Citizens Environmental Coalition

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Mr. Martin Krentz
West Valley Demonstration Project
US Department of Energy
10282 Rock Springs Rd. AC-DOE
West Valley, NY 14171-9799

Sent via email to
martin.krentz@emcbc.doe.gov
lee.gordon@nyserda.ny.gov

Re: Scoping Comments: NEPA & SEQRA

Dear Mr. Krentz,

In this letter we address some of the important issues related to environmental review under the National environmental Policy Act and the State Environmental Quality Review Act.

The Federal Register notice on Feb. 21, 2018 announced the preparation of a Supplemental EIS, although the rationale was vague.

"Sometimes a Federal agency is obligated to prepare a supplement to an existing EIS. An agency must prepare a supplement to either a draft or final EIS if it makes substantial changes in the proposed action that are relevant to environmental concerns, or if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. An agency may also prepare a supplemental EIS if it determines that doing so will further the purposes of NEPA." [1]

The scoping notice that was issued on Feb. 21, 2018 provides only a vague justification for a supplemental EIS: "the preparation of an SEIS would further the purposes of NEPA by including new information and changes since issuance of the 2010 final EIS…" We believe the notice should have provided some detail about the new information and changes since 2010.

Final EIS and ROD, Record of Decision, and the planned deliberative scientific process

A Final EIS was issued in 2010. That EIS committed to a deliberative scientific process in which a considerable list of Phase I studies would be completed by subject matter experts and reviewed by an Independent Science Panel (ISP). The public would also be able to review and comment on the work products of the subject matter experts. Out of a lengthy list of study areas, work on

[1] A Citizen's Guide to NEPA, Council on Environmental Quality, Executive Office of the President, 2007.

just two study areas has been done—exhumation and erosion, and it may not be complete. The ISP has not reviewed the work because it appears to have been disbanded. The public only learned about this officially when we questioned the absence of ISP input.

A second purpose for the Phase 1 studies was to reach consensus between the Agencies regarding outstanding areas of disagreement regarding science-based decisions.
It is true that there have been major changes in the Studies planned and the process for conducting those studies since the Final EIS and Record of Decision were issued. In addition, in presentations at the scoping hearings we were told that consensus has been reached in some areas, but not in others between the agencies. Unfortunately the areas of consensus were not identified for the public and neither were the areas of no consensus.

Given this history, a new SEIS is appropriate if it improves on the inadequate scientific analysis in the 2010 FEIS.

The scoping notice fails to clarify any of the above matters and further provides no assurance that the science will be improved. The analyses in the 2010 EIS were inadequate. That was part of the rationale for the Phase 1 studies that were proposed. Now that the established scientific process has been overthrown we are very concerned about whether there will be a sound scientific basis for Phase 2 decisions in the SEIS, which relate to major radiological waste inventories. The following are some of the key concerns:

1) A geotechnical stability analysis was not pursued as a Phase 1 study. This issue relates to the vulnerability to erosion, landslides and mass wasting at the site.
2) The engineered barriers study was not completed. This was a significant deficiency in the 2010 EIS, because the DOE allocated minimal funds in the analysis to the maintenance of such barriers in the face of continuing erosion. These kinds of errors, favor a close-in-place solution as being less costly.
3) The notice tells us that "TIERING" will be used in the SEIS. We are told that where appropriate information and analyses from the 2010 EIS will be summarized and incorporated by reference in the SEIS. Since much of the 2010 EIS analyses were inadequate, reliance on that work should be quite limited. We believe that in all areas where the scientific basis of the analysis was inadequate, and therefore a Phase 1 study was planned as part of Phased Decisionmaking, there should be no tiering used. We need to see the full scientific justification, not merely a reference to the 2010 EIS, and a faulty or limited analysis.
4) "Preliminary information" from the PPA (Probabilistic Performance Assessment) would be used to inform the development of the "hybrid alternatives." There is no way to justify the use of preliminary information when the Agencies have years to prepare this SEIS. Preliminary information cannot possibly meet any scientific criteria. If a hybrid alternative is developed with preliminary information only, it cannot be chosen as a preferred alternative.
5) The Sole Source Aquifer underlying the West Valley site has not received any research attention by the Agencies. We believe more characterization work needs to be done and testing to see whether radiological or chemical contamination has affected the aquifer.

