

**Center for Health, Environment and Justice
Citizens Campaign for the Environment
Citizens' Environmental Coalition
Coalition on West Valley Nuclear Wastes
Environmental Justice Action Group of WNY
New York Public Interest Research Group
Nuclear Information and Resource Service
Save the Pine Bush
Sierra Club Niagara Chapter**

March 24, 2011

Bryan Bower, Director
US Department of Energy
West Valley Demonstration Project



Paul Bembia, Director
West Valley Site Management Program
New York State Energy Research and Development Authority



Re: Comments on West Valley Phase I studies and process

Dear Directors,

In these comments we have provided detailed recommendations for:

- 1) improving the public participation process and agency responsiveness to public input as we move forward with all West Valley site activities and studies
- 2) additional Phase I studies.

First we must address the problematic Environmental Impact Statement (EIS) process we have just been through. This discussion clarifies the essential nature of improving the public participation process for Phase I studies and all site activity. Part I of these comments will address this issue.

Part I

Bryan Bower and other US Department of Energy (DOE) representatives continue to convey the following two statements:

1) The Agency rationale for a "phased approach" was that it enabled a way forward on immediate cleanup tasks, while providing additional time for completion of studies in Phase I. The Agency said that it did not have enough information to make decisions now about Phase II and that these studies would be essential to future agency decision-making.

2) The 2010 EIS contained enough information for the Agency to make all future decisions including Phase II cleanup decisions.

Both of these statements have been made in writing in the final EIS and other DOE materials. Since they are contradictory, both of these statements cannot be true.

Other relevant issues:

- The EIS was focused primarily on Phase I site activities related to 1-2% of radioactive materials on site, that have not been processed in some way. Decommissioning also focused entirely on Phase I, as did the US Nuclear Regulatory Commission's (NRC's) review.
- A primary function of an EIS is to collect sufficient information so that a detailed environmental analysis can be prepared and provided to the public and elected officials. Without adequate information, a complete environmental analysis could not be performed. The Agency, in choosing the phased approach to allow for additional studies, therefore admitted to the inadequacy of information.
- Long-term analysis of containment of radioactive materials at this erosion prone site was incomplete and inadequate. In addition, during the EIS public comment period, the US Environmental Protection Agency (EPA) sent a letter highlighting that West Valley would need to store radioactive materials for a longer time frame and that the Final EIS should discuss 40 CFR 191 (refers to Code of Federal Regulations) as the appropriate standard for the WNYNSC site. EPA's comments have not been addressed.

Extensive and meaningful public participation assumes much greater importance in this situation given that the EIS provided only a brief summary of Phase I studies. Thousands of substantive comments were also submitted on the EIS - and yet only one change was made - a reduction in the time period for Phase I to 10 years.

We believe that DOE must honor the commitment made by DOE and Ines' Triay for meaningful public participation in all studies and physical site activities as the agency moves forward.

We also believe that a second EIS will be necessary because of all of the information collection activities that will be undertaken for the Characterization, Sampling and Analysis Plan (CSAP) and for all Phase I studies. All of these studies will provide new information, a key criterion for an environmental impact statement under the National Environmental Policy Act (NEPA). A Supplement Analysis merely presumes enhancements to existing study information, and provides for inadequate public participation. Under the current situation, a supplemental analysis cannot possibly be sufficient. In addition, the longer term analyses recommended by EPA including compliance under 40 CFR 191 must be undertaken.

It should be noted that the New York State Energy Research & Development Authority (NYSERDA) is planning for a second EIS as part of its obligation to deal with the State Disposal area (SDA).

Part II Essentials of Public Participation

A. Information

- 1) Advance notice of at least one month for public meetings to allow full attendance (except in the case of the need for an emergency meeting). Notice should include proposed agenda topics. The public should also have the opportunity to suggest agenda topics.
- 2) Webcasting and teleconferencing of all meetings with provision of documents in advance to the extent they are available, at the meeting to all in person, or online, and posted to a website prior to the meeting. The webcast of the meeting and all documents should be posted online for future reference and for those that could not attend.
- 3) Timelines need to be prepared that enable the public to understand the cleanup steps and their order. Regular status updates should be provided to the public regarding the physical activities at the site as well as the planning activities for many different projects and studies. As agency plans and/or the timelines are altered, revised versions should be made available and posted to the website.

We recommend two timelines:

- one for all studies including the CSAP, and
- one related to physical cleanup activities.

The timelines can use brief descriptions for purposes of the timelines but fuller narrative descriptions should accompany the timelines. Progress reports should be provided at every meeting. Regular updates to the timelines should be done with notation of revision date.

