



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD, SUITE 102  
KING OF PRUSSIA, PA 19406-1415

September 28, 2022

Bryan C. Bower, Director  
West Valley Demonstration Project  
U. S. Department of Energy  
10282 Rock Springs Road  
West Valley, NY 14171

**SUBJECT: WEST VALLEY DEMONSTRATION PROJECT - U.S. NUCLEAR  
REGULATORY COMMISSION MONITORING VISIT  
REPORT NO. 05000201/2022002**

Dear Mr. Bower:

On August 15 – 18, 2022, the Nuclear Regulatory Commission (NRC) conducted an announced monitoring visit at the U.S. Department of Energy's West Valley Demonstration Project (DOE-WVDP) site to review ongoing decommissioning activities. The monitoring visit consisted of observations by the NRC representatives, review of documents, interviews with site personnel and plant walkdowns supplemented by in-office reviews and periodic phone calls. The results of the monitoring visit were discussed with you on August 18, 2022, and are provided in the enclosed report.

In our December 17, 2021, letter to you (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21349B344), it was concluded that the DOE-WVDP has demonstrated adequate planning to the NRC that the Main Plant Process Building (MPPB) is ready for open air demolition; however, we requested an opportunity to conduct a monitoring visit to the site before demolition of the MPPB commenced. The monitoring visit documented in this report meets the intent of that request, with the exception of monitoring activities associated with the demolition of Product Purification Cell – South (PPC-S). At the time of this monitoring visit, DOE-WVDP had not conducted a formal review of radiological data or finalized demolition plans for PPC-S. The NRC requests an opportunity to conduct a monitoring visit to the

B. Bower

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site, once appropriate documentation is available, prior to commencement of demolition activities for PPC-S. The site visit will be coordinated with your staff.

No public health and safety issues of more than minor significance were identified.

Please contact me at (610) 337-6953 if you have any questions regarding this matter.

Sincerely,

Anthony Dimitriadis, Chief  
Decommissioning, ISFSI, and Reactor Health  
Physics Branch  
Division of Radiological Safety and Security

Docket No. 05000201

License No. CSF-1

Enclosure:

Report No. 05000201/2022002

cc w/encl:

Craig Rieman, Deputy Director

Jennifer Dundas, Safety and Site Programs Team Leader

Janice Williams, Regulatory Affairs

Paul Bembia, NYSERDA Program Director

SUBJECT: WEST VALLEY DEMONSTRATION PROJECT - U. S. NUCLEAR  
REGULATORY COMMISSION MONITORING VISIT  
REPORT NO. 05000201/2022002 DATED SEPTEMBER 28, 2022

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DOCUMENT NAME: <https://usnrc.sharepoint.com/teams/Region-I-Decommissioning-Branch/Inspection Reports/Issued Reports/WVDP Ltr and Rpt 2022002.docx>

**SUNSI Review Complete:** KWarner After declaring this document "An Official Agency Record" it **will** be released to the Public.

**ML22266A057**

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DATE	9/23/2022	9/28/2022				

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U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

MONITORING REPORT

Monitoring Visit No. POOM-032/2022002

Project No. POOM-032

NRC Docket No. 05000201

NRC License No. CSF-1

Location: West Valley Demonstration Project  
10282 Rock Springs Road  
West Valley, New York 14171

Monitoring Visit Dates: August 15 - 18, 2022

Monitoring Visit Exit Date: August 18, 2022

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## **EXECUTIVE SUMMARY**

U.S. Department of Energy (DOE)  
West Valley Demonstration Project (WVDP)  
NRC Monitoring Visit Report No. 2022002

An announced monitoring visit was conducted on August 15 - 18, 2022, by U.S. Nuclear Regulatory Commission (NRC) staff at the DOE-WVDP site in West Valley, New York. This visit was supplemented by in-office reviews and periodic phone calls. NRC staff also participated in the DOE quarterly public meeting on May 25, 2022. The monitoring visit included reviews of programs and activities associated with the West Valley site decommissioning project. The monitoring visit consisted of interviews with DOE staff, DOE contractors, and New York State Energy Research and Development Agency (NYSERDA) personnel; a review of documents; walkdowns of the facility; observations of prepared work areas and in-progress work activities. The program for conducting NRC monitoring visits at the WVDP site is described in Inspection Manual Chapter (IMC) 0111, "Region I Monitoring Activities for the Department of Energy West Valley Demonstration Project."

