To: West Valley Citizen Task Force
From: Bill Logue, Citizen Task Force Facilitator
Date: June 14, 2010
Subject: Summary of the May 26, 2010 Meeting

Next Meeting

The next Citizen Task Force Meeting will be:

Time & Date: 6:30 – 9:00 PM, June 23, 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, Chris Crawford, Rob Dallas, Bob Engel, Chris Gerwitz, Deb John, Steve Kowalski, Paul Kranz, Lee Lambert, Kathy McGoldrick, Joe Patti, Warren Schmidt, 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.
West Valley Environmental Services, LLC (WVES): Sonja Allen, Charles Biedermann, Jim Blankenhorn, John Chamberlain, Jack Gerber, John McKibbin.
Observers: Jack Alexander, David Caldwell, Terry Dunford, Shannon Farrell, Rob Gamble, Joanne Hameister, Jeff Neff, Bill Potts.

Introductions and Announcements

Bill Logue welcomed the group and reviewed the meeting documents.[1] He reported that Tim Siepel, due to work responsibilities, will be unlikely to attend a meeting until the end of the year. His alternate, Bob Engel, will attend in the meantime. The CTF agreed to review membership later in the year once the CTF needs, and likely areas of focus, become clearer in relation to the actions specified in the Record of Decision (ROD) and Findings Statement. Bill Logue informed the CTF that NRC and DOE would be holding a videoconference on June 10 to address follow up questions on the Technical Evaluation Report. Information on how to attend by telephone or at the videoconference will be forwarded to the group.

Resolution Concerning Funding

The CTF members signed the resolution concerning funding and a cover letter to Dr. Ines Triay, DOE Assistant Secretary for Environmental Management.

DOE WVDP Project Update

Bryan Bower of DOE and John McKibbin, WVES President and Project Manager, provided the CTF with a project update.

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

Safety. As of April 30, WVDP employees have worked more than 2.5 million hours without a lost-time accident or illness. No first aids or recordable injuries were reported to date in May. The Total Recordable Case Rate (TRC) and Days Away, Transferred, Restricted (DART) both stand at 0.2.

Contamination Event. John McKibbin gave a report on a contamination event on May 10 in the Main Process Plant Building (MPPB) related to work in Extraction Cell-3. He noted that contamination events are possible when doing the type of decontamination work that performed at the WVDP, however, they are always a cause for concern. Three operators and one Radiation Control Technician were exposed when waste was being bagged and removed from the area. The waste included anti-contamination clothing and piping and other objects. The piping had been cut to length with ends and sharp edges taped over. The procedure is to place waste in a plastic bag which is taped with its end twisted and folded over in a "J-seal". This bag is then placed inside another bag. The process is repeated until the waste is inside 3-4 layers of plastic bags and the bags are then placed inside a waste box. At various stages the bags were moved farther out of the Extraction Cell, which involves moving them over several raised door sills. Each bag should be "smeared" to test it for radiation as it moved out of an area.

Several defects have been identified in the handling process in the investigation of the incident. The proper smearing was not done, J-seals were not thorough enough, four bags had small punctures, and the waste box was too far from where it should have been placed to reduce handling.

Once contamination was discovered, the area was secured, and a time out was taken across the site to determine the causes. The bags were returned to a safer area and the next day an investigation was started. The exposure to the four individuals was primarily from Beta radiation which cannot penetrate much beyond the surface of the skin. The individuals received the following doses: Individual 1 - Top of shoe by laces 2,500,000 dpm and right arm 12,500 dpm; Individual 2 - Front of shirt 1,250,000 dpm and right hand 750,000 dpm; Individual 3 - right coverall leg 3,100,000 dpm; and Individual 4 right finger 3,200 dpm. Each person was safely decontaminated and there was no internal dose or significant external dose to the individuals. The DOE dose limit is 5 rad (Roentgen Absorbed Dose), the site limit is 2 rad and the maximum exposed individual from this event was less than 0.200 rad. The location of the contamination on the individuals is probably due to the fact that a person has to hold the bag open because of the size and shape of the waste. In response to a question Mr. McKibbin noted that the workers had between 8 and 27 years of experience.

All workers were briefed on the incident and the corrective actions before resuming work. A number of lessons were identified from the event including:

- Reduce the number of times an item is handled to reduce the possibility of bag punctures or abrasions.
- Look at different types of bagging or seals for pipes, e.g., bag each end of the pipe.
- Have waste boxes as close as possible to waste generation areas.
- Have materials radiologically cleared prior to moving them out of a radiologically controlled area to a buffer area.
- Reinforcing bagging and sealing techniques.

