



**Department of Energy**  
West Valley Demonstration Project  
10282 Rock Springs Road  
West Valley, NY 14171-9799

March 5, 2015

Mr. Daniel W. Coyne  
President & General Manager  
CH2M HILL B&W West Valley, LLC  
West Valley Demonstration Project  
10282 Rock Springs Road  
West Valley, NY 14171-9799

ATTENTION: J. D. Rendall, Regulatory Strategy, AC-EA

SUBJECT: Environmental Checklist WVDP-2014-05, "Decommissioning and Closure of the North Plateau Groundwater Recovery System"

REFERENCE: Letter WD:2014:0593 (364941), D. W. Coyne to R. W. Reffner, "Contract No. DE-EM0001529, Section J-3, Item 105, NEPA Documentation, Transmittal of Environmental Checklist WVDP-2014-05, 'Decommissioning and Closure of the North Plateau Groundwater Recovery System'," dated January 20, 2015

Dear Mr. Coyne:

I have reviewed the subject Environmental Checklist and agree that the actions described therein are categorically excluded per Title 10, Code of Federal Regulations (CFR) Part 1021, as amended, Subpart D, Appendix B, B6.9, "Measures to Reduce Migration of Contaminated Groundwater," and the action qualifies as an interim action under 40CFR 1506.2 as detailed in the attachment to the Environmental Checklist. Enclosed is a signed Environmental Checklist form to that effect.

The contents of this correspondence are not intended to impact or modify contract scope and/or cost. If you have any questions, please contact me on Extension 4007.

Sincerely,

A handwritten signature in blue ink, appearing to read "Martin P. Krentz".

Martin P. Krentz  
National Environmental Policy Act Compliance Officer  
West Valley Demonstration Project

Enclosure: Signed Environmental Checklist

cc: See Page 2

MPK:364993 – 451.4



Mr. Daniel W. Coyne

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March 5, 2015

cc: C. A. Biedermann, CHBWV, AC-EA, w/enc.  
J. J. Hoch, CHBWV, WV-PL6, w/enc.  
C. M. Bohan, DOE-WVDP, AC-DOE, w/enc.  
M. P. Krentz, DOE-WVDP, AC-DOE, w/enc.  
M. N. Maloney, DOE-WVDP, AC-DOE, w/enc.  
P. J. Bembia, NYSERDA, AC-NYS, w/enc.

MPK:364993 - 451.4

**Attachment**  
**Environmental Checklist WVDP-2014-05**  
**Decommissioning and Closure of the North Plateau**  
**Groundwater Recovery System**

**Department of Energy  
West Valley Demonstration Project (DOE-WVDP)**

**ENVIRONMENTAL CHECKLIST**

<b>Project/Activity Title: Decommissioning and Closure of the North Plateau Groundwater Recovery System</b>	<b>NEPA ID Number:</b> WVDP-2014-005	<b>Rev. #:</b> 0	<b>Date:</b> January 20, 2015
<b>Contractor Project Manager:</b> John D. Rendall	<b>Phone Number:</b> 716-942-4602		
<b>Contractor NEPA Coordinator:</b> Charles A. Biedermann	<b>Phone Number:</b> 716-942-4333		
<b>DOE-WVDP NEPA Document Manager:</b> Martin P. Krentz	<b>Phone Number:</b> 716-942-4007		

**A. BRIEF PROJECT/ACTIVITY DESCRIPTION:** Attach a detailed description or statement of work.

**B. SOURCES OF IMPACT:** Would the action involve, generate, or result in changes to any of the following:

	YES	NO		YES	NO
1. Air Emissions	X		12. Water Use/Diversion		X
2. Liquid Effluents	X		13. Water Treatment	X	
3. Solid Waste	X		14. Water Course Modification		X
4. Radioactive Waste/Soil	X		15. Radiation/Toxic Chemical Exposures	X	
5. Hazardous Waste		X	16. Pesticide/Herbicide Use		X
6. Mixed Waste		X	17. High Energy Source/Explosives		X
7. Chemical Storage/Use		X	18. Transportation	X	
8. Petroleum Storage/Use		X	19. Noise Level	X	
9. Asbestos		X	20. Workforce Adjustment		X
10. Utilities	X		21. Other		X
11. Clearing or Excavation		X			

In an attachment, qualify and explain each question that you have specifically answered "YES."

**C. CATEGORY EVALUATION CRITERIA:** Would the proposed action:

	YES	NO
1. Take place in an area of previous or ongoing disturbance?	X	
2. Create hazardous, radioactive, or mixed waste for which no disposal is available?		X
3. Impact a RCRA-regulated unit or facility?		X
4. Force a low income or ethnic minority population to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards because of a lack of political or economic strength?		X
5. Involve air emissions and be located in an air pollutant non-attainment or maintenance area for any criteria pollutants?		X
6. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders (i.e., require any federal, state, or local permits, approvals, etc.)?		X
7. Disturb hazardous substances, pollutants, or contaminants that pre-exist in the environment such that there would be uncontrolled or unpermitted releases?		X
8. Require siting, construction, or major expansion of a waste storage, disposal recovery, or treatment facilities, but may include such categorically-excluded facilities?		X
9. Adversely affect environmentally sensitive resources including, but not limited to: structures of archeological, historic or architectural significance; threatened or endangered species or their habitat; floodplains or wetlands; wildlife refuges, agricultural lands or vital water resources (e.g., sole-source aquifers)?		X
10. Involve extraordinary circumstances?		X
11. Be "connected" to other actions with potentially significant impacts, related to other proposed actions with cumulatively significant impacts, and precluded by 40 CFR § 1506.1 or 10 CFR § 1021.211?		X

In an attachment, qualify and explain each question that you have specifically answered "YES."