Based on the results of these activities, no public health and safety issues of more than minor significance were identified.

## **REPORT DETAILS**

### **1.0 Introduction**

In accordance with the WVDP Act of 1980 and as implemented by a Memorandum of Understanding between the DOE and the NRC, an announced routine monitoring visit was conducted on August 15 - 18, 2022, by NRC staff at the DOE-WVDP site in West Valley, New York, which was supplemented by in-office reviews and periodic phone calls. NRC staff also participated in the DOE quarterly public meeting on May 25, 2022. The program for conducting NRC monitoring visits at the WVDP site is described in IMC 0111. The monitoring visit included reviews of programs and activities associated with the WVDP decommissioning project.

### **2.0 North Plateau Permeable Treatment Wall**

#### **a. Inspection Scope**

The NRC reviewed performance documentation associated with a Permeable Treatment Wall (PTW) installed on the WVDP north plateau designed to mitigate the spread of strontium-90 (Sr-90) in groundwater migrating from the Main Plant Process Building (MPPB) source area. The monitoring visit consisted of interviews with DOE staff and DOE contractor personnel, a review of documents and a tour of the site.

#### **b. Observations and Findings**

The NRC reviewed information in several quarterly PTW monitoring reports and the 2021 Comprehensive Monitoring Report, which documents results of the five-year monitoring program following the tenth year of operation. The report includes summaries of the Sr-90 concentrations in groundwater monitoring well samples (as available) in the 66 specific PTW wells installed up gradient, in, and down gradient of the PTW, and the network of existing wells in the PTW vicinity. The report indicates that the performance of the PTW is generally meeting the established Remedial Action Objectives and functional requirements. These key objectives and requirements include: a reduction in the down gradient Sr-90 concentrations (compared to up gradient concentrations) from the PTW to below 10,000 pCi/L; minimizing expansion of the contaminated groundwater plume; and no substantial diversion or alteration in groundwater flow.

The NRC determined that the PTW continues to be effective in removing Sr-90 from North Plateau groundwater. While Sr-90 groundwater well concentrations in and down-gradient of the PTW have increased since their installation, particularly in the western lobe of the plume (see discussion below), the concentrations of Sr-90 in monitoring well samples immediately downgradient of the PTW are generally lower than the corresponding up gradient wells. An exception is the shallow downgradient well at station 4 (PTW-S4C-S), which measured 12,050 pCi/L in April 2021. This measurement has fluctuated, but the 2021 Comprehensive Monitoring report documents that this is the first time that a downgradient PTW platform well has exceeded 10,000 pCi/L since April 2012. Causes for increased concentrations within and downgradient of the PTW may include the following: (i) higher concentrations of Sr-90 migrating through the PTW, (ii) increasing ionic strength of groundwater from use of de-icing salts leading to increased competition for sorption sites, (iii) preferential flow of groundwater through the

PTW leading to depletion of sorption capacity in localized zones, and (iv) more generalized depletion of sorption capacity throughout the PTW. Bypass flow around the wall is considered to be less likely.

The groundwater flow patterns are complicated, but the 2021 Comprehensive Monitoring Report indicates that overall flow had been towards the northeast and east through the PTW without diversion around the ends of the wall, demonstrating that the large-scale flow pattern has not been substantially altered. The 2021 report states that there does not appear to be any significant expansion of the plume except for areas that were already on the down gradient side of the PTW. Visual inspections of the ground surface near the PTW did not identify any erosion, standing water, or rutting, and no physical changes to the PTW system have been observed. Several small puddles along the access road were filled with gravel. The soil containment structure, which included the soil excavated during the installation of the PTW, was removed during the summer and fall of 2021. DOE continues to monitor and maintain the PTW and surrounding area to correct any potential issues that may negatively affect performance.

