

Department of Energy

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

May 31, 2013

Mr. Chad Glenn
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Transmittal of QP-450-01 - Management of Environmental Media - Phase 1

Decommissioning of the West Valley Demonstration Project

REFERENCE: Phase 1 Decommissioning Plan for the West Valley Demonstration Project,

Revision 2, dated December 2009

Dear Mr. Glenn:

The U.S. Department of Energy (DOE) West Valley Demonstration Project (WVDP) is providing the U.S. Nuclear Regulatory Commission (NRC) the DOE-WVDP Policy, *QP-450-01 - Management of Environmental Media – Phase 1 Decommissioning of the West Valley Demonstration Project* (Media Policy) for information purposes. The Media Policy establishes DOE-WVDP requirements for the management of environmental media (soil, sediment, groundwater, vegetation, animal remains) that may be generated by its contractors during the implementation of Phase 1 decommissioning activities at the WVDP.

The management of surface soil, subsurface soil, and streambed sediment in the Media Policy is consistent with the requirements of the Phase 1 Decommissioning Plan for the West Valley Demonstration Project (DP), with the exception of re-use of excavated soils. The DP prohibited use of excavated soils to backfill excavations regardless of radionuclide concentration levels. The Media Policy requires excavated surface and subsurface soils to be characterized for the 18 radionuclides of interest (ROI) and 12 potential ROI, and to be disposed of offsite if the surface soil clean-up goals (CG) identified in the DP are exceeded. The CG developed in the DP were more conservative than the derived concentration guideline levels (DCGL) that were developed in the DP to meet the unrestricted release criteria of 25 mrem/yr. In accordance with this Media Policy, excavated surface and subsurface soils that do not exceed the surface soil CG, pending DOE approval, are allowed to be returned to the excavation, staged near the excavation, or reused elsewhere onsite. For all soil relocation scenarios, in addition to the soil characterization, the Media Policy also requires our contractors to provide additional information including the volume of soil to be relocated and radiological characterization information where these soils will be relocated, so they can be removed in the future, if necessary. All of this information is being retained by DOE, such that DOE will know the characteristics of the relocated soil, the volume of the relocated soil, and the characteristics of the new soil lay down area.

The change in management of excavated soils that do not exceed the surface soil CGs was driven by prudent cost control, efficient work sequencing, and focused clean-up priorities. DOE-WVDP believes that costs associated with the packaging, transportation, and disposal of potentially

uncontaminated soils can be better spent on other Phase 1 decommissioning activities such as the removal of the Main Plant Process Building and the source area of the North Plateau plume in Waste Management Area (WMA) 1. DOE believes that the implementation of this Media Policy is consistent with DOE's commitment to not take actions during Phase 1 decommissioning activities that would prejudice Phase 2 decision-making. DOE is prepared to meet and discuss this issue and this revision of the DP with the NRC at its convenience.

Please let us know if NRC needs any additional information regarding the DOE-WVDP Media Policy. Please refer any questions about this correspondence to Moira Maloney of the West Valley Demonstration Project staff at 716-942-4255.

Sincerely,

Bryan Bower, Director

West Valley Demonstration Project

Enclosures: QP-450-01 - Management of Environmental Media - Phase 1 Decommissioning of the West Valley Demonstration Project, April 2013 (2 copies)

cc: J. R. Craig, DOE-EMCBC, Office of the Director, w/o enc.

R. E. Holland, DOE-EMCBC, Office of the Director, w/o enc.

M. J. Letourneau, DOE-HQ, EM-41, CLOV, w/enc.

M. N. Maloney, DOE-WVDP, AC-DOE, w/o enc.

L. W. Camper, NRC, w/o enc.

D. Persinko, NRC, w/o enc.

P. J. Bembia, NYSERDA, AC-NYS, w/enc.

ZZZ:360314 - 459

No. QP-450-01

Rev. 0



Department of Energy

West Valley Demonstration Project

POLICY, PROCEDURE AND PLAN NO: QP-450-01 REV: 0 DATE: 04/04/13

SUBJECT: Management of Environmental

Media - Phase 1 Decommissioning of the West Valley Demonstration

Project

APPROVED:

OE-WVDP Director

1.0 PURPOSE

The purpose of this policy is to establish the guidelines for managing environmental media such as surface soil, subsurface soil, streambed sediment, groundwater, vegetation, and fauna that is excavated, pumped, removed, or trapped, as applicable, during the execution of Phase 1 Decommissioning activities and other site operations within the West Valley Demonstration Project (WVDP) premises.