Department of Energy  
West Valley Demonstration Project (DOE-WVDP)

ENVIRONMENTAL CHECKLIST

D. RECOMMENDATION AND DETERMINATION:

**DOE-WVDP Director's Recommendation:** I find and recommend that this proposed action meets the criteria specified in 10 CFR Part 1021, Subpart D, and/or DOE Policy and Guidance for the following:

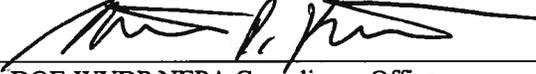
Categorical Exclusions (Appendix B, Class of Action: B6.9, Measures to Reduce Migration of Contaminated Groundwater)

Actions Within the Scope of Existing NEPA Documentation NEPA Document ID Number: \_\_\_\_\_

Ongoing Operations (Standard Operating Procedure OH-6.1.01, Rev. 1, Section 5.2)

Signature:  Date 03-05-2015  
Director, West Valley Demonstration Project (WVDP),  
Department of Energy

**DOE-WVDP NEPA Compliance Officer's Determination:** Based on my review of the attached information concerning this proposed action, as the WVDP NEPA Compliance Officer (DOE Order 451.1B, Section 5.d.), I have determined that the proposed action fits within the specified class of actions, that the other regulatory requirements identified in Section C are met, and that this proposed action proceed without further NEPA review.

Signature:  Date 2/23/15  
DOE-WVDP NEPA Compliance Officer,  
West Valley Demonstration Project

**OR**

- Environmental Assessments (Appendix C, Class of Action \_\_\_\_\_; or Action not listed in Subpart D)
- Environmental Impact Statements (Appendix D, Class of Action \_\_\_\_\_)
- Interim Actions (40 CFR Part 1506.1 and 10 CFR Part 1021.211)
- Integrated Documentation for CERCLA/RCRA Actions
- Variances (Emergency Action, 40 CFR Part 1506.11 and 10 CFR Part 1021.34)

**DOE-WVDP NEPA Compliance Officer's Concurrence:** I concur with the recommendation that this proposed action fits within the specified class of actions.

Signature: \_\_\_\_\_ Date \_\_\_\_\_  
DOE-WVDP NEPA Compliance Officer,  
West Valley Demonstration Project

**DOE-WVDP Manager's Determination:** Based on my review of the attached information concerning this proposed action, as the Director of the West Valley Demonstration Project (DOE Order 451.1B, Section 5.a.), I have determined that the level of documentation recommended for the proposed action is appropriate.

Signature: \_\_\_\_\_ Date \_\_\_\_\_  
Director, West Valley Demonstration Project (WVDP),  
Department of Energy

## ATTACHMENT

### DECOMMISSIONING AND CLOSURE OF THE NORTH PLATEAU GROUNDWATER RECOVERY SYSTEM, WVDP-2014-005

#### A. BRIEF PROJECT/ACTIVITY DESCRIPTION:

From 1966 to 1972, Nuclear Fuel Services, Inc. (NFS) operated a nuclear fuel reprocessing plant at the Western New York Nuclear Service Center (WNYNSC) near West Valley, New York (Figure 1). The plant reclaimed uranium and plutonium from spent nuclear fuel. After operating the fuel reprocessing facility for six years, NFS halted operations to make modifications to increase the plant's reprocessing capacity, reduce worker doses, and reduce radioactive effluents. During this period, new regulatory requirements were issued related to earthquake and tornado protection, and waste management requirements. NFS concluded that it would not be economically viable to continue the reprocessing operation at West Valley. In 1976, NFS informed New York State that it was withdrawing from the reprocessing business and intended to turn the West Valley facility and the two disposal areas over to New York State.

At that time, the reprocessing facility contained 750 spent fuel assemblies that had not been reprocessed, 600,000 gallons of liquid High Level Radioactive Waste (HLW) stored in two steel tanks, the highly contaminated Main Plant Process Building, and almost three million cubic feet of radioactive waste buried in the two disposal areas.

In 1980, Congress passed the West Valley Demonstration Project (WVDP) Act (Public Law 96-368), which directed the U. S. Department of Energy (DOE) to do the following:

1. Solidify the HLW at the WNYNSC in a form suitable for transportation and disposal;
2. Develop containers for the HLW that are suitable for permanent disposal;
3. Transport the solidified HLW, in accordance with applicable provisions of law, to an appropriate Federal repository for permanent disposal;
4. In accordance with applicable licensing requirements, dispose of low-level radioactive waste (LLW) and transuranic (TRU) waste produced as a result of solidifying the HLW; and
5. Decontaminate and decommission: (a) the tanks and other facilities of the WNYNSC in which the HLW solidified under the Project is stored; (b) the facilities used in the solidification of the waste; and (c) any material and hardware used in connection with the Project, in accordance with requirements that the U.S. Nuclear Regulatory Commission (NRC) prescribes.

A project base map of the WVDP is shown in Figure 2.

