To:	West Valley Citizen Task Force
From:	Bill Logue, Citizen Task Force Facilitator
Date:	December 12, 2016
Subject:	Summary of the October 26, 2016 Meeting

## Next Meeting

Date & Time:	January 25, 2017, 6:30 – 9:00 PM
Location:	Ashford Office Complex
	9030 Route 219
	West Valley, NY

## **CTF** Members and Alternates Attending

Deb Aumick\*, Rob Dallas, Charlie Davis, Clyde Drake, Barbara Frackiewicz, Lee James, Paul Kranz\*, Ann Lazroe, Lewis McCaffrey, Joe Patti, John Pfeffer, Ray Vaughan, Eric Wohlers.

## Agency Participants and Observers

Department of Energy (DOE): Bryan Bower, Martin Krentz, Sandra Szalinski, Zintars Zadins.

New York State Energy Research and Development Authority (NYSERDA): Paul Bembia, Brad Frank, Lee Gordon, Andrea Mellon.

CH2M HILL BWXT West Valley, LLC. (CHBWV): Jeff Bradford, Lynette Bennett, John Rendall.

Nuclear Regulatory Commission (NRC): Amy Snyder.

New York State Department of Environmental Conservation (NYSDEC): Patrick Concannon, Ken Martin. Public: Diane D'Arrigo\*, Joanne Hameister\*, Paul Siepierski, Zach(?) Taylor, Barbara Warren\*.

#### **INTRODUCTIONS, ANNOUNCEMENTS, ADMINISTRATIVE BUSINESS**

Bill Logue welcomed all present and reviewed the meeting agenda and materials<sup>1</sup>. He introduced Ann Lazroe as the nominee of the Buffalo-Niagara League of Women Voters representative to the CTF replacing Lee Lambert. Ann introduced herself and the CTF and agencies welcomed Ann to the group. Eric Wohlers introduced Lewis McCaffrey as his alternate. Bryan Bower advised the CTF that Cathy Bohan has accepted a position at DOE headquarters. Jeff Bradford informed the CTF that John Rendall will be going to the Hanford Site to manage the Ground Water Remediation Program there. John expressed his appreciation for working with the CTF during his time at the site.

Bryan Bower and Paul Bembia encouraged CTF members to attend meetings in person whenever possible. They also noted that in most circumstances experts will present on things such as the Phase 1 Studies and Supplemental EIS at the Quarterly Public Meetings (QPM) and encouraged members to attend those meetings because having experts at multiple meetings for the same issue uses funding that could be spent on other activities. A CTF member asked that at the QPMs presenters be allowed to complete their presentation with Q&A following the presentation.

# DOE BUDGET UPDATE

Bryan Bower of DOE provided an update on the WVDP budget. He noted that budgets were developed internally about three years prior to implementation. The WVDP budget has defense (safeguards and security) and non-defense (demolition, decommissioning and operations) components. The FY 2017 request for non-defense is about \$2.4 million above the FY 2016 enacted amount and the Safeguards and Security portion in \$576,000 lower. The total request for FY 2017 is \$63.628 million. He briefly highlighted the work that would be accomplished with funding. The government is operating under a continuing resolution (CR) through December 9. The CR funds is based on the prior year budget. There is some carryover of unexpended funds from FY 2016.

<sup>&</sup>lt;sup>1</sup> Each is listed at the end of this summary and may be found at <u>www.westvalleyctf.org</u>

<sup>\*</sup> Participated by telephone.

These funds in conjunction with the CR allotment allows work to stay on track for demolition, although costs are being monitored closely in the event funding is reduced.

## CHBWV PROJECT UPDATE

Jeff Bradford of CHBWV discussed the status of the shipment of the vitrification components and the status of the High-Level Waste Canister Relocation. Mr. Bradford showed a video about the fabrication of the casks that are used to store the canisters of High-Level Waste (https://www.youtube.com/watch?v=TFBqy5ccEzI) A CTF member remarked that the video tag line "Putting Buffalo to Work" indicated that workers were not drawn from the immediate area. Lynette Bennett of CHBWV stated that cask fabricators were skilled union labor that was not locally available and had been found through the Buffalo Ironworkers Local.

#### PHASE 1 STUDIES UPDATE

Lee Gordon of NYSERDA provided updates on the Phase 1 Studies Erosion Working Group and Exhumation Working Group. Based on ECS's contract, all Phase 1 Studies Reports will be complete by February 2018.

**Erosion Working Group (EWG).** He reminded the CTF that the EWG proposed three studies: Study 1) Terrain Analysis, Age Dating and Paleoclimate, Study 2) Recent Erosion and Deposition Processes and Study 3) Preliminary Erosion Modeling.

Most of the Tasks in **Study 1** are complete including mapping; field reconnaissance; site prioritization, walkover and sampling; and sample preparation and selection for dating. The sample age analysis and geologic interpretation is in progress and the report was started in August. Mr. Gordon displayed images on the locations including the tree farm terraces, abandoned meander and Heinz Creek terraces and an example of locations of ground penetrating radar lines, trenches and pits at the meander location. The purpose of this work is to help recreate the erosional history since the glaciers of 14,000 years ago. This will help estimate the confidence factor in the predictive models. Additional data will be collected if gaps are identified in the modeling.

For **Study 2** the completed tasks include the qualification of erodibility of cohesive and clastic sediment, and topographic characteristics of select gullies. The quantification of infiltration capacity is in progress. Dr. Bennett suggested an added task of a digital comparison of the 2010 and 2015 LiDAR data using change detection. This impacts several tasks including quantifying flow rates and total suspended solids in select gullies and stream locations. The report for Study 2 is being drafted. Field data collection will continue and change detection models will be used to extract key information from comparison of the LiDAR data.

