

To: West Valley Citizen Task Force
From: Bill Logue, Citizen Task Force Facilitator
Date: December 3, 2019
Subject: **Summary of the October 23, 2019 Meeting**

Next Meeting

Date & Time: **January 22, 2020 at 6:30 PM**
Location: Ashford Office Complex
9030 Route 219
West Valley, NY

CTF Members and Alternates Attending

Charlie Davis, Clyde Drake, Barbara Frackiewicz, Heidi Hartley*, John Hood, Lee James*, Kathy McGoldrick, Tony Memmo, Joe Patti, John Pfeffer, Mary Reid*, Pat Townsend, Ray Vaughan, Eric Wohlers. Facilitator: Loraine Della Porta*.

Agency Participants and Observers

Department of Energy (DOE): Bryan Bower, Martin Krentz, Moira Maloney, Bethany McNeill, Audrey Seeley, 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): Scott Anderson, Dave Klenk, Joe Pillittere, Martin Regan, John Rendall, Alison Steiner, Bob Steiner, Janice Williams, Steve Wedvik.

New York State Department of Environmental Conservation: Patrick Concannon*.

Neptune and Company: Dan Levitt*, Sean McCandless*.

Public: Diane D'Arrigo*, Wayne Barber, Kelsey Shank, William Townsend, Barbara Warren*.

Introductions, Announcements, Administrative Business

Bill Logue welcomed all present and reviewed the meeting agenda and materials¹. The group reviewed and approved the schedule of meetings for 2020. Bryan Bower informed the group that Dan Brouillette would become acting Secretary of Energy on the resignation of Secretary of Energy Rick Perry.

CHBWV Project Update

John Rendall of CHBWV presented a project update on contract Milestones 3 and 4. He noted that Under Secretary of Energy Paul Dabbar recently visited the site.

Safety. DOE-EM Deputy Assistant Secretary – Safety, Security, and Quality Assurance Dae Chung presented the VPP Star of Excellence Award to CHBWV leadership and workers. The 12-month average for Total Recordable Cases (TRC) is now 1.41. Days Away, Restrictions, Transfers is now at 0.71. Mr. Rendall stated that recent injuries had not occurred during deactivation activities but in the “white space” between jobs.

Deactivation Progress Under Milestone 3. MPPB deactivation is 98% complete. The new additions to scope for the Main Plant Process Building (MPPB) are the reason the percentage of completion has not changed in several months. The General Purpose Cell (GPC)/GPC Operating Aisle size reduction of small tools and equipment is complete and a fifth liner is being loaded. The area is prepared for removal and waste loadout of large equipment. The Product Purification Cell-South (PPC-S) monorail ceiling beam is being installed and set up for Product Purification Packaging and handling of Nitrocision® Equipment. The Nitrocision® process removes a film of contaminated material from the concrete surface. In the Fuel Receiving and Storage (FRS) Facility asbestos containing material removal continues with bagging, wrapping and cutting of sections of piping.

Four of 7 ancillary support structures have been removed under Milestone 3. These include the Contact-Size

¹ Each is listed at the end of this summary and may be found at www.westvalleyctf.org

* Participated by telephone.

Reduction Facility, Manipulator Repair Shop, Laundry Facility and Utility Room Extension. Upcoming demolitions include the Main Plant Office Started, on October 15, and the Load-In Facility and Utility Room which will be started in January 2020. Mr. Rendall reviewed graphics of Demolition and Debris Shipping comparing baseline, actual and forecast shipments and the completed, planned and new deactivations associated with the MPPB.

Balance of Site Facilities – Milestone 4. The NRC-Licensed Disposal Area (NDA) erosion control armoring was completed using articulated concrete block mats. The Erdman Brook erosion repair is complete. Demolition is complete on the Waste Tank Farm Equipment Shelter. In total 44 of 47 facilities have been demolished and the areas restored. Recent demolitions include the Vitrification Storage Vault and Chemical Process Cell-Waste Storage Area. Upcoming demolitions include the Utility Room and Load-In area of the MPPB. The new electrical substation was connected on August 23 to the new 34.5 kV feed line from National Grid.