The NRC notes that the 2021 Comprehensive Monitoring Report concluded that monitoring of the Sr-90 plume provided valuable information and should continue as stated in the current monitoring program but noted several actions that could be taken to more fully diagnose the causes of degraded performance and increase the longevity of the PTW in mitigating releases of Sr-90 from the MPPB. At the time of the monitoring visit, the site was in the process of determining next steps for the PTW; the NRC will continue to review PTW performance during future visits.

c. Conclusions

No significant public health and safety issues were identified. Review of recent PTW quarterly and 5-year Monitoring Reports indicate that the performance of the PTW is generally meeting the established Remedial Action Objectives and functional requirements. Performance of the PTW is degrading in at least a portion of the wall with increasing concentrations in downgradient wells and one well greater than 10,000 pCi/L. DOE is evaluating options to increase the longevity of the wall. The NRC representatives provided comments during the exit debrief that the site should consider several of the actions suggested in the 2021 Comprehensive Plan, including an analysis of the distribution of Sr-90 in the PTW, the remaining sorption capacity of the bed, and analysis of flow patterns to better understand how performance of the system may be improved.

### **3.0 MPPB Deactivation and Demolition Preparation**

a. Inspection Scope

The MPPB was the main facility used for commercial nuclear fuel reprocessing; the MPPB was built between 1963 and 1966 and used by Nuclear Fuel Services from 1966 to 1972. The building consists of a series of cells, aisles, and rooms that are mostly above grade with a couple extending below ground surface. Portions of the MPPB have been modified over the past four decades by the WVDP to support mission activities such as solidifying high-level waste.

The NRC reviewed DOE's continuing progress toward the deactivation and preparation of the MPPB for upcoming demolition. The monitoring visit consisted of interviews with DOE staff and contractor personnel, including discussions with cognizant personnel on the deactivation and upcoming demolition activities. NRC staff performed walk-downs of the site, including around the outside of the MPPB, the rail operations area, the water management system, including the series of frac tanks and portions of the lagoon system, the PTW area, and waste preparation and load out areas. Walkdowns of the accessible areas inside the MPPB were conducted during the last monitoring period and documented in monitoring report 2022001.

b. Observations and Findings

WVDP had conducted significant deactivation, with CHBWV reporting during the August 24, 2022, quarterly public meeting that 99% of the main plant has been deactivated. During the time of this monitoring visit, CHBWV had entered the phase of their contracted work to demolish the MPPB to grade level (100 +/- 3 ft) safely. All below-grade structures had been grouted with controlled low-strength material (CLSM) in preparation for demolition activities.

WVDP continues deactivation of the MPPB in preparation for demolition. Work during this monitoring period included deactivation and demolition preparations in the Product Purification Cell-South (PPC-S) and completion of preparations in the Ventilation Wash Room. Deactivation work continued during this monitoring period in the Acid Recovery Cell using a saw to segment the contaminated concrete floor into blocks for easier load out during demolition.

The site conducted several assessments in preparation for the start of MPPB demolition. At the time of the monitoring visit the Line Management Self-Assessment (LMSA) and Contractor Readiness Assessment (CRA) final reports were available for review. The DOE Readiness Assessment was scheduled for completion after LMSA and CRA pre-start items were at or near completion. The NRC reviewed the WVDP contractor LMSA and CRA reports and determined that they were appropriately comprehensive and self-critical. The LMSA was conducted in stages and documented eight pre-start issues and two post-start issues. Following the LMSA, a two-week CRA was conducted, which documented seven pre-start items. The NRC noted that the site continued to work through the pre-start items during the monitoring visit. The NRC reviewed the DOE Readiness Assessment Implementation Plan to verify that the review topics were comprehensive and noted that DOE WVDP Director approval is a prerequisite for the commencement of demolition.

The NRC reviewed the work instruction package (WIP) and the demolition schedule to determine if assumptions made in the demolition work plan (DWP) and other previously reviewed documentation, including radiological characterization and air modeling data and analyses, had been maintained. The NRC also reviewed how the site incorporated lessons learned from previous demolition projects. The NRC noted that the WIP includes provisions for DOE to review and approve all changes related to the execution of the demolition plan, including any changes to any engineering, administrative or regulatory controls, thereby giving an additional level of oversight. The WIP includes protected