2.0 SCOPE

This policy applies to Department of Energy (DOE) WVDP staff and to DOE-WVDP contractors and their subcontractors involved with implementing Phase 1 Decommissioning activities and other WVDP site operations. Phase 1 Decommissioning activities are described in the *Phase 1 Decommissioning Plan for the West Valley Demonstration Project* (DP). WVDP site operations other than the Phase 1 Decommissioning activities identified in the DP may also require the management of environmental media, such as the excavation of soil within the project premises.

3.0 REQUIREMENTS & REFERENCES

3.1 Requirements

- 3.1.1 DOE O 435.1 Chg. 1 Radioactive Waste Management
- 3.1.2 DOE M 435.1-1 Chg. 2 Radioactive Waste Management Manual
- 3.1.3 West Valley Demonstration Project Act of 1980 (Public Law 96-368)
- 3.1.4 Phase 1 Decommissioning Plan for the West Valley Demonstration Project, Revision 2, U.S. Department of Energy, West Valley, New York, December, 2009
- 3.1.5 DOE O 458.1 Adm Chg. 3 Radiation Protection of the Public and the Environment

3.2 References

- 3.2.1 QP-253-02 Glossary of Terms and Definitions
- 3.2.2 USEPA Region II Administrative Order on Consent, Docket No. II RCRA 3008(h) – 92-0202
- 3.2.3 6 NYCRR Part 371 Identification and Listing of Hazardous Waste
- 3.2.4 6 NYCRR Part 373-3 Hazardous Waste Permit Application (RCRA Part A Permit) February 3, 2010

3.2.5 Phase 1 Final Status Survey Plan for the West Valley Demonstration Project

4.0 **DEFINITIONS**

See QP-253-02, "Glossary of Terms and Definitions."

5.0 RESPONSIBILITIES

- 5.1 <u>DOE-WVDP Director</u> Responsible for ensuring that this environmental media management policy is implemented at the WVDP.
- 5.2 <u>DOE-WVDP Deputy Director</u> Responsible for oversight of WVDP contractors performing work associated with the implementation of this environmental media management policy. Ensures that the implementation of this policy is performed consistent with DOE, Federal, state, and local safety, health, quality assurance, and environmental requirements, regulations, and laws.
- 5.3 DOE-WVDP Regulatory Strategy and Environmental Compliance Team Responsible for ensuring that the management of environmental media generated under this policy meets the requirements of the WVDP Act, DOE Orders, Federal regulations and statutes such as the National Environmental Policy Act (NEPA), Resource Conservation and Recovery Act (RCRA), and U.S. Nuclear Regulatory Commission (NRC) regulations, New York State regulations such as the State Environmental Quality Review Act (SEQRA), and West Valley specific requirements such as the Phase 1 Decommissioning Plan for the West Valley Demonstration Project.
- 5.4 <u>DOE-WVDP Project Managers</u>— Responsible for the management and oversight of the field activities associated with the implementation of this environmental media management policy. Makes regular visits to assigned project work areas for purposes of monitoring and verifying progress status and completion.

6.0 GENERAL INFORMATION

The Phase 1 Decommissioning of the WVDP will involve the removal and off-site disposal of structures such as the Main Plant Process Building and Vitrification Facility, and the excavation of large volumes of contaminated and non-contaminated soil within the project premises. Phase 1 Decommissioning activities are described in the DP. WVDP site operations other than the Phase 1 Decommissioning activities identified in the DP may also require the excavation of soil within the project premises. Examples of WVDP site operations that may require excavation activities include maintenance of site infrastructure, and construction activities such as the construction of buildings and concrete storage pads within the WVDP project premises. DOE-WVDP considers an excavation as any action resulting in manmade cuts, cavities, trenches, or depressions in the existing ground surface, formed by removal of material.