- 4) A Summary Overview is particularly important to inform the public adequately of what is going on. NYSERDA's Independent Expert Review Team said, "*The complexity of the West Valley site and the plan for its decommissioning make it very difficult to construct mentally a complete and coherent strategic overview of the Decommissioning Plan. Such an overview is necessary to determine how all the elements are integrated and whether all significant gaps have been identified. In the absence of such an overview as part of the DP, the reviewers must provide their own interpretation of the integrated plan from descriptions of individual plan elements. A narrative or graphic that would aid in this effort would make the entire plan much more transparent.*" See Review of US Dept of Energy Responses to the US Nuclear Regulatory Commission Requests for Additional Information on the West Valley Demonstration Project Phase I Decommissioning Plan, prepared for NYSERDA, December 14, 2009.

We will have many experts from different fields reviewing Phase I studies and making recommendations. To facilitate their work we support this recommendation. We also note that a Summary Overview would be very helpful for the public.

- 5) Funding adequacy for the planned activities is a key public concern. We need information about what \$60 million will fund -- at a minimum-- for each of the next 3 years in relation to all of the tasks including those still remaining to reach the interim end state and those in Phase I. Cost Estimates for each of the Phase I tasks should be provided.

For example, we have concerns about when the source area of the plume will be excavated. If this activity is delayed due to funding, what are the implications for the spread of contamination as well as for the useful life of the permeable treatment wall?

- 6) Honest and transparent communication and information is essential. Agencies should not be hiding information or selectively providing only a subset of information to the public.

- 7) All agency plans for the site must be clearly presented in an official and dated document, whether draft or not.

- 8) A single website should make available all site information, timeline and progress descriptions in a simple format. Electronic documents can be posted there. Historical documents should be separated from current documents for which immediate public input is being sought.

- 9) Public comment periods should be announced and posted on the website. All public comments and questions should be posted on the website. Agencies should make every effort at public meetings to inform the public about documents being prepared for public review and comment in the near future.

For example, there was recently a Quarterly Meeting on Feb. 23rd and at that meeting we were told to provide comments on Phase I by March 25th. Yet we were not informed that DOE would soon release a 114- page document related to handling the Vitrification Melter as Waste Incidental to Reprocessing, and that there would be a public comment period of just 45 days. We learned about this because a short list of people were notified on March 11th.

As a result members of the public and public officials in attendance at the Quarterly meeting were not alerted to this upcoming issue and opportunity to comment.

B. Public Participation

- 1) The rocky relationship between DOE and NYSERDA is an ongoing problem. However, that problem should not override the need for and attention to public concerns and involvement.
- 2) All public participation is relevant and must be governed by one public participation process.
- 3) Both written and verbal issues and concerns raised by the public should be handled through an established process which includes:
 - Written Notation of the issue or concern raised and the date
 - Agency decision as to the appropriate next step for issue to be handled (Note: Ignoring the public is not an appropriate next step)
 - The Facilitator should record the issue and ensure that agency response is provided within a month. If the particular issue is determined to be handled much later -- at a future step in the cleanup-- that response must be provided to the public and documented as a concern or issue for future consideration.

The response to written comments on a key study, the Characterization, Sampling and Analysis Plan, has been particularly unacceptable. At a meeting in Aug. of 2010, DOE consultants were only available by phone and their only answer to our comments was that -- when they revise their Plan, they will consider our comments. This leaves us in a quandary because if the CSAP is not being altered to reflect our comments, then many of the specifics we raised should be addressed as Phase I studies. Despite several subsequent requests for a response by DOE, we have received no substantive response that addresses the issues raised.

4) Core Team meetings should be held in public through a webcast that provides an opportunity for public participation and public comment.

5) Procedures should be established for public involvement in scientific and technical issues.

- The public must be involved in the selection of subject matter experts and members of the independent scientific panel.
- The public must be involved in the structure and function of scientific and technical panels and public participation processes.
- Involved agencies must allocate funds for a public technical expert. The public should be able to choose its own expert to represent and evaluate our issues of concern and to participate in agency technical and scientific meetings. The public expert will ensure that issues raised by the public are actually addressed by scientific panels assembled by the agencies.
- In addition, the public must be allowed to observe and invited to offer public comments early in each scientific or technical meeting or at a midpoint.

6) Administrative and funding issues. Key issues related to administration and funding also need to be handled. The public needs clear answers on these issues and the process above concerning agency responses should be followed. However, the only reason for technical and scientific panels to deal at all with administration and funding issues is where there is a definite interaction that requires expert judgment. In most cases administrative and funding issues will be dealt with by relevant agencies in other public meetings.