assumptions defined as “those conditions, or limits, that were used as the basis for MPPB demolition-specific air dispersion modeling results, or water management system design required to protect surface water releases to the environment.” These protected assumptions were consistent with assumptions that were found to be important to a member of the public and worker dose-based air dispersion modeling results and/or important to the water management system design to protect against significant surface water impacts to the environment. The assumptions were documented in red font, which the NRC noted is a good practice for easy visibility to the reader. The NRC notes that appropriate severe weather stop work criteria were included in the WIP, including forecasted winds having the potential to exceed 30 mph, forecasted rain more than 1.25” in a 24-hour period or greater of 0.5” in one hour, and sustained winds exceed 15 mph with certain criteria, or when conditions are interfering with the effectiveness of dust suppression. Each demolition area has specified instructions, including specific steps on what method and how to demolish each area; radiological, waste, industrial, health, and safety considerations; and any additional precautions for the area. Demolition activities are given minimum demolition durations, in part, to ensure reasonable radiological conditions for nearby workers. The NRC notes the appropriate use of dust suppression is a protected and important assumption to minimize airborne contaminants. The PPC North and South cells were not included in WIP 1904751. The NRC staff noted and understands that the site intends to create a separate WIP for these cells after analyses of the radiological data is complete.

NRC representatives discussed pre-demolition plans for controlling the environmental release of radioactive materials through air and water pathways and limiting potential exposures to workers through inhalation and direct exposure pathways. WVDP representatives indicated that the operating experience and lessons learned during the demolition of the 01-14 building, WVDP Vitrification facility and the Hanford Plutonium Finishing Plant were utilized in the development of the MPPB demolition plan. Significant pre-demolition actions over the last several decades include removing and separately disposing of major contaminated equipment and vessels, filling piping and electrical conduits with grout or foam, as appropriate, high-pressure washes to decontaminate walls, applying fixatives to walls to limit release of aerosol contamination, and placing a layer of grout on the floor to reduce the gamma exposure rate and to fix contamination in place. These activities to remove high activity sources, decontaminate building surfaces, and implement radiological controls are expected to limit worker and public dose during demolition to acceptable levels. Although not within the scope of this demolition, filling the below grade cells with grout allows for the safe movement of demolition equipment. Demolition of the prepared facility will be performed using a variety of large construction apparatus equipped with shearing, crushing, demolition, and water spray attachments.

The NRC reviewed WVDP’s processes and procedures for water collection and management to verify that lessons learned from the Vitrification Building demolition and others were incorporated and that the water would be appropriately collected and sampled to determine next steps, including potential discharge. The site designed a system to collect, segregate, and sample the demolition water while minimizing the amount of uncontaminated stormwater to be treated prior to discharge. Berms of sufficient area coinciding with the high contamination area, (HCA) are being utilized to collect the water. Storm and floor drains in these areas will be sealed off to prevent unintended releases. The water will be collected in the bermed areas and directed to the north interceptor where it will be mechanically filtered and pumped into a series of

frac tanks for sampling and storage. The water will be dispositioned based on the sampling results. A radiological treatment skid containing ion exchange resins is available to remove radiological constituents as needed. Higher radiological and Resource Conservation and Recovery Act (RCRA) liquid storage tanks are available to store any liquids not meeting site release requirements and will be held there until they are shipped off site for disposal.

Liquids deemed eligible for the site's normal water processing system will be released to Lagoon 2 where it will go through pre-existing liquid treatment system to Lagoon 4 or 5 then to Lagoon 3 before being released out of Outfall 001 on Erdman Brook after being sampled to demonstrate the release requirements (State Pollutant Discharge Elimination System requirements) are met. The treatment pathway described above may vary over the course of decommissioning, but DOE will continue to sample surface water to ensure it meets SPDES requirements prior to discharge. The NRC notes that several protected assumptions cover water collection and management, including a requirement for water control barriers (i.e., berms to be in place prior to and maintained during all phases of demolition and weekly berm inspections be performed throughout demolition activities). The height of these berms was reviewed in the DWP and are based on certain storm events. The NRC notes that WVDP-597, MPPB Demolition Water Management Plan states that "operators will be on duty 24 hours per day, 7 days per week to ensure constant and consistent attention to demolition water," and that this demonstrates an appropriate amount of attention to water management. NRC staff performed walked-downs of the water management system and interviewed an operator trained on the system and found the operator's knowledge about the water management system adequate.