As described in the DP, Phase 1 Decommissioning activities are confined to the WVDP premises (Attachment A) and include removal and off-site disposal of the following:

- The Main Plant Process Building, Vitrification Facility, 01-14 Building, Utility Room/ Utility Room
 Expansion, and the Plant Office Building in Waste Management Area (WMA) 1;
- Soil underlying the Main Plant Process Building and Vitrification Facility in WMA 1 including the source area of the North Plateau Plume, which is referred to as the WMA 1 excavation (Attachment B);
- The neutralization pit, interceptors, solvent dike, Lagoons 1, 2, and 3, and associated soils in WMA 2 which is referred to as the WMA 2 excavation (Attachment C);

No. QP-450-01 Rev. 0

- Lagoons 4 and 5;
- Gravel and concrete pads across the project premises, including those located over the nonsource area of the north plateau groundwater plume; and
- Balance of Site Facilities.

Phase 1 Decommissioning does not include the underground waste storage tanks in WMA 3, the Construction Demolition and Debris Landfill (CDDL) in WMA 4, the NRC-licensed Disposal Area (NDA) in WMA 7, or the subsurface contamination at depths greater than 1 meter (3.3 ft.) below grade associated with the non-source area of the north plateau groundwater plume. These Phase 2 areas will be addressed during Phase 2 Decommissioning of the WVDP.

In this policy, Phase 1 areas refer to the entire project premises with the exception of the Phase 2 areas identified above.

The DP identified wide area Derived Concentration Guideline Levels (DCGL_w) for 18 radionuclides of interest (ROI) that meet the U.S. Nuclear Regulatory Commission (NRC) unrestricted release criteria (25 mrem/year) for surface soil and streambed sediment within the project premises, and for subsurface soil in the WMA 1 and WMA 2 excavations. Wide area cleanup goals (CG_w) were also developed for surface soil, subsurface soil, and streambed sediment that are more conservative than the 25 mrem/year DCGL_w (Attachment D).

The CG_w were developed for individual ROI to guide Phase 1 remediation in Phase 1 areas of the project premises. In areas with multiple ROI, a sum-of-the-fractions (SOF) approach as described in NUREG-1575, Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), will be taken to evaluate if soil and sediment meet the NRC unrestricted release criteria. The DCGL_w and CG_w for surface soil, subsurface soil, and streambed sediment may be revised if additional soil and sediment data collected during Phase 1 sampling activities indicates that the original conceptual models require revision.

Phase 1 Decommissioning activities and WVDP site operations may also require the management of other environmental media, such as groundwater, surface water, streambed sediment, vegetation, and fauna. This policy identifies the management options for environmental media that will be generated during the implementation of Phase 1 Decommissioning activities and WVDP site operations.

7.0 PROCEDURE

Environmental media covered under this policy includes surface soil, subsurface soil, streambed sediment, groundwater, vegetation, and fauna. The offsite disposal of environmental media described in this policy will be in accordance with requirements in DOE O 458.1, DOE O 435.1, DOE M 435.1-1 (as identified in Section 3.1), and all applicable Federal, state, and local requirements.

7.1 Management of Excavated Surface Soil within the Project Premises

Phase 1 Decommissioning activities and other WVDP site operations may require the excavation of surface soil within the project premises. The DP defines surface soils as soil extending from the ground surface down to a depth of 1 meter (3.3 feet). Surface soil also includes the soil/sediment within shallow drainage ditches within the project premises and portions of Erdman Brook and Franks Creek located in broad flat valleys as described in the DP.

7.1.1 Management of Surface Soil in Phase 1 Areas of the Project Premises

Phase 1 Decommissioning activities will include the removal of gravel pads, concrete pads and their associated foundations, and soils underlying these pads to a maximum depth of 0.67 meters (2 ft).

DOE-WVDP may decide to remediate surface soil within Phase 1 areas of the project premises during Phase 1 Decommissioning where radiological contamination does not extend deeper than 1 meter. However, DOE-WVDP may decide to delay the remediation of surface soil in Phase 1 areas to Phase 2 Decommissioning.

Surface soils excavated from Phase 1 areas as part of Phase 1 Decommissioning activities and other WVDP site operations **SHALL** be characterized in accordance with approved contractor procedures for radiological parameters, including those radiological parameters identified in the DP, and **SHALL** be managed in the following manner:

- Surface soil excavated within the proposed Phase 1 WMA 1 (Attachment B) and WMA 2 (Attachment C) excavations to support WVDP site operations may be returned to the excavation or, upon DOE-WVDP review and approval, the soil may be staged in a pile or re-used within the boundaries of the proposed WMA 1 and WMA 2 excavations. The surface soil and subsurface soil within the proposed Phase 1 WMA 1 and WMA 2 excavations will eventually be excavated and disposed of at offsite disposal facilities during the completion of Phase 1 Decommissioning.
- Surface soil excavated in Phase 1 areas outside of the proposed WMA 1 and WMA 2 excavations that exceeds the Phase 1 surface soil CG_w (Attachment D) SHALL be packaged and disposed of at an authorized offsite disposal facility within one (1) year of generating the excavated soil, or managed as otherwise authorized by the DOE-WVDP Field Element Manager.