A CTF member questioned whether thicker bags could be used. Mr. McKibbin noted that this would make the bags more difficult to seal. Mr. Bower noted that, in addition to the WVES investigation, DOE had brought in an independent team with members from DOE-Idaho and DOE-Headquarters to conduct an investigation. To date the results of the investigation agree.

A CTF member noted that the Beta contamination from this event would not be picked up by a routine gamma walkover survey but could have been by using a Field Instrument for the Detection of Low Energy Radiation "FIDLER" sampler/detector. The CTF member had raised this issue at the March 24, 2010 meeting during the Characterization Sampling and Analysis Plan discussion. The CTF member noted that contamination can be overlooked if detection equipment like the FIDLER is not used. He suggested that the agencies and the CTF keep this in mind when discussing future studies and analyses of the site.

Funding. Mr. Bower continued the project update by noting that $11million in American Resource and Recovery Act (ARRA) funds have been shifted from WVDP to the Brookhaven National Labs to complete work there for closure in FY 2011. As a result, there will be several impacts on the cleanup work at WVDP. Waste shipping and the characterization of wastes in Tank 8D-4 will be delayed. MPPB decontamination efforts will be reduced, including discontinuing work in the Liquid Waste Cell and reducing the amount of piping and utility isolation. DOE is making these specific adjustments to minimize job losses and to be able to resume quickly when funding is available.

MPPB. In Extraction Cell – 1 (XC-1) the outer hatch covers were removed and relocated. The inner hatch covers were removed and placed in a waste box. This cell is where the first extraction process was used to remove the usable uranium and plutonium from the spent fuel that was dissolved in nitric acid in the Chemical Process Cell. Since this cell has high levels of gamma radiation, work will be done robotically. Core drilling for placement of cameras and utilities is complete and the robotic arm is being tested at the test tower. The arm will be deployed through the hatch to remove at least 9 vessels and more than a mile of piping.

In the Process Mechanical Cell the Nitrocision® decontamination process is removing contamination on the floor and walls. Work is approximately 75% complete. Radiation data is expected in June.

Tank & Vault Drying. Work continues on installation of the drying system for the High-level Waste Tanks and Vaults. Ventilation line installation is underway and new above ground ventilation lines are installed in the Waste Tank Farm. Temporary ventilation lines are operational. The Rotary Dryer is in place. The existing ventilation header is being removed.

Waste Processing. As of April 30, 2010, 72937 ft^3 of stored Low-level Radioactive Waste (LLW) and 39,670 ft^3 of Transuranic (TRU) waste have been processed and 47,079 ft^3 of LLW shipped for disposal. With the reduction in ARRA funds waste shipments were halted. To prepare for new waste streams several upgrades are underway including new HEPA filters in the Remote Handled Waste Facility and a plasma cutting tool in the Container Sorting and Repackaging Facility and Vitrification Facility.

North Plateau Groundwater Plume (NPGP) Permeable Treatment Wall (PTW).

John Chamberlain of WVES gave a presentation on the status of the NPGP PTW project which is transitioning from the design to installation phase. He reminded the CTF that the North Plateau is the

portion of the site where the MPPB and other facilities are and which is bounded on one side by Quarry Creek and on the other by Erdman Brook. Mr. Chamberlain showed a cross section diagram from the 1970s of the plateau topography with 10-30 feet of glacial fill which is relatively permeable sitting on top of a less permeable clay layer. Precipitation infiltrates the fill down to the clay and moves northeast until it surfaces at the edge of the plateau. The design of the PTW was selected because of the way groundwater moves through the site.

In 1993 contaminated groundwater surfaced in ditches on the North Plateau and small diameter Geoprobe® wells were installed in 1994 to establish the nature and extent of contamination. The Strontium-90 contamination is attributed to process line leaks in the 1970's. The wells allow for sampling at different depths for a three-dimensional coverage of the contamination and measurement of its spread over time. In addition to existing wells about 120 additional monitoring wells were installed for the PTW project. These wells are up and downgradient of the proposed PTW. Additional wells will be placed in the wall.

The initial response to the Strontium-90 contaminated groundwater plume was to install a pump and treat system in 1995. This pumps and treats 2-4 million gallons of contaminated groundwater per year. In 1996 and 1998 drainage changes were made near the MPPB to divert surface water away from the plume area. In 1999 a pilot PTW was installed. It was evaluated in 2002.

Eight alternatives were considered in arriving at the design of the PTW. Based on site geology and the location of the plume the alternative of in-situ treatment through a passive PTW was selected. The additional wells and borings were used to determine the geology, hydrogeology and geochemistry of the area and wall location and depth. Studies concluded that the wall would be effective if it is along the area of the leading edge of the plume where the contamination is at 10,000 picocuries/liter which places it near an existing road adjacent to the Construction and Demolition Debris Landfill. This will capture the three plume prongs.

