



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

September 24, 2013

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-2013-02, "North Parking Lot High Level Waste Canister Fabrication and Concrete Pad Construction"

REFERENCE: Letter WD:2013:0403 (361661), D. W. Coyne to R. W. Reffner, "Contract No. DE-EM0001529, Section J-3, Item 105, NEPA Documentation, Transmittal of Environmental Checklist WVDP-2013-02, 'North Parking Lot High Level Waste Canister Fabrication and Concrete Pad Construction,'" dated September 18, 2013

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, Appendix B to Subpart D, CX B.1.15, "Support Buildings" and B1.23 "Demolition and Disposal of Buildings." 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 black 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: 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:361672 - 451.4



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

ENVIRONMENTAL CHECKLIST

Project/Activity Title: North Parking Lot High Level Waste Canister Fabrication and Concrete Pad Construction	NEPA ID Number: Rev. #: Date: WVDP-2013-02 0 August 20, 2013
Contractor Project Manager: Joe Ebert	Phone Number: 716-942-4778
Contractor NEPA Coordinator: Charles A. Biedermann	Phone Number: 716-942-4333
DOE-WVDP NEPA Document Manager: Martin P. Krentz	Phone Number: 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? As specified at 10 CFR § 1021.410(b)(2), extraordinary circumstances are unique situations presented by specific proposed actions, such as scientific controversy about the environmental effects of the action, uncertain effects or effects involving unique or unknown risks, or unresolved conflicts concerning alternate uses of available resources within the meaning of Section 102(2)(E) of NEPA [42 U.S.C. 4332(2)].		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 B1.15 and B1.23)
- 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 09-24-2013
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 9/19/13
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

SECTION A: BRIEF PROJECT DESCRIPTION

BACKGROUND

Between 1966 and 1972, Nuclear Fuel Services, Inc. (NFS) operated a commercial nuclear fuel reprocessing facility at the Western New York Nuclear Service Center (WNYNSC) near West Valley, New York (Figure 1). Nuclear fuel was reprocessed in the Main Plant Process Building (MPPB), in which uranium and plutonium were recovered from spent fuel assemblies. After operating the facility for 6 years, NFS halted all operations to make plant modifications and upgrades. During this period, as a result of new regulations, NFS concluded that it would not be economically viable to continue reprocessing operations. In 1976, NFS informed the State of New York that it was withdrawing from the nuclear fuel reprocessing business and intended to return the West Valley facility to the State.

In 1980, the U.S. 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 at the WNYNSC:

- Solidify the High Level waste (HLW) in a form suitable for transportation and disposal;
- Develop containers for the HLW that are suitable for permanent disposal;
- Transport the solidified HLW, in accordance with applicable provisions of law, to an appropriate Federal repository for permanent disposal;
- 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
- 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.

Because there currently is no appropriate Federal repository for permanent disposal of the WVDP solidified HLW, after completion of solidification of the HLW and development of containers for the HLW suitable for permanent disposal, the DOE-WVDP has shifted its emphasis to waste disposal and decontamination and decommissioning. 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 environmental Impact Statements (EIS's) were prepared to review alternatives for completion of the WVDP Act requirements; WVDP Waste Management EIS (DOE/EIS-0337-F) completed in 2003 and the Record of Decision (ROD) was issued in 2005 and the Decommissioning and/or Long-Term Stewardship EIS (DOE/EIS-0226) completed in 2010 and the ROD was issued in 2010.

Since shipment of the HLW canisters to an offsite approved Federal repository is not currently feasible, provisions were included in the Phase 1 actions of the Phased Decision Making Alternative approved by the ROD for the Decommissioning and/or Long-Term Stewardship EIS. The provisions include construction of a Dry Cask Storage Area (DCSA) for the extended onsite storage of the solidified HLW and the relocation of the HLW canisters from the Main Plant Process Building.

A.1 PURPOSE AND NEED

Although DOE/EIS-0226 evaluates the environmental impacts for the construction and operation of a DCSA, the EIS does not provide environmental evaluations of all of the onsite construction and operational aspects associated with the fabrication of the concrete casks or "canisters." The purpose of this environmental review is to evaluate the additional actions associated with construction and operation of a canister fabrication operation, including installation and subsequent demolition of a concrete pad at the WVDP.