In 1982, a Final Environmental Impact Statement (EIS) (DOE/EIS-0081) was issued for the actions that DOE proposed to satisfy the first two requirements of the WVDP Act. During the initial phase of work performed under EIS-0081, the HLW was immobilized in borosilicate glass through vitrification. The canisters of immobilized HLW are stored onsite in the High Level Waste Interim Storage Facility (the former Chemical Process Cell) and will be relocated to the HLW Canister Interim Storage System for temporary storage until DOE authorizes their removal. In 1993 and 1998, the DOE prepared Supplement Analyses (DOE-EIS-025 and WVDP-321, respectively) of the 1982 EIS to re-examine on-going HLW solidification activities as well as other refinements to the

actions originally evaluated in the EIS. As a result of both analyses, DOE concluded that no environmentally relevant or substantial changes in Project scope had occurred, that no new circumstances or relevant information existed, and that the environmental analyses performed for the 1982 EIS were still valid.

After solidification of liquid and sludge was completed in September 2002, the WVDP shifted its attention and resources to the remaining requirements of the WVDP Act, waste disposal and facility decontamination and decommissioning. To facilitate these activities, in 2006, DOE prepared the Environmental Assessment for the Decontamination, Demolition, and Removal of Certain Facilities at the West Valley Demonstration Project. A Finding of No Significant Impact for these actions was subsequently made. Additionally, two EIS=s were prepared to review alternatives for completion of these requirements; The WVDP Waste Management EIS (DOE/EIS-0337-F; the WM EIS) completed in 2003 (DOE 2003(a)) and ROD issued in 2005 and the Decommissioning and/or Long-Term Stewardship EIS (DOE/EIS-0226) completed in 2010 and ROD issued in 2010. A supplemental analysis to the waste management EIS was performed (DOE, June 2006).

### **North Plateau Groundwater Contamination Plume**

During the early 1990's the WVDP identified an area of elevated gross beta concentrations in portions of the sand and gravel unit groundwater near the former nuclear fuel reprocessing building (Main Plant Process Building [MPPB]). This radiological contamination was attributed to releases from the MPPB that occurred during NFS operations (DOE/EIS-0226). In 1993, surface water in a ditch known as the "swamp ditch" near the edge of the North Plateau (NP) was found to contain elevated gross beta concentrations. A Geoprobe® subsurface soil and groundwater sampling program conducted in 1994 further characterized the lateral and vertical extent of the elevated gross beta concentrations in soil and groundwater underlying the NP. Strontium-90 (Sr-90) and its decay product, yttrium-90, were found to be the primary contributors to the measured gross beta concentrations. Subsequent Geoprobe® investigations conducted in 1997, 1998, and 2008 refined the distribution of the beta-emitters in soil and groundwater, and further characterized hydrogeologic conditions on the NP. The plume of impacted groundwater is approximately a 200-meter- (650-foot-) wide by 500-meter- (1,640-foot-) long zone that extends northeast from the Main Plant Process Building in Waste Management Area (WMA) 1 to the Construction Demolition Debris Landfill (CDDL) in WMA 4. The groundwater plume is slowly advancing in a north-northeasterly direction and discharges to topographical low areas contiguous to the swamp ditch, the swamp ditch itself, and seepage locations along the downslope edge of the northeastern portion of the NP above Franks Creek. As a result of this discharge, detectable concentrations above the DOE's Derived Concentration Standards (DCS) for Sr-90 have been found in surface water flowing from the NP at the boundary of the WVDP project premises.

The NP Groundwater Recovery System (NPGRS) was installed in 1995 and operated to collect and remove Sr-90 from impacted groundwater near the leading edge of the plume west of the Low Level Waste Treatment Facility lagoons (Figures 2 and 3). This pump and treat system, located in WMA 2, was intended to mitigate contamination and seepage of groundwater in the western lobe of the Sr-90 plume. Groundwater pumped from the recovery wells was treated by ion-exchange in the Low-Level Waste Treatment Facility (LLW2) also located in WMA 2. Drawing 913-B0098, Sheet 36 illustrates the location of the NPGRS and the underground conveyance lines (force mains) carrying recovered contaminated groundwater to LLW2 and Lagoon 2 (Figure 4). The treated groundwater is pumped to Lagoons 4 or 5 and then to Lagoon 3, from which it is eventually discharged through a State Pollutant Discharge Elimination System-regulated discharge point to Erdman Brook. The NPGRS was effective in limiting the seepage of impacted groundwater to the ground surface in a topographic low west and southwest of the CDDL (see Figure 3). However, the NPGRS was not expected to completely mitigate advance of the plume toward the swamp ditch or to mitigate the central and eastern lobes of the contamination plume.

In 1999, a pilot Permeable Treatment Wall (PTW) was constructed on a small segment (approximately 30 feet long) of the central portion of the plume to demonstrate the feasibility of plume mitigation using passive in situ ion-exchange technology. An evaluation of the monitoring data indicated that the pilot PTW is effective in removing Sr-90 from groundwater. A subsequent remediation alternatives analysis (Geomatrix 2007) commissioned by West Valley Nuclear Services Company on behalf of the DOE resulted in a recommendation to install a subsurface PTW as a full scale remedy to address groundwater impacted by Sr-90 on the NP. Subsequent field investigations (West Valley Environmental Services [WVES] 2009a & b) were initiated in 2008 and 2009 to acquire additional data to help support final design of the full scale PTW. The final design was completed in June 2010 and installation of the full scale PTW was completed in November 2010 (Figures 2 and 4).

Initial baseline monitoring of the PTW was performed in January 2011 (WVES and AMEC Geomatrix, 2011) and monitoring of the PTW and plume has been conducted on a quarterly basis since this time. The effectiveness of the PTW in mitigating migration of the Sr-90 and attaining the remedial action objectives, as evaluated from the quarterly monitoring data, is documented in annual reports.