If the excavated surface soil does not exceed the Phase 1 surface soil CG_w it may either be returned to the excavation, staged in a pile in the immediate vicinity of the excavation, or re-used onsite pending DOE-WVDP review and approval. For all on-site soil staging/relocation/re-use requests, the DOE contractor SHALL, at a minimum, provide DOE-WVDP the following information: volume, texture, and radiological characterization data of soil to be staged/relocated/re-used, the proposed relocation area and its associated surface soil radiological characterization data, schedule, equipment requirements, and cost. DOE-WVDP may also request additional information at its discretion.

The final disposition of these returned, staged, and re-used soils **SHALL** be fully documented, including their radionuclide inventory. The surface soils in the area where these excavated soils will be staged or used will also be characterized for the radiological parameters identified in the DP. This information will be preserved in a retrievable system that will allow a future determination as to where these soils were placed, staged, or re-used in the event their removal is required during Phase 2 Decommissioning.

Relocation and re-use of soil on-site **SHALL** be in compliance with all applicable Federal and New York regulations and DOE Orders. Excavated soil will not be staged or re-used in areas of the WVDP that have been released in accordance with requirements identified in the Phase 1 Final Status Survey Plan for the WVDP (FSSP).

7.1.2 Management of Surface Soil in Phase 2 Areas of the Project Premises

Surface soil within Phase 2 areas of the project premises will not be remediated during Phase 1 Decommissioning. However, surface soil may be excavated in Phase 2 areas to support other WVDP site operations.

Since Phase 2 DCGL_w and CG_w have not been developed for surface soils in Phase 2 areas, surface soils excavated from these areas **SHALL** be managed in the following manner:

Surface soil excavated from Phase 2 areas may be returned to the
excavation. Any excess soil which cannot be returned to the original
excavation as a result of new infrastructure additions, SHALL be
characterized in accordance with approved contractor procedures, packaged,
and disposed of at an authorized offsite disposal facility within one (1) year of
generating the excavated soil, or managed as otherwise authorized by the
DOE-WVDP Field Element Manager.

7.2 Management of Excavated Subsurface Soil within the Project Premises

The DP defines subsurface soil as soil located at depths greater than one meter (3.3 feet) below the ground surface. During the latter stages of Phase 1 Decommissioning, a large volume of surface and subsurface soil will be excavated from the proposed WMA 1 (Attachment B) and WMA 2 (Attachment C) excavations after the Main Plant Process Building and Vitrification Facility have been demolished to grade. The WMA 1 and WMA 2 excavations will extend into the Lavery till to depths up to 50 feet below grade in the North Plateau of the WVDP.

7.2.1 Management of Excavated Subsurface Soil from the WMA 1 and WMA 2 Excavations

Subsurface soil excavated from the proposed WMA 1 (Attachment B) and WMA 2 (Attachment C) excavations **SHALL** be managed in the following manner:

- In the event that WVDP site operations require the excavation of subsurface soil from within the proposed WMA 1 and WMA 2 excavations before the start of the final major WMA 1 and WMA 2 excavation work, all subsurface soil may be returned to the excavation and covered with surface soil removed from the excavation. Any excess soil which cannot be returned to the original excavation as a result of new infrastructure additions, SHALL be characterized in accordance with approved contractor procedures, packaged, and disposed of at an authorized offsite disposal facility within one (1) year of generating the excavated soil, or managed as otherwise authorized by the DOE-WVDP Field Element Manager. The surface soil and subsurface soil within the WMA 1 and WMA 2 excavations will eventually be excavated and disposed of at offsite disposal facilities during the completion of Phase 1 Decommissioning.
- All subsurface soil excavated from the major WMA 1 and WMA 2
 excavations during the later stages of Phase 1 Decommissioning after the
 Main Plant Process Building and Vitrification Facility have been demolished
 to grade, SHALL be characterized in accordance with approved contractor
 procedures for radiological and chemical parameters to meet the designated
 disposal facility's waste acceptance criteria (WAC). The excavated soil
 SHALL be packaged and disposed of at an authorized offsite disposal facility
 within one (1) year of generating the excavated soil, or managed as
 otherwise authorized by the DOE-WVDP Field Element Manager.