For **Study 3**, Preliminary Modeling, most of the tasks are in progress and the model is using LiDAR data to build surface models at different scales for the watersheds. Forward model runs should begin in early 2017. The LiDAR resolution is able to detect change at about the 15 cm vertical and 30 cm horizontal resolution. Next steps are continuation of the building of the models, calibration with the past history, testing on analogue watersheds and forward projection model runs and evaluation of uncertainty.

**Exhumation Working Group (EXWG).** Mr. Gordon stated that the report on waste inventories was complete and posted to the Phase 1 Studies website. The report includes an update of the waste inventories for radiological decay and ingrowth to a new base year of 2020 with future increments at 30-year intervals through 2140. It also evaluates when removal actions at the SDA, NDA and Waste Tank Farm could be performed by contact handled methods rather than remote handled. After discussion, Mr. Gordon encouraged those present to review the report as to these timeframes.

The geophysics Prove-Out Study used five methods to identify segments within the trenches that contain monoliths, densely packed waste or large quantities of metallic waste to compare against the inventory estimates. This will help identify the location and depth of wastes and amount of liquid in the trenches. The methods included magnetometer survey, electromagnetic survey seismic refraction, multi-channel analysis and electrical resistivity. Most were done without penetrating the geomembrane cover; however some methods used a one-foot spike inserted through the cover. The fieldwork is complete and the report is being drafted. Worker and community protective measures are being evaluated under different exhumation scenarios for the level of protection, potential exposure, equipment requirement and comparison with other sites. One difficulty is that most other sites are dry in comparison to West Valley. The report is being reviewed internally by the contractor. Seven other sites are being researched for state-of-practice for exhumation and treatment technologies protection methods and retrievable storage projects. The report on lessons learned from those sites is nearing completion

and will assist in evaluating full or partial exhumation scenarios.

Responding to questions, Mr. Gordon and Mr. Bembia stated that water in the trenches infiltrated prior to the covers being stalled and that recent increases in leachate in Trench 1 and 14 are being studied. The increase is likely from lateral groundwater flow, but that a specific source has not been identified. Soil cores were taken over the summer and 24 piezometers installed and are being developed to review groundwater connectivity in the areas surrounding Trenches 1 and 14. The cores revealed clay soils and areas of sand lenses and peat.

## PROBABILISTIC PERFORMANCE ASSESSMENT (PPA)

Zintars Zadins of Restoration Services, Inc. provided an update on the PPA contract. The PPA contractor has prepared the draft report Features, Events, Processes, and Scenarios (FEPS) for the West Valley Site which is being reviewed by the agencies. There are about 1,300 FEPS in the literature and they include things such as structures, geology, events (landslides, storms, quakes), processes (erosion) and scenarios (human actions). Those relevant to the site have been identified and selected in this document. The PPA contractor has also prepared the draft report Conceptual Site Model (CSM) for the West Valley Site which identifies the mechanisms and processes by which humans may be exposed to radiation from the site in the future. The CSM Report is being reviewed by the agencies. The FEPS and CSM Reports will be used by the PPA contractor to develop the PPA computer model that will support the agencies in their Phase 2 decision-making in the Supplemental EIS. Neptune and Company will present the FEPS and CSM at the November QPM.

## FIELD SAMPLING AND DOSAGE ASSESSMENT UPDATE

Andrea Mellon of NYSERDA provided an update on the status of Field Sampling and Dose Assessment in Follow Up to the Aerial Gamma Radiation Survey Conducted in 2014. She noted that the assessment of offsite locations had found no health or safety issues and all findings were below the NRC unrestricted release criteria of 25 mrem. NYSERDA has been working with the Seneca Nation of Indians to update the findings for locations on the Nation to incorporate culturally specific land uses (e.g. year round consumption of game, uses of certain herbs, etc.) and the dose assessment report will be updated, reviewed with the Seneca Nation and then released to the public.

# **OBSERVER COMMENTS**

Ray Vaughan made a number of comments as an observer as he had recused himself from the CTF for the meeting because he has consulted with the Seneca Nation on the dose assessment with respect to their lands. In response to a comment Mr. Gordon stated he will ask the EWG to address in the modeling the erodibility of glacial fill and bedrock. Mr. Vaughan asked the agencies to consider or have the PPA contractor consider mechanisms for protecting the PPA and modeling from four different types of potential error: 1) questionable methods (e.g., grid density); 2) model information errors (e.g., in prior models Erdman Brook stopped at the railroad tracks); 3) the sensitivity analysis not looking at a wide enough range or over a long enough time frame where changes could become non-linear; and 4) that the post-glacial landscape not be reverse engineered in a way that would minimize future erosion. In response Mr. Gordon stated that this would be relayed to Neptune and Company and that expert and stakeholder comment and ability to use a public dashboard should guard against these potential errors. A discussion of model grid size ensued.

Mr. McCaffrey suggested that the level of confidence to be used in the PPA is a policy question that should be answered. Mr. Bower noted that the PPA will be used for decision-making in the NEPA and SEQRA decision processes and that the final decision must meet the decommissioning criteria. Ms. Snyder of NRC stated that the agency use a level of confidence of alpha 95% in its analyses.

## ACTION ITEMS

Action	Who; When
None	

# **DOCUMENTS DISTRIBUTED**

Description	Generated by; Date
Meeting Agenda	Logue; 10/26/16
Budget Update	DOE; 10/26/16
EWG and EXWG Update	NYSERDA; 10/26/16
PPA Update	DOE; 10/26/16
News Clippings Distributed at Meeting	NYSERDA; 10/26/16