Having demonstrated the effectiveness of the PTW as a comprehensive strategy for mitigation of further migration of the Sr-90 contamination, in April 2013, the NPGRS was shut down. Monthly evaluations of groundwater elevations in the vicinity of the NPGRS have shown that the discontinued use of the NPGRS does not adversely affect PTW performance nor has it resulted in any observed surfacing of groundwater up-gradient of the PTW. Accordingly, it was determined that future use of the NPGRS is not required and that the NPGRS could be decommissioned and removed.

#### **Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship of the West Valley Demonstration Project and the Western New York Nuclear Service Center**

Decommissioning and removal of the NPGRS is evaluated in the FEIS (DOE/EIS-0226). However, this action was assumed to occur during Phase 2 activities. As Phase 2 decision making is pending further environmental studies, in accordance with Council on Environmental Quality regulations, 40 CFR Part 1506.1: "Limitations on Actions during NEPA Process," no action concerning the proposal pending completion of the National Environmental Policy Act (NEPA) process may be taken which would (1) have an adverse effect on the environment; or (2) limits the choice of reasonable alternatives. Furthermore, while work on a required program EIS is in progress and the action is not covered by an existing program statement, agencies shall not undertake in the interim any major federal action covered by the program which may significantly affect the quality of the human environment unless such action is: (1) justified independently of the program; (2) Is itself accompanied by an adequate EIS; and (3) will not prejudice the ultimate decision on the program. An action that is within the scope of an EIS that is taken before the final NEPA decision making process is completed is commonly referred to as an "interim action."

In accordance with a DOE Office of NEPA Policy and Compliance memorandum (DOE, 2003):

"Actions that are covered by, or are part of, a DOE proposal for which an EIS is being prepared shall not be categorically excluded under subpart D of these regulations [10 CFR Part 101] unless they qualify as interim actions under 40 CFR 1506.1."

The proposed action evaluated by this checklist (decommissioning and closure of the NPGRS) meets both the Council on Environmental Quality regulatory requirements and the DOE Office of NEPA Policy and Compliance guidance memorandum in that Decommissioning of the NPGRS:

- Will not have an adverse environmental impact as the full scale PTW has been demonstrated as an operationally effective strontium-90 plume mitigation technology;
- Does not limit the choices of reasonable alternatives under the FEIS Phase 2 NEPA decision making process;
- Is justified independently of the FEIS Phase 2 decision making program as an obsolete and costly technology having limited success in mitigation of only a small portion of the strontium-90 plume;
- Will not prejudice the ultimate decision under Phase 2 of the FEIS because it is neither affected by or would be affected by the decision;
- Is relatively limited and minor in scope and scale as the NPGRS three extraction wells have a limited zone of influence on the strontium-90 plume;
- Does not require any analyses to demonstrate that the criteria for the above are met; and
- Is similar in nature to categorical exclusions (e.g., B6.9, Measures to Reduce Migration of Contaminated Groundwater).

Evaluations have demonstrated that discontinued operation of the NPGRS does not adversely affect the operation of the PTW and that this mitigation alternative is no longer cost effective. Therefore, DOE has determined that decommissioning, removal and closure under the WVDP State Pollutant Discharge Elimination System (SPDES) permit should occur during the Phase 1 actions. Pursuant to the DOE National Environmental Policy Act process, a determination must be made that:

- 1) The proposed action fits within a class of actions that is listed in appendix A or B to subpart D of 10 Code of Federal Regulations (CFR) Part 1021;
- (2) There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects. [Extraordinary circumstances are unique situations presented by specific proposals, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternative uses of available resources]; and
- (3) The proposed action has not been segmented to meet the definition of a categorical exclusion. [Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. The scope of a proposal must include the consideration of connected and cumulative actions, that is, the proposal is not connected to other actions with potentially significant impacts is not related to other actions with individually insignificant but cumulatively significant impacts, and is not precluded by 40 CFR Part 1506.1 or 10 CFR Part 1021.211 of this part concerning limitations on actions during EIS preparation.]

Evaluation of the NPGRS decommissioning and closure:

- Fits within a class of actions in appendix B of 10 CFR subpart D. Specifically, the proposed action fits the criteria for a categorical exclusion;
- Is not associated with any extraordinary circumstances impacting environmental effects; and

- Will not result in segmentation or otherwise impact the Phase 2 decision making process.

Therefore, this action does not require preparation of either a Supplemental Analysis to the FEIS (DOE/EIS-0226), analysis under the Phase 2 decision making for this FEIS, or an Environmental Assessment.

### **A.1 Purpose and Need**

The purpose of this environmental review is to evaluate actions relating to the decommissioning and closure under the State Pollutant Discharge Elimination System WVDP permit and removal of NPGRS. Decommissioning of the NPGRS is appropriate because monitoring has shown that the full scale PTW is performing as designed and that discontinued operation of the NPGRS will not adversely affect its operation. Additionally, monitoring of groundwater levels since the NPGRS was shut down in April of 2013 has shown that there is no surfacing of groundwater up-gradient of the PTW.

### **A.2 Objective**

The objective of this action is to decommission and close, in accordance with the State Pollutant Discharge Elimination System regulations and WVDP permit, the NPGRS. Continued operation of the NPGRS is no longer cost effective since the Sr-90 contaminants passing through the effective zone on influence of the NPGRS are now being passively removed by the PTW.