A.2 OBJECTIVES

The objective is to evaluate the environmental aspects associated with canister fabrication in the WVDP north parking lot (Figure 3), including the construction of a concrete pad, operation of the fabrication

process and its associated ancillary structures, and the eventual demolition and removal of the concrete slab and ancillary structures.

A.3 TYPE AND SCOPE OF ACTIVITIES

The Canister Fabrication operation involves facility preparation, fabrication of approximately 57 canisters for storage of the solidified HLW, transport of the completed canisters to the MPPB/Vitrification Facility, and demolition of the operation after canister fabrication has been completed. Specifically, facility preparation will be completed on the existing paved asphalt parking lot. No excavation will be conducted for construction of the fabrication facility. The fabrication ancillary structures can include installation of crew Ground Level Offices (GLOs), Tool trailers and Sealand containers; electrical and non-potable water connections; designation of laydown areas, and a self-contained concrete washout system. The fabrication facility will consist of construction of an approximately 164 foot by 18 foot concrete pad and an approximately 164 foot by 18 foot concrete approach ramp (Figure 3). Operation of the canister fabrication facility includes preparation of rebar around inner molds (may include welding or wire tie of the rebar) pouring of concrete into the canister molds, and curing of the concrete. Demolition activities will include isolation of utilities; removal of trailers, containers, GLOs and miscellaneous materials; demolition and removal of the concrete slab and approach ramp; removal of the concrete washout system; and restoration of the area to pre-fabrication facility conditions.

A.4 SCHEDULING AND TIMING

The installation and operation of the proposed canister fabrication facility is planned for fall 2013. Construction is currently scheduled to begin in October 2013. Canister fabrication can begin; weather permitting, as soon as the concrete slab and approach ramp has cured.

SECTION B: SOURCES OF IMPACT

1. Air Emissions – Minor carbon dioxide and carbon monoxide along with particulate emissions are anticipated during construction, operation and demolition of the facility. These emissions will occur intermittently over a ten hour day from operation of gasoline and diesel powered equipment. Additionally metal oxide emissions will occur from welding operations. All welding, if required, will be performed manually in full compliance with the New York State Department of Environmental Conservation (NYSDEC) regulations for Air Resources.

2. Liquid Effluents – Liquid effluents will be limited to concrete truck washout, storm water runoff, runoff from the use of non-potable water for minor uses such as wetting down concrete molds, and wastewater from demolition activities. Concrete truck washout will be limited to the truck chutes and will be contained in the concrete washout system. If accumulated water in the self-contained washout system must be removed, it will be containerized and managed in accordance with applicable regulations and the WWD State Pollutant Discharge Elimination System (SPDES) permit. The main truck drum must be washed out at the offsite batch plant. Storm water runoff and minor runoff from non-potable water uses will be managed through the existing WWD SPDES permitted storm water management system. Wastewater may be generated during the demolition of the concrete pad once all of the canisters have been fabricated. All water from this process would be contained and properly treated and disposed of through the WWD SPDES permitted system.

3. Solid Waste - Typical construction debris solid waste will be generated during installation, operation of the canister fabrication facility and demolition of the facility after completion of the fabrication operation. 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 WWD. 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 under consideration for identifying waste minimization approaches for construction, operation, and demolition.

7. Chemical Storage/Use – Limited quantities of chemicals will be stored and used during canister fabrication. Before any chemical is approved for storage and use at the WVDP, a review of the Safety Data Sheet is performed and the chemical is evaluated. “Green” or recycled alternatives are investigated and, once approved for use; appropriate requirements are placed on both the storage and uses of the chemical. Only chemicals typical of welding, if required, and concrete fabrication operations are anticipated.

8. Petroleum Storage/Use - Petroleum products (i.e., gasoline or diesel) for vehicular traffic (e.g., canister movement from the fabrication pad to the Vitrification Load Out Facility) are used. No storage of these fuels in the North parking Lot (other than those in the vehicle fuel tanks) will be permitted. Steps to be taken will include a documented leak inspection program, readily available spill kits, spills or releases of petroleum products shall be immediately reported by the person discovering the spill to CHBWV Operations who will notify Regulatory Strategy, all cleanup materials will be collected and properly disposed of by CHBWV Waste Operations, and timely regulatory and DOE notifications will be made in accordance with WVDP procedures and NYS agreement reporting criteria.