Water Withdrawal Permit Application. In 2012 NYSDEC required facilities to report water withdrawal activities if they were capable of withdrawing ground or surface water of 100,000 gallons or more per day. WVDP has two water withdrawal sources – the two man-made reservoirs constructed in the 1960's and two groundwater wells. WVDP submitted an application in 2017 and it was deemed complete by NYSDEC and approved for public notice on August 15, 2019 and made available for comment.

In response to questions, CHBWV and DOE representatives noted that future demolition debris shipment would be more efficient and safer when done by rail, that the onsite portion of the rail spur was repaired, and that, once several contract scope issues were resolved, CHBWV would move forward with inspection, scope development and contracting for repairs. The process will also determine if Genesee & Wyoming Railroad will be paid upfront for the repairs or through usage fees. When the spur is not in use it can cost \$250,000-\$300,000/year to maintain.

2018 Annual Site Environmental Report

Alison Steiner, CHBWV Principal Environmental Regulatory Specialist, presented a summary of the 2018 Annual Site Environmental Report (ASER). The report is available online at www.wv.doe.gov. She noted major areas of demolition and deactivation during the year. The environmental monitoring data confirmed that public health and safety was protected during demolition activities. By way of context, the public receives approximately 620 mrem/year radiation dose from natural and manmade sources annually, and DOE requires that public exposure from DOE operations not exceed 100 mrem/year. The total dose from air and water from WVDP operations in 2018 was less than 0.57 mrem. The radioactive exposure dose is one of about 40 environmental exposures that are monitored.

Air Sample Monitoring. Ms. Steiner showed a map of the locations of sixteen offsite ambient air samplers that surround the site and a background ambient air sampler located in Great Valley. Additionally, she noted that in 2018, air samples were taken on site at 4 active air emission stacks and 15 portable ventilation units (PVUs). The regulatory dose limit to the Maximally Exposed Off-Site Individual (MEOSI) from air emissions from the WVDP is 10 mrem per year. The actual dose to the MEOSI for 2018 was less than 0.55 mrem. The air samplers operate continuously with a HEPA filter collecting particulates and a charcoal canister collecting gas. Filters are analyzed bi-weekly and canisters monthly. The offsite ambient air monitor's detection limits are 40-70 times lower than detection limits found in the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations.. She noted that WVDP samplers are so sensitive that they detected radioactivity from the Fukushima event. Steve Wedvik, CHBWV Environmental Scientist, shared sample filters and canisters and demonstrated an air sampler and described how it functioned. He noted that sampling is not specific to a day as the total particulate mass captured on a filter is divided by the total volume of air sampled over the two week period. He also explained that samples have a 10-day waiting period before they are analyzed at the onsite Environmental Lab and a quarterly composite is compiled to allow for decay.

Surface Water Monitoring. Surface water is monitored at 8 locations on site and 3 locations offsite - one upstream and two downstream. The locations were shown on a map. In 2018 there were four controlled releases from Lagoon 3 under the State Pollutant Discharge Elimination System (SPDES) permit. Lagoon 3 is sampled before and during discharges. The site was in compliance with the 100 mrem pathway dose limit for surface waters and the MEOSI water exposure from the site was 0.020 mrem. The automated surface water samplers collect a

small volume every 30 minutes and biweekly samples are collected and analyzed and composited monthly or quarterly for radioisotopes. Marty Regan demonstrated how the surface water sampler functions.

Other Environmental Monitoring. In addition to the above, sampling is performed at 69 groundwater wells and sampling points quarterly; the two potable water supply wells and three sentinel wells monthly and biweekly; 6 deer and 1 dairy milk annually; and every five years fish, crops, sediments and additional milk; and direct radiation monitoring at 10 onsite and 17 offsite locations.