7.2.2 Management of Excavated Subsurface Soils from Phase 1 Areas Outside of the WMA 1 and WMA 2 Excavations

Phase 1 Decommissioning activities do not include the removal of any subsurface soil in Phase 1 areas outside of the proposed WMA 1 (Attachment B) and WMA 2 (Attachment C) excavations. However, subsurface soil may need to be excavated in Phase 1 areas outside of the proposed WMA 1 and WMA 2 excavations to support WVDP site operations and construction activities.

Since CGw have not been developed for subsurface soils in Phase 1 areas outside of the proposed WMA 1 and WMA 2 excavations, subsurface soils excavated from these areas will be managed in the following manner:

Subsurface soil excavated during WVDP site operations in Phase 1 areas outside of the WMA 1 and WMA 2 excavations SHALL be characterized for radiological parameters identified in the DP in accordance with approved contractor procedures. Soil that exceeds the Phase 1 surface soil CG_w SHALL be packaged and disposed of at an authorized offsite disposal facility within one (1) year of generating the excavated soil, or managed as otherwise authorized by the DOE-WVDP Field Element Manager.

If the excavated subsurface soil does not exceed the Phase 1 surface soil CG_w it may either be returned to the excavation, staged in a pile in the immediate vicinity of the excavation, or re-used onsite pending DOE-WVDP review and approval. For all on-site soil staging/relocation/re-use requests, the Phase 1 Decommissioning contractor SHALL, at a minimum, provide DOE-WVDP the following information: volume, texture, and radiological characterization data of the soil to be staged/relocated/re-used, the proposed relocation area and its associated surface soil radiological characterization data, schedule, equipment requirements, and cost. DOE-WVDP may also request additional information at its discretion.

The final disposition of these returned, staged, relocated, and re-used soils **SHALL** be fully documented, including their radionuclide inventory. The surface soils in the area where these excavated soils will be staged or used will also be characterized for the radiological parameters identified in the DP. This information will be preserved in a retrievable system that will allow a future determination where these soils were placed, staged, or re-used in the event their removal is required during Phase 2 Decommissioning.

Relocation and re-use of soil on-site **SHALL** be in compliance with all applicable Federal and New York regulations and DOE Orders. Excavated subsurface soil will not be staged or re-used in areas of the WVDP that have been released in accordance with requirements identified in the FSSP.

7.2.3 Management of Excavated Subsurface Soils from Phase 2 Areas

Since Phase 2 area $DCGL_w$ and CG_w have not been developed for subsurface soils, subsurface soils excavated from these areas during WVDP site operations **SHALL** be managed in the following manner:

 Subsurface soil excavated from Phase 2 areas may be returned to the excavation and covered with surface soil removed from the excavation. Any excess soil which cannot be returned to the original excavation as a result of

new infrastructure additions, **SHALL** be characterized in accordance with approved contractor procedures, packaged, and disposed of at an authorized offsite disposal facility within one (1) year of generating the excavated soil, or managed as otherwise authorized by the DOE-WVDP Field Element Manager.

7.3 Management of Streambed Sediment within the Project Premises

Streambed sediment refers to the sediment within Erdman Brook and Franks Creek within the project premises. Streambed sediment does not refer to the soil/sediment within the shallow drainage ditches within the project premises which are considered surface soil. Any soil excavated from these drainage ditches during Phase 1 Decommissioning will be managed as surface soil or as subsurface soil if the excavation is deeper than 1 meter (3.3 ft).

7.3.1 Management of Streambed Sediment during Phase 1 Decommissioning

There are currently no plans to excavate streambed sediment from Erdman Brook or Frank's Creek as part of Phase 1 Decommissioning. If DOE-WVDP decides to excavate streambed sediment as part of Phase 1 Decommissioning, the DP **SHALL** require revision.

7.3.2 Management of Streambed Sediment Excavated During Other WVDP Site Operations

Streambed sediment within the project premises may need to be excavated to support WVDP site operations such as the removal of streambed sediment from the area of the Parshall flume located where Franks Creek exits the project premises.