10. Utilities - Existing utilities are readily available from site power sources and will be used to power the facility and support trailers/containers. Portable generator(s) may also be used as needed to provide electrical power. WVDP standard operating and engineering procedures are used to connect power sources to the field equipment, office trailers, and other onsite electrical equipment. WVDP procedures will also track and document configuration changes in utility lines.

12. Water Use/Diversion – This project require site non-potable/industrial water usage. Water will be provided through existing site utilities. Hose connections will be used to direct non-potable water to areas in which it is required (e.g., the concrete fabrication pad). Runoff from the use on this non-potable water will be conveyed to existing site catch basin where it can be contained for treatment or released as required by WVDP State Pollutant Discharge Elimination System (SPDES) permit and NYSDEC regulations.

18. Transportation – Transportation impacting actions include delivery of concrete and materials for construction of the facility and during fabrication of the canisters. Delivery of an estimated three concrete trucks per canister is anticipated. These slight increases in truck traffic will not adversely impact area roads or traffic. Transportation of all materials required for construction of the facility, operation of the canister fabrication process, and final demolition of the facility will be in compliance with applicable Department of Transportation requirements and local traffic laws.

19. Noise Levels - Construction actions such as cutting, grinding, welding, and hammering may result in increased noise levels near the activity. These noise levels will be of limited duration throughout the day and are expected to be below 85 dB. Noise levels generated by the arriving and departing cement trucks, pumping of the concrete into the canister forms, and noises from other trucks delivering materials to the site should not be above 85 dB in personnel access areas. Significant temporary and localized increases in noise levels are expected for demolition of the concrete pad after completion of all canister fabrication. Hearing protection will be required per Occupational Health and Safety Administration requirements and DOE Orders during activities expected to generate elevated noise levels.

SECTION C. CATEGORY EVALUATION CRITERIAL

1. Take place in an area of previous or on-going disturbance? Yes.

Construction of the Canister Fabrication Pad, operation of the canister fabrication process, and demolition of the pad after completion of fabrication activities shall occur solely within areas of previous or ongoing disturbance within the North Parking Lot of the WVDP.

2. Create hazardous, radioactive or mixed waste for which no disposal is available? No.

3. Impact a RCRA-regulated unit or facility? No

4. Force a low income or ethnic minority population to shoulder a disproportionate share of the negative environmental impacts? No.

5. Involve air emissions and be located in an air pollutant non-attainment or maintenance area for any criteria pollutants? No

6. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders? No.

7. Disturb hazardous substances, pollutants or contaminants that pre-exist in the environment such that there would be uncontrolled or unpermitted releases? No.

8. Require siting, construction, or major expansion of a waste storage, disposal, recovery, or treatment facilities, but may include such categorically-excluded facilities? No.

9 Adversely affect environmentally sensitive resources? No.

10. Involve extraordinary circumstances? No.

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? No.

RECOMMENDATIONS AND DETERMINATION

Categorical exclusions (CX) are recommended for the proposed action. The construction of a concrete pad structure and operation of the canister fabrication facility described in this checklist fall within classes of actions described in Title 10 Code of Federal Regulations Part 1021, as Amended, Subpart D, Appendix B, CX B1.15, Support Buildings and B1.23, Demolition and Disposal of Buildings.

REFERENCES

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

New York State Department of Environmental Conservation, "General Permits," NYR10X044, Effective Date August 13, 2013

U. S. Congress, "National Environmental Policy Act," 42 U.S.C. 4321 *et seq.*, as Amended, dated January 1, 1970

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

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

U.S. Department of Energy, "West Valley Demonstration Project Waste Management Activities, Record of Decision," dated 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-I552, dated 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, "Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration project and Western New York Nuclear Service Center," DOE/EIS -0226, dated January 2010

U.S. Department of Energy, "Record of Decision: Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration project and Western New York Nuclear Service Center," dated April 14, 2010

U.S. Department of Energy, "National Environmental Policy Act Implementing Procedures; Final Rule," 10CFR 1021, dated October 13, 2011

