To: West Valley Citizen Task Force
From: Bill Logue, Citizen Task Force Facilitator
Date: July 13, 2010
Subject: Summary of the June 23, 2010 Meeting

Next Meeting

The next Citizen Task Force Meeting will be:

Time & Date: 6:30 – 9:00 PM, August 25, 2010
Location: Ashford Office Complex
9030 Route 219
West Valley, NY

Note: Participants must be U.S. citizens and have photo identification. Please contact Bill Logue (860-521-9122, Bill@LogueGroup.com) with questions or comments concerning this summary or future meetings.

CTF Members and Alternates Attending

Deb Aumick, Bob Engel, Paul Kranz, Lee Lambert, Kathy McGoldrick, Joe Patti, Warren Schmidt, Eric Wohlers, Ray Vaughan.

Agency Participants and Observers

Department of Energy (DOE): Bryan Bower.
New York State Energy Research and Development Authority (NYSERDA): Tom Attridge, Paul Bembia, Andrea Mellon.
West Valley Environmental Services, LLC (WVES): Sonja Allen, Charles Biedermann.
Ecology & Environment (Consultants on CMS): Jackie Gillings, Preetam Kuchikulla. (via telephone)
Observers: Terry Dunford, Eugene Gleason, Jeff Neff.

Introductions and Announcements

Bill Logue welcomed the group and reviewed the meeting documents.[1] Paul Kranz provided members with a copy of the URS 2009 Annual Review of Global Management & Operations Services; the West Valley Demonstration Project (WVDP) is mentioned on page 12.

Unscheduled DOE Briefing Concerning Earthquake

Bryan Bower of DOE updated the CTF on precautions taken as a result of the approximately 5.0 earthquake centered near Ottawa, Canada at about 1:40 PM that day. When the earthquake occurred the WVDP was holding its annual emergency response exercise (simulating two injuries and a fire). The exercise was terminated and site managers instituted a precautionary evacuation of the site and the Ashford Office Complex.

Following the evacuation the site and safety systems were evaluated. The evaluation started at 2:30 PM at the roads and worked toward the facility. Radiation techs ensured that in the evacuation there was no spread from the Main Plant Process Building (MPPB). Staff performed visual inspections for structural damage from the tremors. Monitoring systems were recalibrated as necessary. Air monitors were checked for radiation and for loosened asbestos. In addition to the MPPB, other facilities on the WVDP site and the lagoons were checked. At 4:45 PM the initial inspection was completed with no anomalies found. On June

[1] The documents are listed at the end of this summary and may be found at www.westvalleyctf.org

24 the facility will be checked to ensure there are no changes in conditions and equipment will be further analyzed for possible recalibration.

Tom Attridge of NYSERDA noted that, at the time of the earthquake, work was being performed on the T-1 building which was then evacuated. Staff performed a walkover of the SDA and no problems were found. As part of the operating permit whenever an event like this occurs NYSERDA is required to check the leachate elevation levels in the trenches and this will be done within five days.

There are no seismic instruments on-site. (Inquiry after the meeting identified the closest broadband seismic station as Geneseo, NY.) However, NYSERDA has provided $25,000 in funding to the Lamont Doherty Earth Observatory to install seismic monitoring equipment at the West Valley Central School District this summer.

Bryan Bower noted that in 2000 or 2001 there was a similar event. The site safety will be reviewed to determine if the correct frequency between events for seismic hazards of this magnitude is used.

NYSERDA and DOE Proposed Phase 1 Studies Process

Paul Bembia of NYSERDA presented an overview of the proposed phase 1 studies process. He reminded the CTF that the Final Environmental Impact Statement (FEIS) was issued in January, the Record of Decision in April and the Findings Statement in May all specifying Phased Decisionmaking. The documents specify a 10 year assessment period during which studies will be conducted to inform decisionmaking and eliminate or narrow technical differences.