NRC staff reviewed WVDP's plans for air monitoring and radiological and contamination controls. The NRC representatives noted that a series of both environmental continuous air monitors (ECAMs) and fixed air samplers (FASs) had been placed around the perimeter of the expected demolition area to assess airborne releases and potential inhalation exposure to demolition workers. These close in monitors would also provide an early indication of any potential releases to the environment that may lead to potential risk-significant dose to members of the public located off-site. The FASs will be analyzed daily for trending purposes and filters will be screened and counted for gross alpha and beta during each shift to quickly assess any degrading conditions. The flow rates in the FASs are higher than the ECAMs and can achieve lower detection limits of  $1E-14$   $\mu\text{Ci/ml}$ . The continuous air monitor outputs are fed to a central monitoring location (control room) near the project where radiation protection staff provide constant monitoring providing near-real time measurements of airborne radioactivity levels. The radiation protection staff demonstrated the capabilities of the equipment and indicated that there were multiple alarm levels for alpha and beta/gamma with subsequent action responses ranging from continued monitoring and dust suppression, stopping work, to sheltering, and will be screened three times per shift for gross alpha and beta during

demolition and waste handling activities. NRC staff discussed the procedure for sampling of FAS filters and deposition plates, as well as ECAM set points in the control room with a knowledgeable operator. Additionally, there are several closed-circuit television cameras on the project site which are used to observe ongoing work activities, and which can be used to inform monitoring personnel of potential causes if elevated readings of the ECAMs are indicated. Monitoring for potential airborne release appears to be robust and sufficient to alert DOE of any potential risk-significant releases from demolition activities in a timely manner.

An additional set of 16 ambient air samplers were located at the boundary of the Western New York Nuclear Service Center within two miles from the demolition area to monitor and verify that emissions remain less than the EPA's National Emission Standards for Hazardous Air Pollutants (NESHAPs) standard. Each of these are positioned in proximity to the nearest resident in each of 16 compass direction (every 22.5 degrees). The flow rates through the samplers are sufficiently high to reach even lower detection limits compared to the ECAMs and FASs at a level of  $1E-16$   $\mu\text{Ci/ml}$ . Data from the offsite samplers are reported in the annual site environmental report.

NRC staff verified that radiological dose rate and contamination surveys were incorporated into the MPPB Demolition Contamination and Radiological Air Monitoring Plan at an appropriate frequency. The NRC noted that a stop-work criteria is listed should any radiation work plan limiting condition be exceeded. The NRC noted that incorporation of deposition plates for contamination monitoring of deposited particles during demolition is an incorporation of lessons learned from other demolition activities.

The site plans to ship much of the waste generated during MPPB demolition in intermodals via direct rail to a licensed commercial waste facility in Utah and ship specialty boxes by truck mostly to the DOE Nevada National Security Site (NNSS) in Nevada. Asbestos containing materials (ACM) will be disposed of in a dedicated Toxic Substances Control Act (TSCA) pit for mixed waste at the Clive, Utah, disposal facility. DOE indicated that it has a contract for disposal of waste and that approximately 15 waste profiles that meet Waste Acceptance Criteria (WAC) for the disposal facility have been approved. Waste engineers will fill out the waste manifests based on the estimated inventory of demolished building sections in debris piles loaded into waste containers. The NRC notes that the site gained significant experience shipping intermodals using direct rail during the PTW containment wall project.

The NRC discussed waste load out activities with cognizant personnel and toured the areas where intermodals would be prepared for loading, actively loaded, stored, and observed several intermodals on rail cars for shipment. The NRC noted the future use of two lift reachers, one in the inner demolition zone where higher contamination is expected and the other kept outside for contamination control. The NRC reviewed waste pile controls in the WIP and noted controls of demolition debris contamination and load out, including in several protected assumptions. Specifically, the WIP states that "demolition debris generated shall be removed each day prior to commencing active demolition the following day" and "loading operations shall be performed to prevent the

inclusion of rain or snow in the waste packages.” DOE indicated that excess water pumped from the waste containers will be sampled and processed via the system described above.

The NRC did not identify any items of more than minor concern during site walkdowns.

c. Conclusions

No public health and safety issues of more than minor significance were identified. The NRC determined that appropriate lessons learned and radiological assumptions were incorporated into MPPB demolition processes and documentation.