### **A.3 Type and Scope of Activities**

Decommissioning will take place in a series of steps including removal of submersible pumps from the three extraction wells, the associated piping and surge tank, and above ground process lines integral to the NPGRS. Environmental enclosures (a shed and cargo container) will be removed and electrical utility lines will be isolated and removed. The three extraction wells will either be capped and remain in place for potential future environmental monitoring of the north plateau plume or be decommissioned in accordance with New York State Department of Environmental Conservation requirements and guidance. Underground wastewater conveyance lines running from the NPGRS to Lagoon 2 and LLW2 will be flushed, and plugged or capped, and isolated (Figure 4).

### **A.4 Schedule and Timing**

Decommissioning, closure and removal of the NPGRS is scheduled to occur during FY 2015. Prior to decommissioning and commencement of closure actions, a State Pollutant Discharge Elimination System Closure Plan certified by a professional engineer authorized to practice in the State of New York must be submitted to the New York State Department of Environmental Conservation. Submittal of the closure plan must be followed by a 60-day waiting period to allow for regulatory agency review of the plan. After the 60-day waiting period, closure activities can begin and are expected to only take several weeks. Completion of closure actions will be documented in photographs and a NPGRS closure report. Regulatory agency personnel will be offered an opportunity to inspect and review in-progress closure activities, and closure documentation including photographs will be provided.

## **B. SOURCES OF IMPACT:**

**1. Air Emissions:** Only minor non-radiological air emissions would occur as a result of NPGRS closure activities. These would include temporary minor emissions of carbon monoxide, carbon dioxide, and particulates generated by machinery and equipment used to decommission the NPGRS and to remove surface structures including the NPGRS environmental enclosures. Volatile organic emissions may

occur during refueling and replacement of hydraulic fluids in this equipment. Such emissions will be minimal and will not require any controls under state and federal Clean Air Act regulations.

**2. Liquid Effluents:** Liquid effluents would result from removal of piping and flushing of wastewater conveyance lines. Liquids will be contained and transferred to the WVDP Low Level Waste Treatment Facility for treatment and discharge through the State Pollutant Discharge Eliminations System outfall in accordance with WVDP permit requirements. Any liquids from equipment spills would be contained and cleaned up in accordance with WVDP spill control and response procedures and disposed of in accordance with applicable regulations.

**3. Solid Waste:** Typical construction waste such as boxes, wood forms, concrete, wiring, piping, waste materials (insulation, wood, metal) would be generated from demolition of the environmental enclosures and materials that have not contacted radiologically contaminated groundwater. This waste is transported to a certified recycler or a properly permitted solid waste landfill for disposal.

An active program to minimize waste generation is in place at the WVDP. The waste minimization program includes both source reduction and recycling. Waste Minimization and Pollution Prevention Opportunities are also an integral part of the work review process. Pollution Prevention opportunities are continually under consideration for identifying Waste Minimization and Pollution Prevention opportunities associated with the NPGRS removal.

**4. Radioactive Waste/Soil:** Radioactive waste from closure of the NPGRS will include the submersible pumps and associated tubing from the three recovery wells, aboveground pipes and other materials that have come in direct contact with the NP groundwater. When the three recovery wells and subsurface conveyances are decommissioned, the well risers would also be included as radioactive waste.

Radioactive solid waste will be containerized and stored onsite in existing facilities pending their proper disposal at authorized offsite disposal facilities. Liquid radioactive waste will be generated from flushing of the underground wastewater conveyance lines. Liquid waste will be treated in the WVDP Liquid Waste Treatment facility and discharged through the State Pollutant Discharge Eliminations System outfall in accordance with WVDP permit requirements.

**10. Utilities:** Existing electrical utilities to the NPGRS will be locked-out and disconnected. Wiring will be removed to the electrical junction box and disposed of via recycling to minimize waste generation or disposal at a permitted offsite facility if recycling is not an option for WVDP wastes.

**13. Water Treatment:** Wastewater will be generated from flushing of the NP groundwater conveyance lines and from draining of tubing from removal of the submersible pumps from the groundwater recovery wells. All wastewater, including radiologically contaminated wastewater from flushing of the underground conveyance lines will be treated in the WVDP Liquid Waste Treatment facility and discharged through the State Pollutant Discharge Eliminations System outfall in accordance with WVDP permit requirements.

**15. Radiation/Toxic Chemical Exposure:** Decommissioning and removal of the NGRS involves work in radiologically controlled areas. Although individual exposures would depend upon the duration of the activity and the proximity of the worker performing the activity to a source of radiation (e.g., radiologically contaminated waste and wastewater), all exposures will be maintained to ALARA levels and in compliance with applicable State and Federal regulations and DOE Orders as implemented by the WVDP Radiological Controls Manual. Worker exposure is limited by guidance provided in the WVDP Radiological Controls Manual, WVDP Industrial Hygiene and Safety Manual and by the Work Instruction Packages. Radiation dose limits to WVDP employees will be maintained to within the Administrative Control Levels as specified in the Radiation Controls Manual.

**18. Transportation:** Only minimal amounts of waste will be generated as a result of NPGRS decommissioning and removal. This waste material will be combined with other WVDP site

deactivation and demolition wastes and transported to permitted offsite facilities. All shipments will comply with state and federal Department of Transportation regulations and requirements. Material shipments will not have significant impacts to public roads and transportation systems.

**19. Noise Level:** Noise from activities such as heavy equipment used for demolition and from cutting and hammering, may result in increased noise levels near the NPGRS in WMA-2. The noise levels would be of short duration and probably would not exceed 85 dB. PPE (hearing protection) will be required per Occupational Safety and Health Administration requirements and DOE Orders during activities expected to generate elevated noise levels.