7) Site Characterization, Sampling and Analysis. NYSERDA's Independent Review Team noted that the site is very complex and that site characterization would normally be completed prior to the development of the Decommissioning plan and EIS, not after as currently is happening at the West Valley site. The team pointed out that as a result DOE is operating with a large number of uncertainties. A great deal of work produced for the NRC and guiding Phase 1 work was based on preliminary assumptions, which must be confirmed later. Substantial work--the DCGL values, the work plans and the engineered barrier designs--may all have to be redone. It is critically important that we have a detailed discussion of the Characterization, Sampling and Analysis Plan to ensure that essential information is gathered. We should devote a meeting or a major part of a meeting to this discussion. This will provide an opportunity to address issues raised by the public about the CSAP.

8) The public needs regular updates regarding planned physical activities at the site and the status of finalizing key design plans, which to date are only preliminary. Significant construction plans in Phase I are currently based on preliminary designs and contractors will be finalizing plans. Major issues have been raised by experts regarding groundwater flow, hydraulic barriers to flow, flow being directed toward the tank farm, flow recontaminating excavated areas, as well as performance issues regarding the slurry wall, which is already being constructed. Experts are very concerned about the final design plans and the potential impacts of these projects. The

public needs to be informed regarding these plans and how these scientific and technical issues are being addressed

9) As issues of concern arise, we need details regarding the approach or investigation being undertaken. An example of this is the finding of high radionuclide concentrations in Buttermilk Creek, near where it joins Cattaraugus Creek, and where a resident farmer is located. This issue should be presented at a public meeting.

C. Planned Studies

1) All Planned studies should be handled with the public information and participation elements discussed here. No studies now being launched at the site should be excluded from public participation because they somehow are not identified by the relevant agencies as Phase I studies.

2) The public must be involved in commenting on all studies related to this site. The list of "Phase I studies" contained in the supplemental agreement between DOE and NYSERDA is below:

- (a) Soil erosion
- (b) Groundwater flow and contaminant transport
- (c) Catastrophic release of contamination and impact on Lake Erie
- (d) Slope stability and slope failure
- (e) Seismic hazard
- (f) Probabilistic vs. deterministic dose and risk analysis
- (g) Alternative approaches to and cost of complete waste and tank exhumation
- (h) Exhumation uncertainties and benefit of pilot exhumation activities
- (i) In-place closure containment technologies
- (j) Engineered barrier performance
- (k) Additional characterization needs
- (l) Cost discounting and cost benefit analysis over long time periods.

Recommended Additions to Phase I Study List:

- During the EIS process, DOE claimed it did not have enough data to make a full cleanup decision, so collectively the studies must provide enough scientific information to help us make a decision about exhumation.
- Real actual pilot exhumation of waste, not a paper exercise
- Climate change and severe weather events could impact items a-d in unusual ways. Climate change was assumed not to occur for 10,000 years in the recent EIS. Studies need to make up for this notable deficiency during Phase I.
- Emergency Preparedness, Prevention and Response are subjects very important to public involvement, trust and protection of the public from harm. Clear and defensible plans

must be developed around likely emergencies at this site. This is a study with an immediate activity—and implementation at the site.

- Characterizing site contamination, sampling and analyses must evaluate adequately major site facilities-- High Level Waste (HLW) tanks, Nuclear Regulatory Commission Disposal Area (NDA) and State Disposal Area (SDA)-- and associated contamination issues. If phase I studies are not now planned to address these facilities, this needs to be corrected.
- Improved long-term analysis of all factors that impact containment of site radioactive materials and improved exposure and dose assumptions. Costs of Cleanup Delays. Costs of early cleanup of the spill associated with the strontium plume versus ultimate actual costs of planned cleanup and long term maintenance, including useful life and replacement of permeable treatment wall.
- Analysis of the efforts needed to adequately protect the Sole Source aquifer
- Better characterization of sediment in creeks and movement of contamination off site, particularly via the Cattaraugus Creek and impacts to the Seneca nation territory.
- More realistic estimate of long term containment costs vs. early exhumation of buried wastes
- Analysis of achieving regulatory compliance with all relevant standards including 40 CRF 191.
- All modeling must be grounded using real, on-site conditions as input parameters. We need to understand the basic conceptual models and ensure that they represent likely future conditions.
- Modeling of Groundwater and contaminant transport. The significance of subsurface contamination must be better accounted for in relation to risks to the public.
- Steps or methods in developing exposure, dose scenarios and derived concentration guideline level values for radionuclides (DCGLs) must be fully described for public understanding and all assumptions documented, to support the claim that conservative assumptions have been used.
- All radionuclides and daughter products should be included in risk estimates.
- Drinking water must be given greater importance in exposure and dose scenarios.
- The lack of conservatism in analyses thus far and the underprediction of actual and future risks is a major public concern. For example we don't believe assuming zero erosion or basing risk analysis only on existing contamination are conservative assumptions.

Thank you for your attention. We look forward to an early response to the issues raised in this letter.

Sincerely,



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