NYSERDA and DOE proposed a process ("process") for arriving at and conducting the appropriate studies. The process was depicted in a flow chart contained with the meeting materials. The process involves Subject Matter Experts, Independent Experts and opportunities for public input. The Subject Matter Experts evaluate potential areas of study and identify specific studies to be conducted. There are regular opportunities for review and input from the regulatory agencies through a regulators roundtable (New York State Departments of Environmental Conservation and Department of Health, NRC and EPA) regarding the potential areas of study, specific studies, results and progress. The roundtable will be an open process where the public can observe.

A three member Independent Scientific Panel would provide guidance to the agencies and Subject Experts and act in a diplomatic capacity to further resolve differences. The identified experts are: Dr. John Garrick, Dr. Chris Whipple and Dr. James Clarke. The public (identified as the general public, CTF, environmental groups and others) would have regular opportunities for input. An independent facilitator will be engaged to assist in managing the discussions.

NYSERDA and DOE, in reviewing existing differences, comments on the EIS and ROD, arrived at a preliminary list of potential areas of study which may be supplemented with public input and by the subject experts. Broad areas will be defined initially then more specificity will be developed. Some studies may be able to be initiated immediately while others prioritized and scoped based on need and cost/benefit. The preliminary list of potential areas of study includes:

- Soil erosion
- Groundwater flow and contaminant transport

- Catastrophic release of contamination and impact on Lake Erie
- Slope stability and slope failure
- Seismic hazard
- Probabilistic vs. deterministic dose and risk analysis
- Alternate approaches to and cost of complete waste and tank exhumation
- Viability, cost, and benefit of partial exhumation of waste, and removal of contamination
- Exhumation uncertainties and benefit of pilot exhumation activities
- In-place closure containment technologies
- Engineered barrier performance
- Additional characterization needs
- Cost discounting and cost benefit analyses over long time periods

Mr. Bembia stated that after the Subject Matter Experts and Independent Scientific Panel are formed and a facilitator engaged, an initial public meeting will be held to provide opportunities for input about the process and potential areas of study. This might mean holding a meeting on the same day as a CTF meeting or having the CTF members participate at members of the public. Regular updates, probably quarterly will be provided. The agencies are finalizing a protocol for identifying potential areas of study which will be shared with the CTF and others.

Ray Vaughan Presentation on Potential Study Topics

CTF Member Ray Vaughan presented his ideas on potential study topics during phase 1. He noted that the list was not comprehensive and was largely drawn from his comments on the FEIS. He also noted that he prepared his presentation before hearing the NYSERDA/DOE proposal and topics and was pleased that there was considerable overlap.

1. Precipitation input into erosion model. Mr. Vaughan proposed a workshop in the near future to review rainfall intensity-frequency relationships because the EIS erosion model was changed between the Draft and Final EIS such that the relationship is not clear. The purpose of the workshop would be to clarify the relationship, make comparison to current rainfall intensity-frequency relationship, understand future climate assumptions, and understand paleoclimate assumptions used in calibrating the model. If disagreement remains after the workshop, a process or additional studies could be used to resolve disagreements.
2. Erosion Model Calibration. He noted that a number of erosion models and calibration methods had been used. He stated that the erosion model for the 1996 EIS predicted high erosion and the FEIS predicted low erosion. The models and calibration should agree with each other with some margin of error. He suggested a workshop to determine if there is a simple misunderstanding easily resolved or to try to define a process or studies to resolve the discrepancies among the models.

   Other topics for a workshop, which could be used to define a process or studies to resolve differences and potential improve models, include:

   - Incision and infill history on the North and South Plateaus and how this relates to the models. Discovery of a log, radiocarbon dated at several hundred years old, brings into question assumptions about continuous incision into the glacial till.