### **C. CATEGORY EVALUATION CRITERIA:**

**1. Take place in an area of previous or ongoing disturbance? Yes:** Decommissioning and closure of the NPGRS shall occur within areas of previous or ongoing disturbance at the WVDP

### **RECOMMENDATIONS AND DETERMINATION**

Categorical exclusion (CX) is recommended for the proposed action. Consideration of the decommissioning and closure activities associated with this action indicate they are consistent with the Categorical Exclusion B6.9, "Measures to Reduce Migration of Contaminated Groundwater," identified in 10 Code of Federal Regulations (CFR) §1021, Appendix B, Categorical Exclusions Applicable to Specific Agency Actions. Specifically, this action is the decommissioning of a small-scale temporary measure to reduce migration of contaminated groundwater.

### **REFERENCES:**

CH2M Hill Babcock and Wilcox West Valley, LLC, "State Pollutant Discharge Elimination System (SPDES) Closure Plan for the WVDP North Plateau Groundwater Recovery System," WVDP-522, revision 0.

CH2M Hill · Babcock and Wilcox West Valley, LLC, "WVDP Radiological Controls Manual," WVDP-010, revision 36.

Council on Environmental Quality, 40 CFR Part 1506.1: "Limitations on Actions during NEPA Process,

Geomatrix Consultants, Inc., "Focused Analysis of Remediation Alternatives for Groundwater Plume Expansion and Seepage to Surface Water, West Valley Demonstration Project – North Plateau Strontium-90 Plume, West Valley, New York," Project No. 13302, Rev. 4, May 30, 2007.

New York State Department of Environmental Conservation, "West Valley Demonstration Project State Pollution Discharge Elimination System Permit," SPDES Permit No.: NY0000973, DEC Id. No.: 9-0422-00005/00006, Effective Date: July 1, 2011.

U.S. Congress, "Clean Air Act," 42 U.S.C. 7401 *et seq.*, 1970 as amended.

U.S. Congress, "Public Law 96-368 West Valley Demonstration Project Act (S.2443)", dated October 1, 1980.

U.S. Department of Energy, "Final Environmental Impact Statement: Long-Term Management of

Liquid High-Level Radioactive Wastes Stored at the Western New York Nuclear Services Center, West Valley," DOE/EIS-0081, June 1982.

U.S. Department of Energy, "West Valley Demonstration Project Waste Management Environmental Impact Statement," DOE/EIS-0337-F, December 2003(DOE 2003 (a)).

U.S. Department of Energy Office of NEPA Policy and Compliance, Memorandum from Beverly A. Cook to Secretarial Officers and Heads of Field Organizations, "Guidance on Actions That May Proceed During the National Environmental Policy Act (NEPA) Process: Interim Actions," June 17, 2003 (DOE 2003 (b)).

U.S. Department of Energy, "West Valley Demonstration Project Waste Management Activities, Record of Decision," June 9, 2005.

U.S. Department of Energy, "Environmental Assessment for the Decontamination, Demolition, and Removal of Certain Facilities at the West Valley Demonstration Project," DOE/EA-1552, September 14, 2006.

U.S. Department of Energy, "Finding of No Significant Impact Proposed Decontamination, Demolition, and Removal of Certain Facilities at the West Valley Demonstration Project," dated September 14, 2006.

U.S. Department of Energy, West Valley Demonstration Project, "Supplement Analysis of Environmental Impacts Resulting from Modifications in the West Valley Demonstration Project," WVDP-EIS-025, September 7, 1993.

U.S. Department of Energy, West Valley Demonstration Project, "DOE/EIS-0081 Supplement Analysis II of Environmental Impacts Resulting from Modifications in the West Valley Demonstration Project," WVDP-321, June 1998.

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**FIGURE 1**  
**Location of the Western New York Nuclear Service Center**