U.S. Department of Energy Environmental Management Consolidated Business Center, "Contract Award;" Contract Number DE-EM000 1529, Solicitation Number DE-SOL-0002084, Issued to CH2M HILL B&W West Valley, LLC; dated June 29, 2011

U.S. Department of Energy and New York State Energy Research and Development Authority, "Cooperative Agreement Between United States Department of Energy and New York State Energy Research and Development Authority on the Western New York Nuclear Service Center at West Valley, New York," effective October 1, 1980, as amended

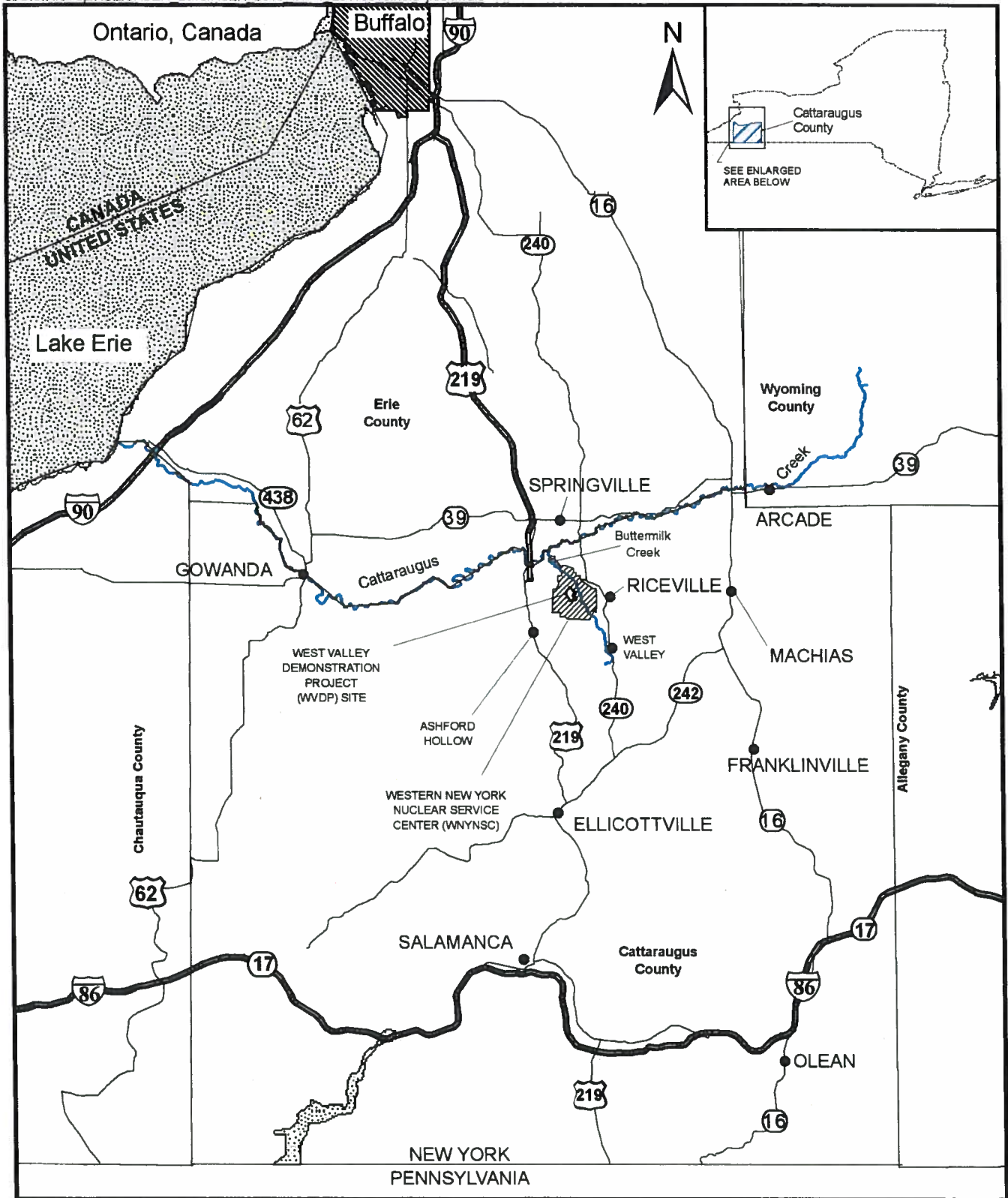


Figure 1. Location of Western New York Nuclear Service Center and West Valley Demonstration Project.