#### 4.0 Occurrence Reporting System

a. Inspection Scope

The NRC monitors reviewed selected occurrence reports and their associated corrective actions. The NRC monitors interviewed cognizant personnel, toured the affected areas, performed walk-downs, and reviewed documentation as appropriate.

b. Observations and Findings

The NRC reviewed and discussed several occurrence reports, corrective action plans, and DOE surveillances and independent assessments with cognizant site personnel. Specifically, the NRC followed up on issues surrounding a SUREPAK leak, the derailment of several empty rail cars, and overall safety culture at the WVDP site. Several of these are discussed in detail in the 2021001/2022001 monitoring report. The NRC notes a common theme between these issues involving inadequate conduct of operations.

The NRC reviewed a DOE-WVDP surveillance and independent assessment addressing the October 2021 SUREPAK leak and discussed with cognizant personnel. The NRC notes that the surveillance and independent assessment documented three and seven findings, respectively. A finding is defined in the documents as a determination of an individual item which is a direct deviation to, is an omission of, or is in noncompliance with an established requirement and which requires correction and a response. DOE-WVDP required CHBWV to submit a corrective action plan to address these findings and to also review the extent of the condition and identify means to prevent recurrence. The NRC reviewed the corrective action plan and found that it was appropriately comprehensive. CHBWV was still in the process of completing several of the corrective actions at the time of the monitoring visit but was near the end of the process.

The NRC noted that all corrective actions were complete for the uncontrolled movement of empty rail cars documented in occurrence report 2022001. The NRC notes that several of the corrective actions to address the safety culture issue are ongoing.

c. Conclusions

No public health and safety issues of more than minor significance were identified. The NRC notes that a healthy safety culture and adequate conduct of operations is paramount to ensuring site activities are conducted in a safe manner and will continue monitoring these issues and adequacy of corrective actions during future monitoring visits.

**5.0 Public Meetings**

DOE WVDP Quarterly Public Meetings

NRC staff participated in the DOE quarterly public meeting on May 25, 2022. During the public meeting, DOE staff, DOE contractors, and NYSERDA representatives provided updates on the progress of various WVDP milestones. The NRC noted that these meetings were via an online format due to the ongoing COVID-19 PHE.

**6.0 Exit Meeting Summary**

The NRC representatives discussed the monitoring visit results with Mr. Bryan C. Bower, Director of the WVDP and other members of the WVDP and NYSERDA staff on August 18, 2022.

## **SUPPLEMENTAL INFORMATION**

### **PARTIAL LIST OF PERSONS CONTACTED**

#### Department of Energy Staff and Contractors

B. Bower, Project Director  
C. Reiman, Deputy Project Director  
D. Boone, ESH&Q Manager  
S. Bousquet, WVDP Federal Project Director  
T. Dogal, Facility and Disposition Manager  
J. Dundas, Safety and Site Programs Team Leader  
J. Ebert, Field Production Project Manager  
S. Gernatt, Radiological Engineer  
P. Loop, Waste and Site Operations Manager  
P. Loretto, Radiological Operations Manager  
S. McCabe, Facility Representative  
J. Prowse, DOE Contractor  
B. Steiner, Regulatory Strategy and Analysis Manager  
Z. Zadins, Environmental Specialist

#### NYSERDA

P. Bembia, Program Director  
B. Frank, Program Manager  
A. Mellon, Project Manager

### **PARTIAL LIST OF DOCUMENTS REVIEWED**

Monthly WVDP Project Performance Reports (various)  
Weekly WVDP Project Status Reports (various)  
Presentations (various)  
Permeable Treatment Wall Comprehensive Monitoring Report – 2021, Revision 1  
WD:2022:0443, Contract No. DE-EM0001529, Transmittal of January 2022 Permeable Treatment Wall Quarterly Monitoring Summary, June 7, 2022  
WD:2021:0560, Contract No. DE-EM0001529, Transmittal of Permeable Treatment Wall Quarterly Monitoring Summary, June 30, 2021  
WD:2022:0031, Contract No. DE-EM0001529, Transmittal of July 2021 Permeable Treatment Wall Quarterly Monitoring Summary, January 6, 2022  
WD:2022:0461, Contract No. DE-EM0001529, Transmittal of Second Revision of October 2021 Permeable Treatment Wall Quarterly Monitoring Summary, June 6, 2022  
WVDP-512, North Plateau Permeable Treatment Wall Performance Monitoring Plan, Revision 4  
WVDP-586, U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) Main Plant Process Building (MPPB) Decommissioning & Demolition (D&D) Work Plan, Revision 4  
U.S. Department of Energy West Valley Demonstration Project – Demolition Readiness of the Main Plant Process Building Decommissioning & Demolition Plan (DOCKET NO. 50-201 (POOM-032)), December 17, 2021  
W1904751, Work Instruction Package Main Plant Process Building Demolition, Field Change 1 Final Report West Valley Main Plant Process Building Demolition Contractor Readiness Assessment, June 30, 2022

