some other reason why the math does not seem to work in this comparison?
2. Why did the volume in double shell tanks not change between 2006 and 2007 (27 million gallons) when 1.1 million gallons were pumped into them from single shell tanks? Apparently, there are some other reductions in the double shell tank volume, so we would like to know what they are in case they could be accelerated to allow for more space for single shell tank contents. I think at least part of this is due to evaporation activity, so we would like a description of that activity's ability to absorb more waste plus any other activities that might reduce tank volume more quickly.
3. Depending on the actual single shell draw-down rate in 2007 (1.1 million gallons or 200,000 gallons, depending on the answer to II.B.1. above), it would take 27-144 years to completely empty all the single shell tanks. How does that compare with the expected remaining lives of those single shell tanks? It seems a major failure of them and dangerous release of waste is more than a remote possibility.
4. In the 2006 report, there was a line item in the summary for "solid wastes received at Hanford from off the site" indicating 168 tons of mixed waste and 79 tons of radioactive waste had been received in 2006. That same line item does not appear in the 2007 report, so we are wondering why it was omitted and what quantities of each type of waste were received in 2007, so please let us know the answer to that question. Also, please let us know the nature and source of the off-site waste received in 2006 and explain how its disposal at Hanford was consistent with the moratorium on off-site waste under DOE's legal settlement with Washington State.



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III. WAREP POSITION ON HANFORD CLEAN-UP PRIORITIES

- A. The primary position of WAREP, subject to your responses to II. above, is that protecting the Columbia River from dangerous waste discharge should be the number one focus of the clean-up effort. Resources should be redirected to that end, even if it means re-allocations from other clean-up priorities. Budget constraints have slowed the entire clean-up process down considerably, leaving the danger that we may run out of time before some catastrophic environmental event occurs. Our present belief is that significant acceleration of transfer of waste from single to double shell tanks is necessary to avoid such a catastrophic event in the form of radioactive pollution of the entire Columbia River system downstream from Hanford.
- B. A corollary position of WAREP is that no new radioactive or mixed waste should be received or stored at Hanford until the single to double shell transfer rate is accelerated as set forth at III.A. above and all other tri-party agreement schedules for clean-up are on track. Otherwise, the new waste simply compounds the problem and makes attaining an acceptable clean-up rate even more difficult.
- C. Another corollary position of WAREP is that the Low Activity Waste (LAW) vitrification process (the assumed primary long term solution to the waste issue) should not be delayed until 2019 (as proposed by DOE) but rather be targeted for 2013 and 2014 commencement as contemplated by the present Tri-Party agreement.

We appreciate your assistance in answering our questions. Please feel free to call if you have any questions.

Washington State Chapter
Republicans For Environmental Protection

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Enclosures

cc: National Office
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Exhibit II-A
(to 3/27/09 Letter)

Summary

Table S.3. Hanford Site Waste Summary, 2007

Activity	Waste Type	2007 Amount	2006 Amount
Solid waste generated during onsite cleanup activities	Solid mixed waste	235,378 kilograms (259 tons)	315,188 (347)
	Radioactive waste	299,701 kilograms (330 tons)	465,340 (513)
Dangerous waste shipped off the Hanford Site	Containerized waste	47,979 kilograms (53 tons)	18,700 (21)
	Bulk solids	0 kilograms	0
	Bulk liquids	96,653 kilograms (107 tons)	917 (1)
Waste volume pumped from underground single-shell waste storage tanks to double-shell waste storage tanks	Liquid waste	4.3 million liters (1.1 million gallons)	2.9 (780,000)
Waste volume in underground single-shell waste storage tanks at the end of 2007	Liquid waste	113 million liters (29.8 million gallons)	113.6 (30.0)
Waste volume evaporated at the 242-A Evaporator	Liquid waste	4.5 million liters (1.2 million gallons)	902,000 (238,000)
Waste added to underground double-shell waste storage tanks	Liquid waste	5.9 million liters (1.6 million gallons)	3.5 (937,000)
Waste volume in underground double-shell waste storage tanks at the end of 2007	Liquid waste	101 million liters (27 million gallons)	101 (27)
Waste dispositioned and shipped offsite from the Waste Receiving and Processing Facility	Solid waste	691 cubic meters (904 cubic yards)	586 (76.7)
Waste treated or directly disposed of at the Mixed Low-Level Waste Treatment and Disposal Facility	Mixed low-level solid waste	1,460 cubic meters (1,910 cubic yards)	988 (1,292)
Waste disposed of at the Environmental Restoration Disposal Facility	Solid waste	398,500 metric tons (439,300 tons)	475,792 (524,474)
Volume of aqueous waste received at the Liquid Effluent Retention Facility	Wastewater containing low levels of organic compounds and tritium	38.3 million liters (10.1 million gallons)	7.08 (1.87)
Volume of liquid effluent treated at the Effluent Treatment Facility	Wastewater containing toxic metals, radionuclides, ammonia, and organic compounds	32.9 million liters (8.69 million gallons)	15.6 (4.13)
Volume of wastewater treated at the 242-A Evaporator	Liquid waste from single-shell tanks	7.8 million liters (2.1 million gallons)	2,095 (553,400)
Volume of effluent disposed of at the 200 Area Treated Effluent Disposal Facility	Uncontaminated liquid waste	1.31 billion liters (346 million gallons)	765.3 Mill (202.2)
Volume of wastewater treated and disposed of at the 300 Area Treated Effluent Disposal Facility	Industrial wastewater	168 million liters (44.4 million gallons)	139.5 36.87