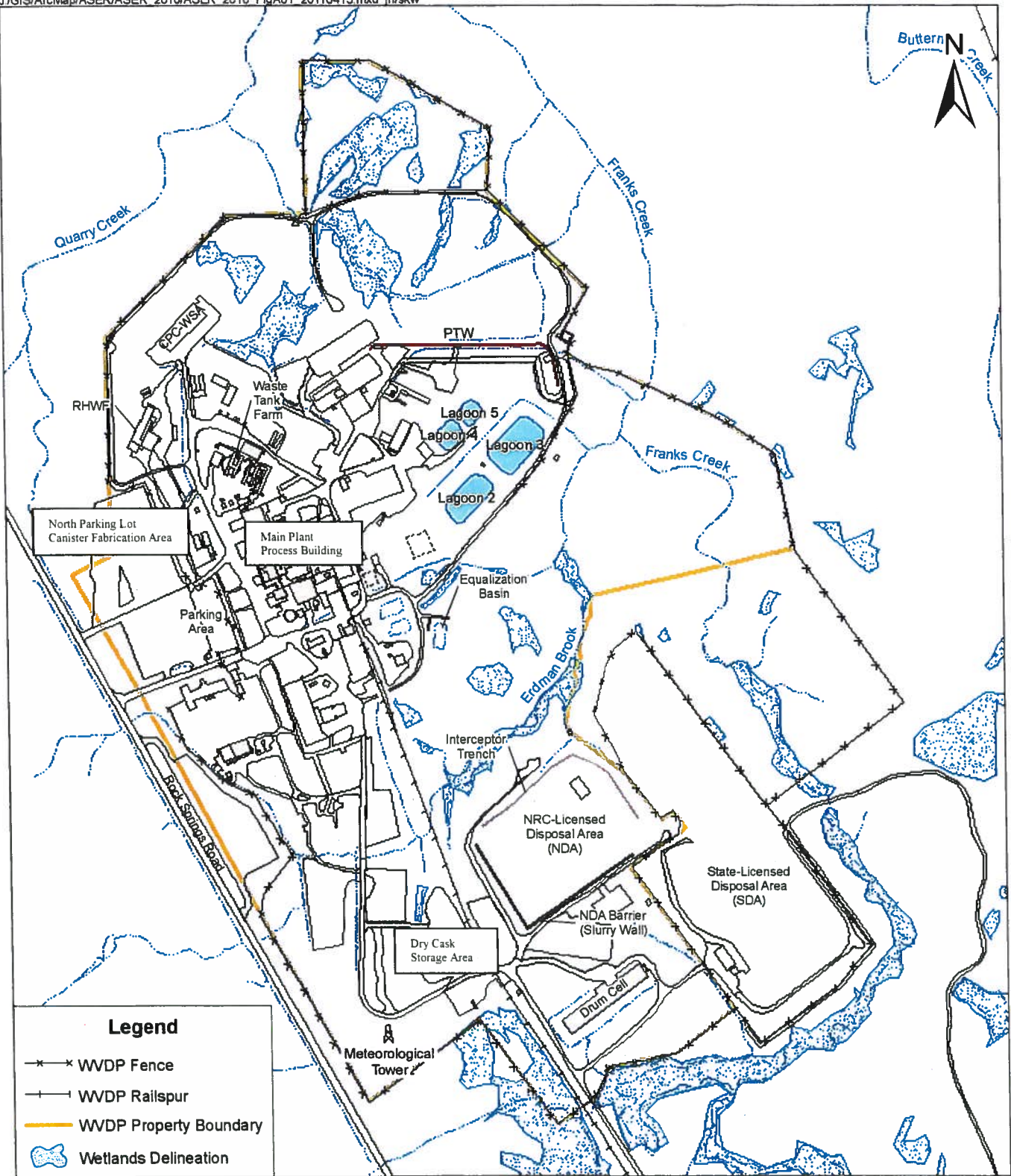


Figure 2. West Valley Demonstration Project Features Including the Location of the North Parking Lot, Main Plant Process Building, and the Dry Cask Storage Area