Streambed sediment excavated to support WVDP site operations **SHALL** be managed in the following manner:

All streambed sediment excavated to support WVDP site operations SHALL
be characterized for radiological and chemical parameters to meet the
designated disposal facility's WAC, packaged, and disposed of at an
authorized offsite disposal facility within one (1) year of generating the
excavated streambed sediment, or managed as otherwise authorized by the
DOE-WVDP Field Element Manager.

7.4 Management of Groundwater within the Project Premises

WVDP site operations and Phase 1 Decommissioning actions have the potential for generating significant volumes of groundwater that may contain radiological or chemical constituents. Potential sources of this groundwater include:

- Dewatering operations associated with the large WMA 1 and WMA 2 excavations;
- Continued operation of the North Plateau Pump and Treat System;
- Continued operation of the NDA Interceptor Trench; and
- Continued operation of the WMA 3 dewatering well.

It is assumed that operation of the North Plateau Pump and Treat System and the NDA Interceptor Trench will be terminated during Phase 1 Decommissioning.

The WVDP currently monitors groundwater quality within the project premises in accordance with the long-term groundwater monitoring requirements of the WVDP's Resource Conservation and Recovery Act (RCRA) 3008(h) Administrative Order on Consent and the 6NYCRR Part 373-3 Hazardous Waste Permit Application (RCRA Part A Permit).

No.	QP-450-01	Rev. 0	

All groundwater collected within the project premises during Phase 1 Decommissioning activities and other WVDP site operations **SHALL** be characterized in accordance with approved contractor procedures for radiological and chemical parameters to evaluate the management of this groundwater.

- The source of the collected groundwater within the project premises SHALL be identified and the groundwater analyzed for the radiological and chemical parameters as approved by DOE-WVDP for that source location.
- The radiological and chemical concentrations in the collected groundwater will be compared to on-site background groundwater concentrations in the appropriate hydrological unit (i.e. Sand and Gravel Unit, Weathered Lavery till, etc.) to determine management options including:
 - Groundwater with radiological concentrations exceeding site background concentrations SHALL be transferred to the Low-Level (liquid) Waste Treatment Facility (LLW2), or its replacement, for treatment before discharge through the State Pollutant Discharge Elimination System (SPDES) permitted discharge to Erdman Brook.
 - Groundwater with radiological concentrations within site background concentrations will be directed to the SPDES-permitted discharge to Erdman Brook without treatment at the LLW2 or its replacement.
 - At present, process knowledge and groundwater data does not indicate the presence of RCRA-listed or characteristic waste in groundwater within the project premises. If chemical sampling results indicate the presence of chemical parameters of concern, an evaluation will be made of the need to manage the groundwater as a RCRA hazardous or mixed-waste.

7.5 Management of Vegetation within the Project Premises

This policy applies to vegetation within the project premises that requires removal to complete planned Phase 1 Decommissioning activities or other WVDP site operations. However, this policy does not apply to routine site landscaping activities such as lawn mowing or brush trimming within the project premises. Vegetation refers to aquatic and terrestrial plant life including, but not limited to, grasses, bushes, cattails, and trees within the project premises.

7.5.1 Management of Vegetation Requiring Removal

Vegetation within the project premises requiring removal to complete WVDP site operations or planned Phase 1 Decommissioning activities **SHALL** be radiologically surveyed in accordance with approved contractor procedures to determine the need for radiological control.

- If the vegetation is not in a radiologically posted buffer area or contamination area, the vegetation SHALL be removed and relocated to the DOE-WVDP approved natural vegetation decay area within the project premises.
- If the vegetation is in a radiologically posted buffer area or contamination area, the vegetation SHALL be disposed of at an appropriate offsite radioactive waste disposal facility as putrescible radioactive waste in accordance with approved contractor procedures and with the disposal facility's WAC, unless otherwise approved by DOE-WVDP.

7.6 Management of Animals within the Project Premises

This policy applies to animals within the project premises, including nuisance animals requiring removal from the project premises. Animals include mammals, birds (and their associated nests), and reptiles within the project premises. This policy **SHALL** apply to animals that have been captured alive or found dead within the project premises.