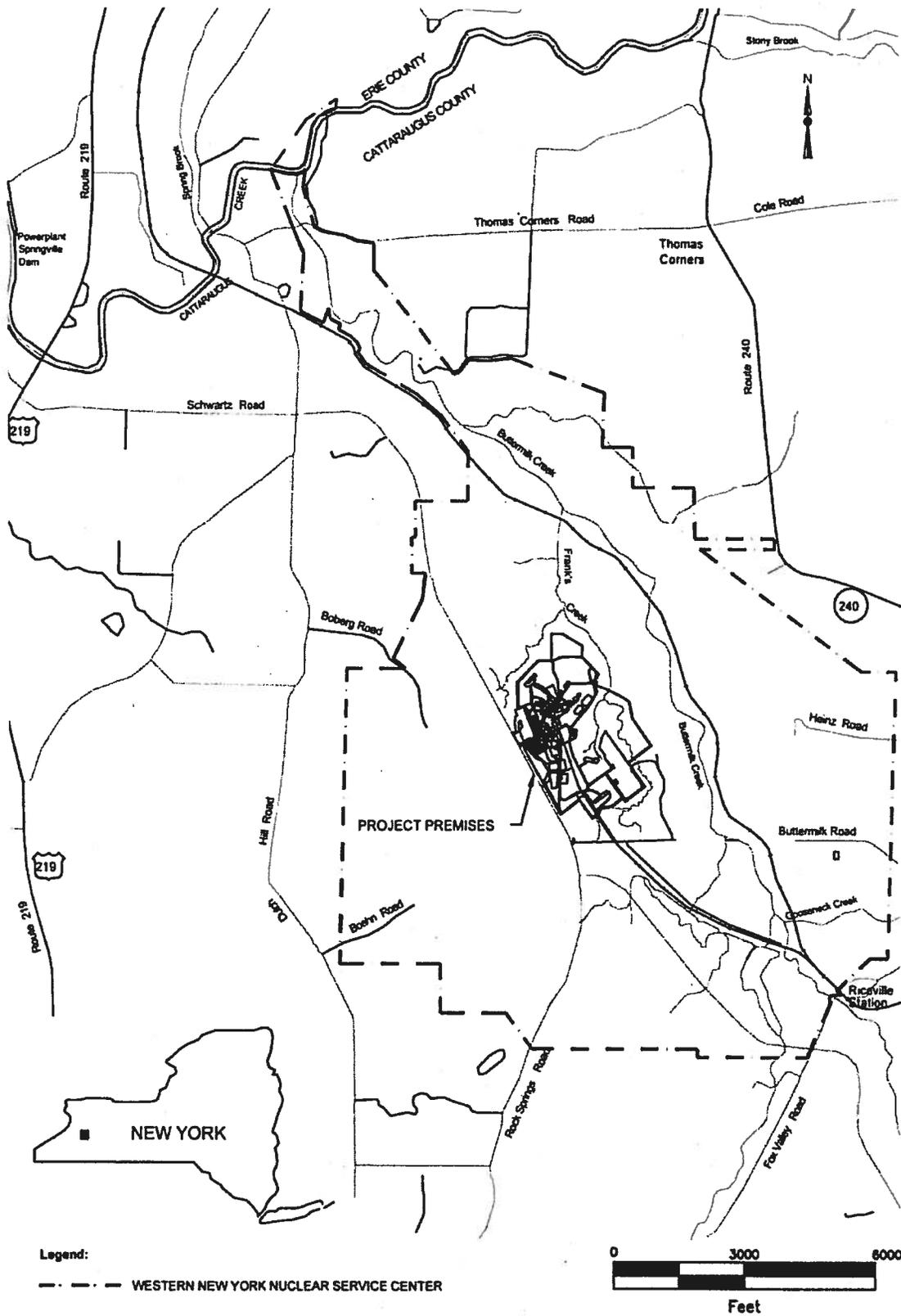




FIGURE 3: Aerial Photograph of Permeable Treatment Wall (During Installation) and the North Plateau Groundwater Recovery System