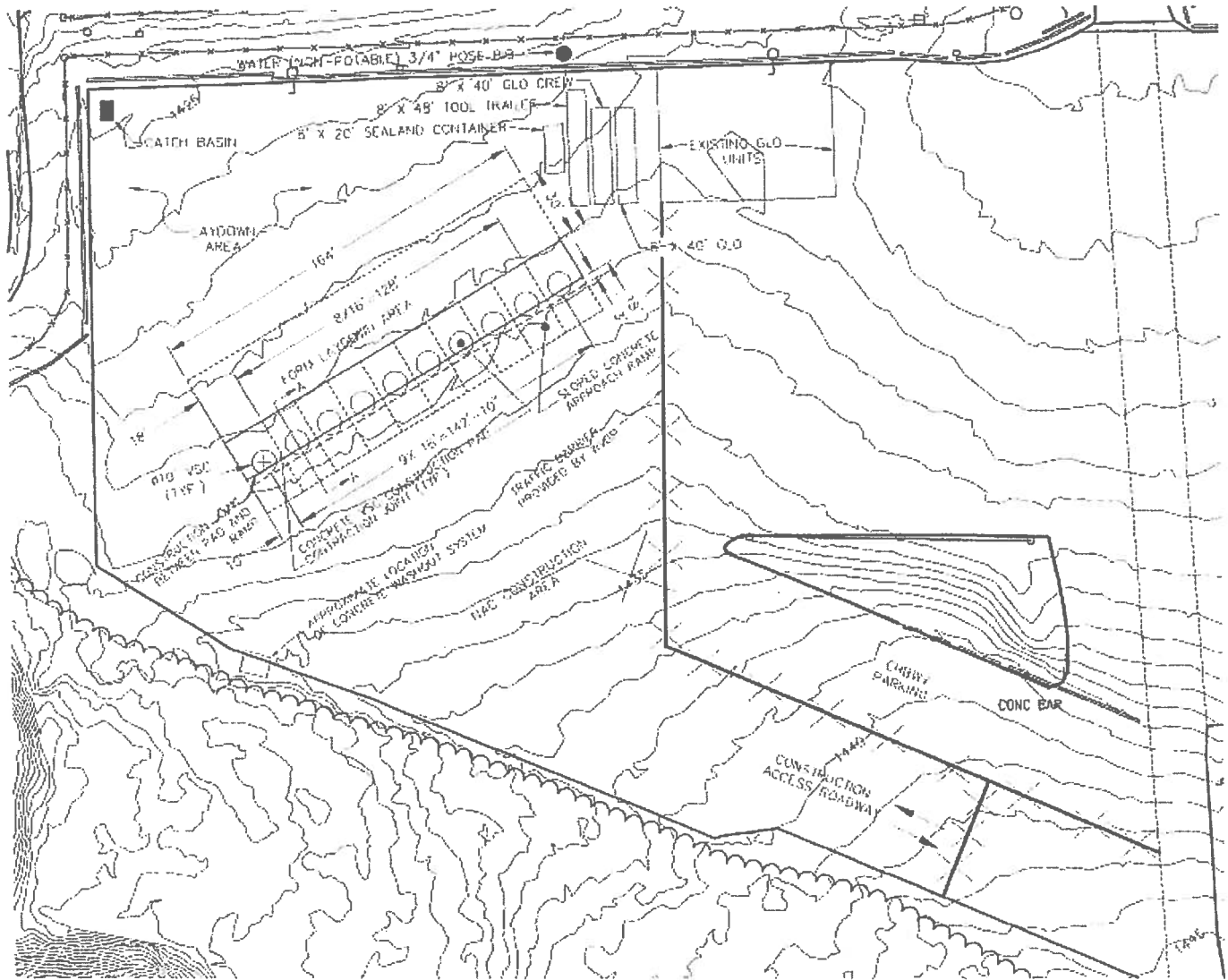


Figure 3. Planned Layout of the Canister Fabrication Operation in the WVDP North Parking Lot