6) Serious limitations of the West Valley site were not presented or discussed in the scoping notice. The site limitations are well known to the Agencies. However, the approach from PPA contractors seems to be to treat the nuclear waste burial grounds as facilities that meet current siting and other regulatory standards for such facilities. The site was chosen before any siting standards and major environmental laws were passed in the early 70s. This means that the performance of existing waste facilities must be carefully evaluated against current standards. A primary goal for performance is whether waste disposal facilities such as the State Disposal Area or the NRC Disposal Area can successfully contain the nuclear waste stored there over the long term future. Isolation of this waste from humans and their environment is necessary to prevent harm. The probabilistic performance assessment is specifically designed to answer questions about the long term performance of West Valley's waste facilities as they are currently, not as how we wish they were. The Agencies chose a performance assessment, but seem not to want an actual evaluation of whether the waste facilities can perform over the long term.

   The failure of the SDA and NDA to meet multiple current siting standards[2] tells us there is a potential for a serious or catastrophic event in which a major portion of the radiological inventory is released to nearby waterways and Lake Erie, carrying contamination through territory of the Seneca Nation. The potential for catastrophic failure is exacerbated by increased extreme weather events, including extreme rainfall. The PPA must evaluate the long term performance of the SDA and NDA, as they actually exist today, including the impacts of worsening climate change on erosion, landslides, mass wasting and the large gullies located on two sides of the SDA (Erdman Brook and Frank's Creek sides).

   NEPA and SEQRA require that the scenarios the public is most concerned about be evaluated in the SEIS. They are reasonably likely scenarios that relate to the vulnerabilities of the site combined with weather events. Other scenarios are also likely—the combination of wind and rain could tear geomembrane covers, allowing

[2] 10 CFR 61 **§ 61.50 Disposal site suitability requirements for land disposal**

1) "Areas must be avoided where surface geologic processes such as mass wasting, erosion, slumping, landsliding, or weathering occur with such frequency and extent to significantly affect the ability of the disposal site to meet the performance objectives of subpart C of this part, or may preclude defensible modeling and prediction of long-term impacts."
2) The hydrogeologic unit used for disposal shall not discharge groundwater to the surface within the disposal site.
3) Upstream drainage areas must be minimized to decrease the amount of runoff which could erode or inundate waste disposal units.
4) § 61.44 Stability of the disposal site after closure. The disposal facility must be sited, designed, used, operated, and closed to achieve long-term stability of the disposal site and to eliminate to the extent practicable the need for ongoing active maintenance of the disposal site following closure so that only surveillance, monitoring, or minor custodial care are required.

heavy rains into the burial grounds. An earthquake could also trigger a landslide. Unfortunately to date, the PPA contractors appear more interested in modeling an inadvertent intruder or a resident farmer. While this may be an SEIS requirement, scenarios such as we describe could happen in the near term, while both Agencies still occupy the site. Multiple twenty inch rainfalls in 24 hrs. have occurred across the nation in the last year. The modelling used must be capable of capturing multiple extreme rainfall events (in contrast to annual averages) as these have the most impact on erosion.

7) The language used to describe the primary alternatives in the scoping notice does not reflect important goals for the waste facilities at West Valley. Again the primary goal must be preventing the loss of containment of the radiological inventories.

Close-in-place Alternative

Major facilities would be managed at their current locations…. Structures and barriers would be designed to meet regulatory requirements to retain hazardous and radioactive constituents to ensure they would be **resistant** to long term degradation….

a) **Resistance** to long term degradation is not adequate. Long lived radionuclides are buried in the SDA and NDA and given the steep slopes on the S. Plateau and the fact that a landslide has already moved the Buttermilk Valley Wall closer to the SDA by 15 feet, being resistant is really not adequate. Engineered structures and barriers can be designed well, but they would have to be maintained and repaired on a frequent basis, no less than annually for an assessment. Sufficient funds would have to be allocated.
b) **Natural attenuation** is not defined, but we can only assume that it means radionuclides will be allowed to disperse naturally via wind & rain to offsite waterways. Natural decay would require a discussion of the specific radionuclide and the number of half-lives needed for its concentration to be insignificant.
c) **Unrestricted Use.** Supposedly this approach would allow large areas of the WNYNSC to be released for unrestricted use. The SEIS should definitely separate a discussion of the area that includes the WVDP (167 acres) & the SDA from the larger 3338 acre property known as the WNYNSC.
We don't in any way support a Close-In-Place Alternative. We also do not support any unrestricted use of the 167 acre WVDP and the SDA properties, if wastes have not been exhumed and properly cleaned up.

