

Tri-Valley CAREs

Communities Against a Radioactive Environment

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*Peace Justice Environment
since 1983*

March 11, 2010

TC & WM EIS
P.O. Box 1178
Richland, WA 99352

Re: Comment on Draft Tank Closure & Waste Management Environmental Impact Statement (TCWMEIS)

To Whom It May Concern:

Tri-Valley CAREs (TVC) is a non-profit organization founded in 1983 by Livermore, California area residents to research and conduct public education and advocacy regarding the potential environmental, health and proliferation impacts of the Department of Energy's Lawrence Livermore National Laboratory. On behalf of our 5,600 members, Tri-Valley CAREs submits the following comments on the Draft Tank Closure & Waste Management Environmental Impact Statement (TCWMEIS) for the Hanford Nuclear Reservation.

The Hanford Site is a nuclear production complex on the Columbia River in Washington. Today, Hanford is already the most contaminated site in the Western Hemisphere. Yet, the U.S. Department of Energy (DOE) proposes dumping even more radioactive wastes, endangering public health and environment. The draft TCWMEIS evaluates the environmental impacts of DOE's preferred alternatives for cleanup and of using Hanford as a national mixed and low level radioactive waste dump, once vitrification plant is "operational." This preferred alternative presents unacceptable risks. In drafting the TCWMEIS, DOE blatantly ignores the public's interest, fails to analyze reasonable alternatives, and proposes to make Hanford a national radioactive waste dump without fully cleaning up the existing contamination.

I. The Proposed Alternative Results in an Unacceptable Level of Contamination to the Local Environment

Over a million gallons of deadly liquid High-Level Nuclear Waste have already leaked out from Single Shell Tanks (SSTs), contaminating the groundwater and heading towards the Columbia River. In order to further prevent this High-Level Nuclear Waste from leaking out of SSTs, DOE proposes to remove 99% of tank wastes. While this "preferred alternative" will reduce the level of future contamination, removal of only 99% of tank wastes will not significantly decrease existing contamination. Under DOE's preferred alternative of removing only 99% of the tank wastes, cancer risk from groundwater contamination would be 50 times the State's cancer risk standard! Granted that removal of 99.9% of tank wastes will still be 10 times the State's cancer risk standard, there is a significant reduction of cancer risk if DOE were to remove 99.9% of tank wastes. Therefore, we recommend that DOE remove 99.9% of tank wastes in order to significantly decrease groundwater contamination.

II. The DOE Must Remove the Tanks and Investigate and Remediate the Soil Contamination Already Emanating from Tank Leaks

There is 35 million gallons of High Level Nuclear Waste stored in the oldest SSTs. Over a million gallons has already leaked. Further, billions of gallons of waste have been discharged from tanks into the soils near the SST “tank farm.” This poses a significant environmental and health risk, since contamination from these tank leaks is spreading rapidly through the soil to the groundwater and is moving towards the Columbia River. The risk of cancer, as a result of groundwater and soil contamination, is increasing significantly and will only grow worse over time. This dire problem requires only one solution: that DOE remove the SSTs and clean up the soil contamination in SST tank farms. However, the TCWMEIS does not reflect that DOE understands the serious negative repercussions that may result from SST leaks, and fails to provide an effective solution to this problem. DOE’s preferred alternative makes no mention of cleaning up the contamination; instead, DOE proposes to leave forever the bulk of the contamination from SST leaks and deliberate discharge along with the SST themselves under dirt caps. Without cleaning up the present contamination and preventing future SST leaks, the contamination will continue to spread, and result in serious environmental and health risks to those not only living in the surrounding areas, but also to those living hundreds of miles away (especially if the contamination spreads to the Columbia River). Therefore, we recommend that DOE remove the SSTs and investigate and remediate the soil contamination from SST leaks. “No Cleanup” of the leaked waste is an unacceptable standard.