The capturing and handling of live and dead animals within the project premises **SHALL** be performed by New York State Department of Environmental Conservation licensed Nuisance Wildlife Control Operators (NWCO) trained in all aspects of animal control activities. The capturing, handling, and disposition of animals within the project premises **SHALL** be performed in accordance with approved contractor procedures.

7.6.1 Disposition of Live Trapped Animals

Live trapped animals within the project premises **SHALL** be radiologically surveyed in accordance with approved contractor procedures to determine the need for radiological control.

- If the live animal is not radiologically contaminated the animal **SHALL** be relocated and released to property outside the project premises in accordance with an approved contractor procedure. If the trapped animal is a cat or dog, attempts will be made to find the owner. If the owner cannot be found, the cat or dog will be sent to a local animal shelter. If a local animal shelter cannot be found to accept the cat or dog, the animal will be euthanized by a veterinarian and disposed of properly.
- If the live animal is radiologically contaminated and requires radiological control precautions, a decision will be made by contractor personnel to decontaminate the animal. If the animal cannot be decontaminated, it **SHALL** be euthanized by a veterinarian or a WVDP NWCO and disposed of at an appropriate offsite radioactive waste disposal facility as putrescible radioactive waste. If the animal can be decontaminated, and it is a dog or a cat, attempts will be made to find the owner. If the owner cannot be found, the decontaminated cat or dog will be sent to a local animal shelter. If a local animal shelter cannot be found to accept the cat or dog, the animal will be euthanized by a veterinarian, WVDP NWCO, or offsite Humane Society and disposed of properly. Decontaminated animals other than dogs or cats will be relocated and released to property outside the project premises.

7.6.2 Disposition of Dead Animals

Dead animals found within the project premises **SHALL** be radiologically surveyed in accordance with approved contractor procedures to determine the need for radiological control.

- If the animal is not radiologically contaminated and was not in a radiologically
 posted buffer area or contamination area, the carcass SHALL be relocated to the
 DOE-WVDP approved natural decay area within the project premises.
- If radiologically contaminated and requiring radiological control precautions, the animal SHALL be bagged, packaged, and disposed of at an appropriate offsite radioactive waste disposal facility as putrescible radioactive waste.

No	QP-450-01	Rev. 0	
INO.	Q1 -430-01	TICV. O	

8.0 RECORDS MAINTENANCE

8.1 All records generated as a result of this policy **SHALL** be prepared, maintained, and stored in accordance with QP-241-01, "Identification and Control of DOE-WVDP General and Quality Assurance Records."

9.0 FORMS/TEMPLATES USED

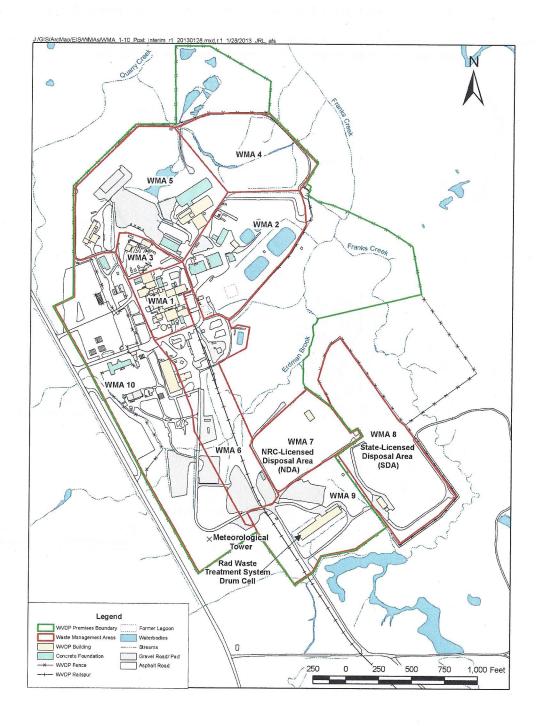
None.

10.0 ATTACHMENTS

- 10.1 Attachment A WVDP Waste Management Areas (WMA).
- 10.2 Attachment B Proposed Extent of the WMA 1 Excavation during Phase 1 Decommissioning.
- 10.3 Attachment C Proposed Extent of the WMA 2 Excavation during Phase 1 Decommissioning.
- 10.4 Attachment D Surface Soil, Subsurface Soil, and Streambed Sediment Cleanup Goals (CG_w) for use during Phase 1 Decommissioning (pCi/g).