Zeolite, a naturally occurring mineral formed from volcanic ash, captures the Strontium-90 as water passes through it. Laboratory testing of zeolite was conducted at the University at Buffalo with simulated groundwater and testing at WVDP with North Plateau groundwater. Two-thousand metric tons of zeolite will be used for a wall three feet wide, 800 feet long and 18-30 feet deep. A single pass trencher that simultaneously removes soil and places the zeolite will install the wall down into the clay layer. This system avoids the process used with the pilot PTW which smeared clay on the trench sides making them less permeable. The trencher can be programmed with GPS coordinates to adjust the cutting to the depth. Preparations will begin this summer and installation may be as quick as 3-4 days or up to two weeks in the fall. The trencher may have to be decontaminated at completion of the project.

Approximately 75,000 ft^3 of soil will be removed from the trench, which is expected to be saturated with water and contaminated with Sr-90. The plan is to build a lined "box" parallel to the wall to receive the soil by conveyor belt from the trencher. If the conveyor does not work as planned, other equipment can be used to place the soil in the box. Once the soil is drained and dried, the contamination will be characterized and disposal options analyzed. Disposal of this soil is part of the Phase 1 work and should provide insight into soil disposal availability for the demolition of the MPPB and removal of the NPGP source area.

NYSERDA Project Update

Tom Attridge, NYSERDA Program Manager, updated the CTF on the Geomembrane Replacement Project, Leachate Removal Project and RCRA Corrective Measure Study.

Geomembrane Replacement. Mr. Attridge reminded the CTF that in 1992 a Very-Low Density Polyethylene (VLDPE) geomembrane was installed over two and a half acres to reduce water infiltration into the trenches of the State-Licensed Disposal Area (SDA). The cover was effective and in 1995 the remainder of the SDA was cover in a different material, XR-5. The geomembranes are tested every few years to ensure their integrity. The VLDPE is at the end of its useful life and will be replaced with XR-5in June or July. The work will take 8-10 days. Testing in 2008 indicated that the existing XR-5 material should last until approximately 2022.

Leachate Removal. In 1991, NYSERDA pumped approximately 8,000 gallons of leachate from waste trenches into a tank located in a building at the SDA. In 2009, NYSERDA decided to remove the leachate and tank as it was no longer needed. The leachate was removed from the tank and shipped offsite for treatment and disposal in November 2009. The leachate tank will be lifted through a hatch in the roof of the T-1 building in June and the building will be "clean closed" under RCRA removing it from the existing permit. The building will be left in place for other potential uses.

RCRA Corrective Measures Study. NYSERDA has prepared a draft Focused Corrective Measures Study under the RCRA 3008(h) Administrative Consent Order. The purpose of the Focused CMS is to recommend interim measures at the SDA for a period of up to 10 years that will minimize the potential of a release of hazardous constituents from the SDA, thereby protecting human health and the environment from these hazardous constituents. A draft of the Study will be available for public comment on June 4 and a public meeting held on June 8 at the Ashford Office Complex. The comment period will last 30 days. Implementing actions from the CMS may be included as conditions by the New York State Department of Environmental Conservation in the RCRA Corrective Action Permit due in the fall of 2010. After discussion, the CTF decided to await the release the draft CMS then determine if a work group is needed to draft comments for discussion at the June meeting.

Other Business

Paul Bembia of NYSERDA advised the CTF that DOE and NYSERDA were outlining a proposed process for arriving at the Phase 1 studies. The process will include subject matter experts, and independent expert panel and consultation with the regulatory agencies, CTF, environmental organizations and the public. At the June CTF meeting NYSERDA and DOE will discuss their proposed process for moving forward and the roles of these groups. Ray Vaughan noted that he had identified 10-12 potential study areas that he would like considered by the agencies. He will present these at the June meeting.

Observer Comments

There were no observer comments.

Action Items

Action	Who; Date
Circulate draft CMS to CTF	NYSERDA/Logue 6/4/10
Circulate information of NRC/DOE TER videoconference	Logue 5/28/10

Documents Distributed

Document Description	Generated by; Date
Meeting Agenda	Logue; 5/26/10
DOE WVDP Update	DOE; 5/26/10
WVES Permeable Treatment Wall Project Update	WVES; 5/26/10
NYSERDA Project Update	NYSERDA; 5/26/10
CTF Letter to Dr. Ines Triay of DOE concerning funding resolution	CTF; 5/26/10
CTF Resolution Concerning Funding	CTF; 5/26/10
Newspaper clippings distributed at the meeting	NYSERDA; 5/26/10