III. Proper Treatment of Hanford’s High-Level Nuclear Waste

The 53 million gallons of liquid High-Level Nuclear Waste at Hanford needs to be treated and turned into a stable glass form, through a process called Vitrification. The current vitrification plant, Waste Treatment Plant (WTP), is still under construction, and will have the capacity to treat only half of the volume of Low Activity Waste (LAW) from the tanks. Decision on how to treat the other half of LAW waste is pending. DOE’s preferred alternative proposes to wait until after 2015 to make this critical decision of either using vitrification, or using supplemental treatment options, like steam reforming, bulk vitrification, or cast stone to treat LAW. The implications for waiting until 2015 means that the radioactive waste will continue, thereby increasing the already grim problem of soil and groundwater contamination. Further, the supplemental treatments have significant drawbacks, particularly for future contamination of groundwater and cancer risk if LAW is buried in a landfill at Hanford. Therefore, we recommend that DOE should start funding a second LAW facility in 2012 in order to have it ready to operate by 2022. Further, DOE should discard the supplemental treatment option since they are less effective and less protective of the environment.

IV. How and Where to Dispose of Radioactive and Hazardous Waste

DOE proposes two “waste management” alternatives for waste generated from on-site cleanup activities, both of which include using Hanford as a national waste dump when DOE operates the vitrification plant. DOE proposes to dispose of all the wastes in the currently existing 200 East landfill (and not construct a second landfill at 200 West), which will add 3 million cubic feet of radioactive and radioactive toxic waste. The TCWMEIS, however, fails to include an alternative of not using Hanford as a national radioactive and mixed radioactive waste dump. Even without using either landfill as a national radioactive and “mixed” radioactive hazardous waste dump, DOE’s analysis shows that either landfill location will cause high contamination and cancer risks for thousands of years! Using the 200 East landfill at Hanford as a radioactive and hazardous waste dump will increase radioactive contamination and cancer risk levels over the next thousand years by tenfold, to 100 times WA State’s cancer risk standards for toxic cleanup sites! In order to prevent this unacceptable increase in contamination and cancer risk levels, we recommend that DOE consider not using Hanford as a waste dump site. Further, DOE should limit wastes in Hanford landfills to amounts and types of Hanford clean-up wastes which will not cause future leakage and violate cancer risk standards.

V. Risks of Transporting Radioactive Waste to Hanford

DOE proposes trucking nearly 3 million cubic feet (or more than 2 trucks a day, every day for twenty years) of radioactive and “mixed” radioactive wastes to Hanford under its preferred alternatives. This has severe negative implications for the public since they will be exposed to the radiation from the trucks along the routes. These shipments of radioactive waste cause fatal cancer in the communities along the truck routes that would be greatly compounded by a reasonably foreseeable traffic accident or terrorist attack involving one of the trucks, especially in a population center. Such event would result in hundreds of square miles of contamination, evacuation of those areas, and over a thousand fatal cancers.

In addition, the draft TCWMEIS fails to address several important questions regarding the routes for the transport of radioactive wastes. For example, will there be radioactive waste transported from California? If so, when will the waste from CA be shipped and what routes will be taken to transport this waste? Will shipment of waste from CA be examined in a separate NEPA document? Will there be public hearings on shipments of waste from CA to Hanford?

VI. Final Thoughts

Cleanup of the Hanford Nuclear Reservation is essential to prevent the spread of contamination, which currently endangers public health and environment in Washington and beyond. Further, existing wastes will create so much contamination that adding more waste is unconscionable. Therefore, DOE needs to analyze additional sites and strategies besides using Hanford as a national radioactive waste dump site. Implementing the preferred alternatives would set a dismal precedent for dealing with future radioactive waste. Thus, this decision has significant impacts on other DOE operated facilities around the country, including our local site, Lawrence Livermore National Laboratory.

We look forward to the agencies response to our concerns and questions and a more thorough alternatives and analysis in the final TCWMEIS. Thank you for your consideration.

Sincerely,

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