- Use of radiocarbon dating in addition to or instead of optically stimulated luminescence dating.
- Stream capture and how it is related to groundwater processes.
- Base-level history of Buttermilk Creek watershed including Zoar Valley incision. This includes understanding the historical watershed elevations and how this impacts down cutting. He showed several slides and statistics comparing Zoar Valley and Niagara Gorge

3. Regional Geologic Structures.
    - Identify the cause and orientation of closely spaced vertical fractures in bedrock under the North and South Plateau and assess the implications for long-term site integrity.
    - Perform additional geophysical testing to determine strike, dip, and most recent reactivation of Sardinia and Cattaraugus Creek Features
4. Bedrock Valley Groundwater System. Mr. Vaughan recommended a characterization study of the bedrock groundwater budget and flow pathways building on prior work of the USGS.
5. Occupational Injuries and Fatalities. Mr. Vaughan recommended a study associated with long-term maintenance of erosion control structures. He noted that some jobs related to this work (e.g., maintaining records and deeds, walking fences) are low risk but that others may have a higher rate of injury or fatality associated with repairing and rebuilding the erosion control structures. This risk assessment would then be part of the comparison to the short term risk associated with full clean up.
6. Probabilistic Risk Assessment. Mr. Vaughan recommended a study, or adoption, of probabilistic risk assessment.

Discussion

In response to a question from Mr. Bembia, Mr. Vaughan noted that the evidence of recent fault reactivation might be found in glacial fill rather than in the underlying bedrock where the faults were originally identified.

Mr. Bembia thanked Mr. Vaughan and noted that this was the type of input and suggestion the agencies desired in establishing and working through the Phase 1 Study Process. The process is designed to resolve differences rather than arrive at a particular outcome. He also noted that DOE and NYSERDA would be expecting the Subject Matter Experts to identify and recommend studies. A CTF member asked that the agencies ensure that the public (broadly defined as above) have opportunities for early and continuous input. Mr. Bembia stated that under the proposed process, there will be regular public meetings on the studies, there will be meetings with the regulators that will likely be public, and the meetings with the Independent Scientific Panel will also be public. Bryan Bower added that at a recent meeting with the regulatory agencies, NRC suggested that the meetings with the regulators on the Phase 1 studies would have to be public meetings under the NRC public meeting process.

A CTF member suggested that some prior consultants to the agencies may not be appropriate as experts because they have reached conclusions already. Mr. Bembia noted that for some topics there are very few experts in the country and finding new experts might be difficult. However, the goal is to resolve differences

by having experts of different opinions talking to each other and using the Independent Scientific Panel to resolve remaining differences. The experts will be asked to prioritize studies because the agencies will then assess available time and funding to ensure that decisions can be made within the 10-year timeframe.

The CTF commended the agencies on their commitment to resolve differences and concurred in the proposed process.

Focused Corrective Measures Study

NYSERDA provided a handout on the Focused Corrective Measures Study (CMS) for the SDA. Andrea Mellon of NYSERDA stated that the CMS is not a radiologic action. Rather, it looks at the Quantitative Risk Assessment, which addressed a 30 year period, and analyses the SDA, in light of the FEIS for a 10 year period, the conditions and risk of breach of hazardous constituents.

The CTF agreed to review the CMS to determine if comments were warranted. They agreed that if comments can be arrived at through email, and perhaps a conference call, they would do so. If necessary this might be the topic for a July meeting.

Other Business

The CTF, DOE and NYSERDA agreed that, to enhance and improve communications of the CTF as a whole with DOE and NYSERDA, the agencies would be copied on CTF group emails. However, if for a particular issue a member feels that it is more appropriate to develop a comment, letter of other document, should through internal communication before sharing it with the agencies that would raise this and the communications would not be copied to the agencies until appropriate.

The CTF agreed to postpone the question of a July meeting until they had reviewed the CMS.

Observer Comments

There were no observer comments.

Action Items

Action	Who; Date
Review CMS notify Bill Logue of any comments	CTF; 7/2/2010
Decision on July meeting	CTF; 7/9/2010

Documents Distributed

Document Description	Generated by; Date
Meeting Agenda	Logue; 6/23/10
NYSERDA & DOE Proposed Phase Studies Process	NYSERA&DOE; 6/23/10
Potential Phase 1 Study Topics	Vaughan; 6/23/10
NYSERDA Focused CMS Handout	NYSERDA; 6/23/10
Newspaper clippings distributed at the meeting	NYSERDA; 6/23/10