WV:2022:0070 – Attachment A, Main Plant Process Building (MPPB) Demolition Line Management Self-Assessment Readiness Consolidated Final Report, June 16, 2022  
DPS-JUN22-DIR.01.06.01.07, Main Plant Process Building (MPPB) Revised Demo Schedule, August 1, 2022  
WVDP-597, Main Plant Process Building (MPPB) Demolition Water Management Plan, Revision 0  
SOP-15-90, Main Plant Process Building (MPPB) Demo Water Management and Sampling, Revision 0  
WVDP Project Update, Main Plant Process Building Deactivation and Demolition Preparations, August 24, 2022  
WVDP-602, Main Plant Process Building (MPPB) Demolition Contamination and Radiological Air Monitoring Plan, Revision 2  
Corrective Action Plan for U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) Independent Assessment of the October 26, 2021, Movement and Leak of SUREPAK SP-080-B (A21-047E), March 31, 2022  
Occurrence Report EM-OH-WVDP-CHBW-WM-2021-0001  
Occurrence Report EM-OH-WVDP-CHBW-WM-2021-0002  
Occurrence Report EM-OH-WVDP-CHBW-WM-2022-0001  
Root Cause Analysis to Support EM-OH-WVDP-CHBW-WM-2021-0002, Emergency Operations Center Activated Following the Discovery of a Leaking SUREPAK during Relocation, December 8, 2021  
WD:2022:0127, Contract No. De-EM0001529, Corrective Action Plan for U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) Independent Assessment of the October 26, 2021, Movement and Leak of SUREPAK SP-080-B (A21-047E)  
WD:2022:0238, Contract No. DE-EM0001529, Safety Culture Sustainability Plan, March 31, 2022  
S21-043E, U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) Surveillance, SUREPAK SP-080 Relocation Spill Incident Recovery, November 23, 2021  
Contract No. DE-EM0001529 - U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) Independent Assessment of the October 26, 2021, Movement and Leak of SUREPAK SP-080-B (A21-047E), January 11, 2022  
WD:2022:0105, Corrective Action Plan Response for U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) Employee Concern (EC/CY 21-01), March 31, 2022  
WD:2021:1031, Contract No. DE-EM0001529, Response to U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) Surveillance S21-043E, SUREPAK SP-080 Relocation Spill Incident Recovery, December 14, 2021

## **LIST OF ACRONYMS USED**

ACM	Asbestos Containing Materials
ADAMS	Agencywide Documents Access and Management System
CHBWV	CH2M HILL BWXT West Valley, LLC
CLSM	Controlled Low-Strength Material
CFR	<i>Code of Federal Regulations</i>
CRA	Contractor Readiness Assessment
DOE	Department of Energy
DWP	Demolition Work Plan
ECAMS	Environmental Continuous Air Monitors
FASs	Fixed Air Samplers
HCA	High Contamination Area
IMC	Inspection Manual Chapter
LMSA	Line Management Self-Assessment
MAR	Material At Risk
MPPB	Main Plant Processing Building
NESHAPs	National Emission Standards for Hazardous Air Pollutants
NNSS	Nevada National Security Site
NRC	Nuclear Regulatory Commission
NYSERDA	New York State Energy Research and Development Authority
PPC-S	Product Purification Cell – South
PPE	Personal Protective Equipment
PTW	Permeable Treatment Wall
RCRA	Resource Conservation and Recovery Act
TSCA	Toxic Substances Control Act
WAC	Waste Acceptance Criteria
WIP	Work Implementation Plan
WVDP	West Valley Demonstration Project