Permeable Treatment Wall Update

Bob Steiner, CHBWV Consulting Engineer, presented an update on the performance of the Permeable Treatment Wall (PTW). At the outset Mr. Steiner reminded the group that the PTW was installed in fall 2010, is 3' wide and 20-30' deep. It is made of zeolite material that performs a passive ion exchange to remove the Sr-90 from the north plateau groundwater plume to the As Low As Reasonable Achievable (ALARA) goal of less than 1,000 pCi/L. Other goals include minimizing expansion of the plume and not precluding future decommissioning strategies. A site map showed the origin of the plume under the MPPB, its extent on the North Plateau and the location of the PTW. The PTW is performing as designed with Sr-90 activity decreasing downgradient of the wall. The ion exchange occurs across the entire length of the PTW. There are several narrow zones within the PTW where higher Sr-90 activity is found. These areas coincide with preferential flow paths, where groundwater flow is the greatest, mostly due to local soil conditions in the sand and gravel. Downgradient Sr-90 levels are expected to continue to decrease over time as groundwater is treated by the PTW. Total estimate dose equivalents are well below the limit of 100 mrem/year and the maximum dose to the MEOSI is 0.012 due to drainage from the North Plateau, largely at the WNSWAMP location where groundwater surfaces. Mr. Steiner displayed a graphic showing the plume lobes relative to the PTW in January 2011 and April 2019.

In response to a question regarding recent significant rain events, Mr. Steiner noted that groundwater levels were monitored at several locations and that there was no indication that it was shallow or would surface. The PTW allows for normal flow through rates so water does not back up around the wall edges. The wall has a 20-year design life and the media was bench tested and simulated and is performing as expected.

Groundwater Withdrawal Permit Discussion

Ray Vaughan presented some concerns he had with the substance and process regarding the recent DOE Groundwater Water Withdrawal permit application to NYSDEC. He reminded CTF members of his two comment letters to NYSDEC that he had already shared with them, and he noted that the process was more confrontational than he would like. At the July 25, 2018 CTF meeting he had suggested "that the agencies, within the limits of privilege discussions and time, inform the CTF in advance of permits and regulatory applications as a regular part of meeting updates," to which Mr. Rieman responded that DOE has public notice and comment processes and that overlaying another process raised concerns, while Mr. Bembia stated that NYSERDA would attempt to inform the CTF of any permit actions taken by NYSERDA. In this instance Mr. Vaughan stated that he became aware of the Groundwater Water Withdrawal permit application only because friends had informed him of it.

Mr. Vaughan displayed a graphic depicting the site and local glacial fill and bedrock. He stated that the site bedrock groundwater flow is not well characterized, that the modeling used relies on unrealistic values for the thickness and hydraulic conductivity of the fractured bedrock, and that these values are very different from those used elsewhere such as the 2010 EIS. The use of Tritium dating could determine the extent that flow is from relatively recent rainwater recharge or ancient water. He believes these issues need to be resolved before the permit is approved.

In response to a question of how Mr. Vaughan's information would be incorporated into the Probabilistic Performance Assessment (PPA), Mr. Bembia stated that the agencies would discuss this and bring it to the attention of the PPA contractor.

Budget Discussion

John Pfeffer stated that he and Charlie Davis had attended the National Cleanup Workshop on behalf of the Town of Ashford. He noted that the CTF was similar to other site-specific advisory boards but those were convened under federal regulations. The other site boards have more input into the site budget priority setting and more congressional interaction. He noted that the West Valley Reauthorization bill sponsored by Congressman Reed would direct that Comptroller General conduct study concerning waste classification within 18 months and authorizes up to \$75 million annually through 2026. A member noted that DOE West Valley leadership is not in a position to advocate for funding with Congress. Another member raised the concern that if more funding allowed Phase 1 work to be completed before the Phase 2 Decision that there could be layoffs and a significant loss of experience. Paul Bembia noted that the Phase 1 work would likely continue through 2030 and that the Phase 2 Decision would be made in approximately 2023-2024.

The option of a conference call or peer exchange with community advisory boards was discussed but no conclusion reached. John Pfeffer will draft a letter requesting funding and it will be circulated to the CTF. The CTF has not visited Washington in several years to advocate for funding and a future visit will be considered.

Other Business

The CTF decided not to meet in December absent urgent business.

Observer Comments

An observer online asked that the monitoring equipment be demonstrated at a future Quarterly Public Meeting.

DOCUMENTS DISTRIBUTED

Description	Generated by; Date
Meeting Agenda	Logue; 10/25/19
Project Update	CHBWV; 10/25/19
2018 ASER Presentation	CHBWV; 10/25/19
Permeable Treatment Wall Update	CHBWV; 10/25/19
Groundwater Withdrawal Characterization Concerns Presentation	Vaughan; 10/25/19
Draft Schedule of 2020 CTF and QPM Meetings	Logue; 10/25/19
News Clippings Distributed at Meeting	NYSERDA; 10/25/19