8) **The Sitewide Removal Alternative/ Full Exhumation Alternative**

The choice of the title derives most likely from the 2010 EIS, when Sitewide Removal was actually an option. However, today the situation is very different as West Valley is currently storing HLW, Transuranic and Greater than Class C wastes with no plan for disposition. We are recommending discussing this alternative as the Full Exhumation Alternative, since multiple members of the public have found this paragraph in the notice

very confusing. Sitewide Removal clearly does not mean what it says—it means storing a lot of waste for the long term.

The Full Exhumation Alternative should detail the exact methods and protections for exhuming waste and limiting contamination, and should discuss exactly how the orphan wastes will be secured, containerized, stored in a protective facility and monitored until the orphan wastes can be moved to an appropriate disposal site as the WVDP Act requires.

9) **The High Level Waste remaining in the Waste Tanks must be exhumed along with highly contaminated process equipment.**

The public does not support efforts to linguistically detoxify high level radioactive waste simply by clever wordsmithing. Merely changing the classification of this waste to "Waste Incidental to Reprocessing" does not alter the danger of this material, or the fact that the tanks are at the end of their useful lives and lie over a sole source aquifer. As we have emphasized, there must be a sound scientific basis for all decisions about the cleanup of the site.

10) **The SEIS must comply with State Environmental Quality Review Act requirements.**

It seems based on the NY Public Notice that a lead agency for the State has not yet been established. DEC and DOH will be involved in the review. We have also requested that the Department of State be involved because of its role with the Great Lakes and Cattaraugus Creek. We understand from Lee Gordon that this is a Type I action as it was in 2010.

11) **Important Environmental Review Issues that should be included:**

Scientific Studies should be released for public review as they are produced and not withheld until the completion of the SEIS. This should include supporting technical documents for the PPA.

All of the scenarios proposed for inclusion in the PPA should be provided to the public for comment. We need to ensure that they address site vulnerabilities and interactions with weather events, which could be additive or synergistic.

Environmental Justice—This is of particular significance for the Seneca nation territory along Cattaraugus Creek, impacted by releases of radiological waste materials.

Intergenerational Justice—A significant amount of long lived radionuclides are not now securely stored on site and could be released to offsite waterways in a variety of scenarios. This item addresses the problem of short term thinking about the affected public living now, and failing to consider the impacts to future generations.

Children's Health- Children in general are much more susceptible to radioactive substances—the younger they are, the more susceptible they are. So unborn babies are most susceptible.

Any health evaluations and dose calculations must address the unique susceptibility of children to radiation exposure. While children are a subset of the population at a particular point in time, they are also the entire future adult population. Not one achieves adulthood without being a child first.

The Importance and Value of the Great Lakes are a unique and precious natural resource that supports wildlife and fishing, provides drinking water and recreation. West Valley represents a hazard that could threaten the uses and health of the Great Lakes. The loss of containment for West Valley nuclear wastes could be permanent, catastrophic, and result in irretrievable and irreversible harm. This kind of harm that cannot be corrected needs to be addressed by acknowledging the very real hazard posed by nuclear wastes at West Valley and planning for Prevention. The SEIS must include a focus on Prevention of Harm. This would include Full exhumation to secure the waste and preventing any possible loss of containment.

Economic Costs of Natural Resource Damages and Human Health Effects.

It is not adequate to just compare the costs of implementing one alternative over another. There must be an appropriate assessment of the potential for natural resource and health damages associated with the release of radioactive materials as a result of inadequate funding, careless evaluation, delays in completing exhumation, etc. To adequately protect future generations a zero discount rate must be used for the evaluation. It is not appropriate to use a tool for short term investing to evaluate long term environmental protection for natural resources to be held as a public trust.

Impacts of Floods to the West Valley site should be evaluated. The site is not in a floodplain, however, extreme rainfall falling on large watersheds can result in large water volumes and fast moving waters in rivers, that scour valley walls, resulting in a landslide, as happened in 2009. How flooding impacts site facilities is what needs study, even though the site, itself, is not in a floodplain.

Respectfully Submitted,

Barbara J Warren

Barbara Warren
Executive Director