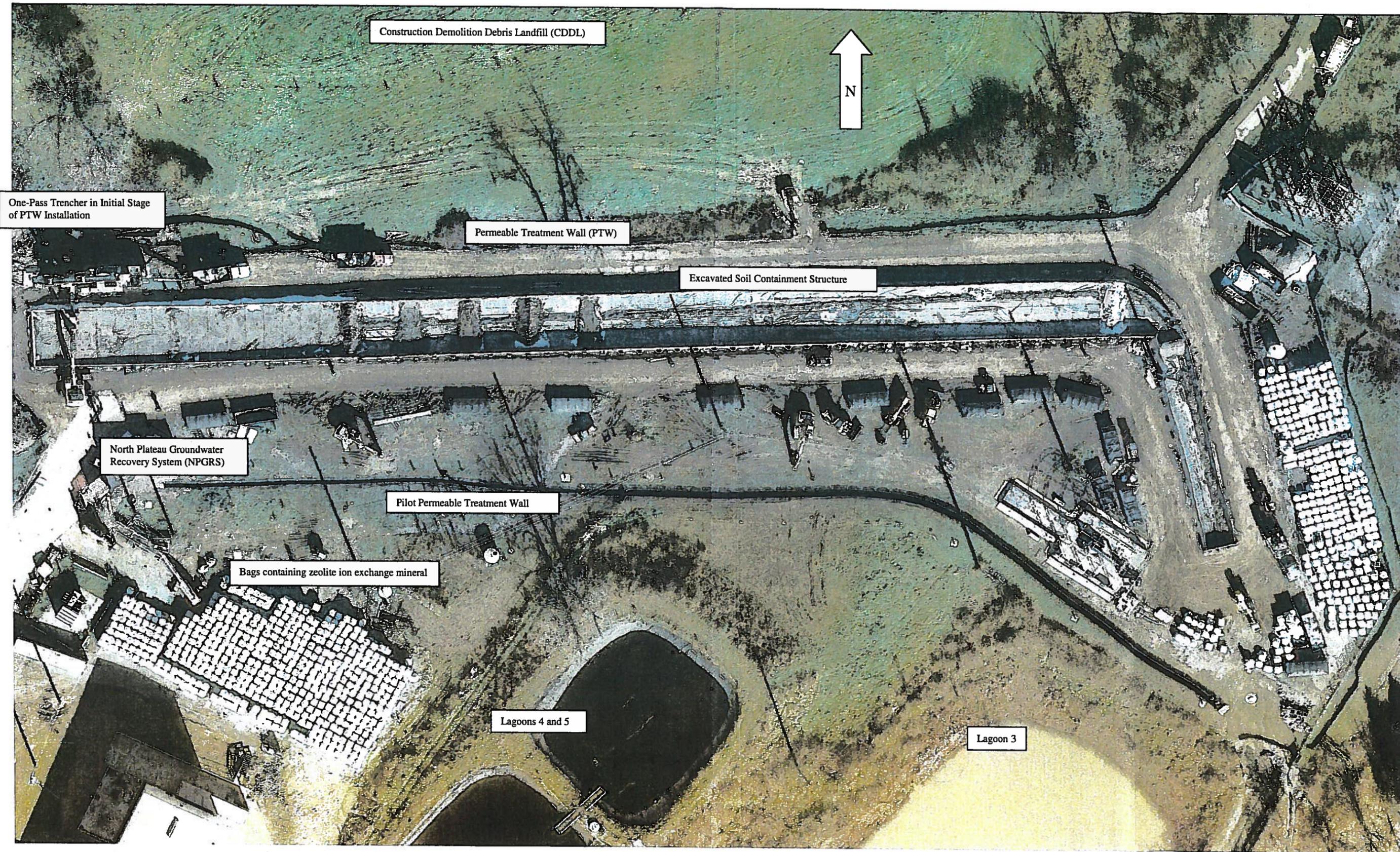
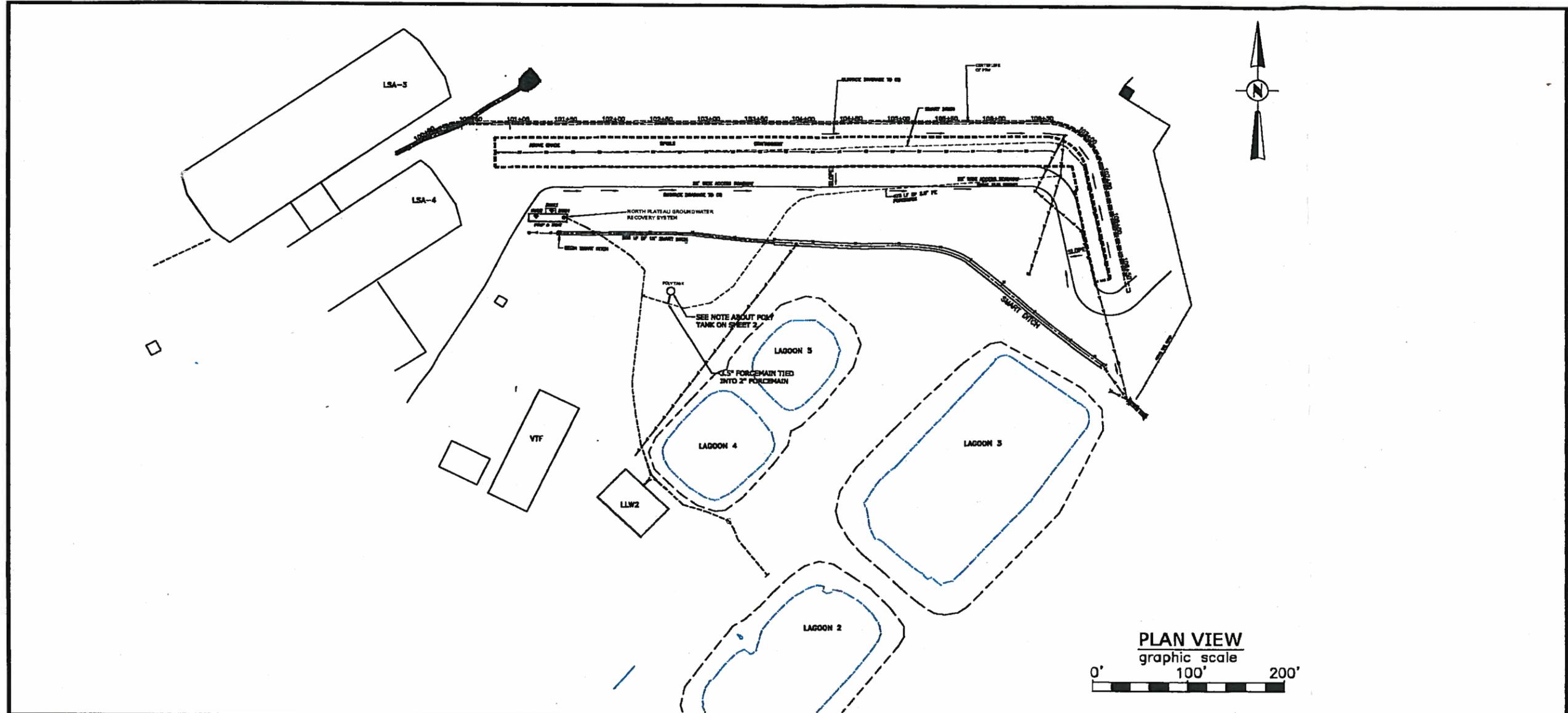


Figure 4: North Plateau Groundwater Recovery System and Underground Conveyance Lines



REVISIONS	APVD		UNLESS OTHERWISE SPECIFIED ALL DIM IN INCHES	DRAFTER	D. STAHLEY	DATE	06/27/11	<b>WVES</b> West Valley Environmental Services	
	DESCRIPTION	06/27/11		BMT	CHECKER	T. FARRELL	DATE		06/27/11
REV	0	ER 27167		ENGINEER	J. WOODWORTH	DATE	06/28/11		
			FILE NAME	913-B-0098_036		NORTH PLATEAU-PERMEABLE TREATMENT WALL FORCEMAIN ROUTING PUMP STATION TO LAGOON 2			
			PLOT SCALE	1=1		DWG #	913-B-0098	REV	0
			D SPEC #			SCALE	AS SHOWN		
			NEXT ASSEMBLY			WEIGHT			
			VERIFY ALL DOCUMENTS FOR CURRENT REVISION AND PENDING CHANGES PRIOR TO EACH USE INIT _____ DATE _____		DATABASE LINKED DRAWING.		SHEET 36 OF		
					DWG SIZE B		A/E CONTRACT #		
					SEE ENGINEERING RELEASE FORM (ER) FOR DRAWING APPROVAL SIGNATURES.		CODE IDENT #		

CAD DRAWING-DO NOT REVISE THIS ORIGINAL