Attachment A

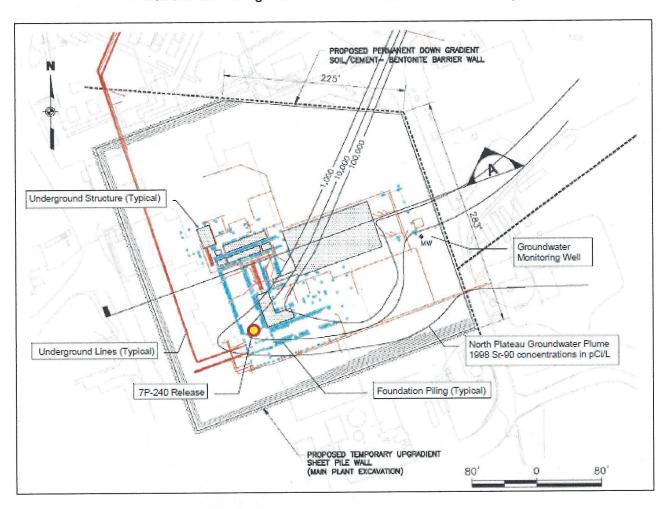
WVDP Waste Management Areas (WMA)



Attachment B

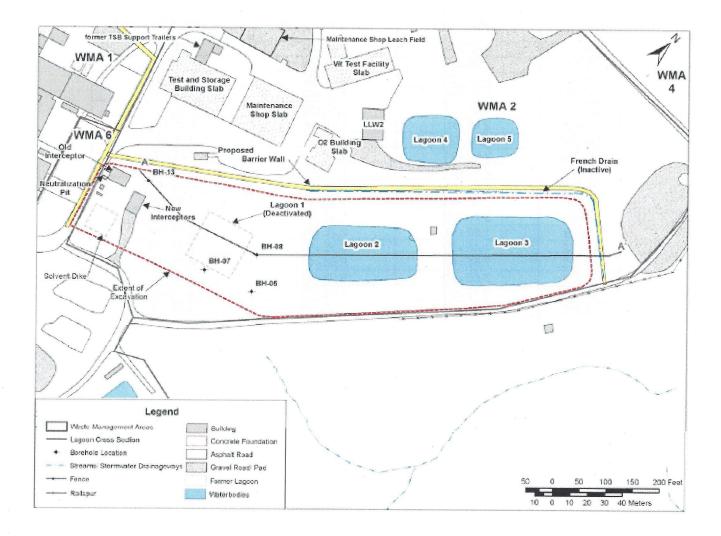
Proposed Extent of the WMA 1 Excavation during Phase 1 Decommissioning

(The proposed WMA 1 excavation is located within the area bounded by the upgradient sheet pile wall and the downgradient soil/cement bentonite barrier wall)



Attachment C

Proposed Extent of the WMA 2 Excavation during Phase 1 Decommissioning.



No. QP-450-01	Rev. 0

Attachment D

Surface Soil, Subsurface Soil, and Streambed Sediment Cleanup Goals (CG_w) for use during Phase 1 Decommissioning (pCi/g)

Nuclide	Surface Soil	Subsurface Soil	Streambed Sediment
Am-241	2.6E+01	2.8E+03	1.0E+03
C-14	1.5E+01	4.5E+02	1.8E+02
Cm-243	3.1E+01	5.0E+02	3.1E+02
Cm-244	5.8E+01	9.9E+03	3.8E+03
Cs-137	1.4E+01	1.4E+02	1.0E+02
I-129	2.9E-01	3.4E+00	7.9E+01
Np-237	2.3E-01	4.5E-01	3.2E+01
Pu-238	3.6E+01	5.9E+03	1.2E+03
Pu-239	2.3E+01	1.4E+03	1.2E+03
Pu-240	2.4E+01	1.5E+03	1.2E+03
Pu-241	1.0E+03	1.1E+05	3.4E+04
Sr-90	3.7E+00	1.3E+02	4.7E+02
Tc-99	1.9E+01	2.7E+02	6.6E+04
U-232	1.4E+00	3.3E+01	2.2E+01
U-233	7.5E+00	8.6E+01	2.2E+03
U-234	7.6E+00	9.0E+01	2.2E+03
U-235	3.1E+00	9.5E+01	2.3E+02
U-238	8.9E+00	9.5E+01	8.2E+02

No. QP-450-01 Rev. 0

DEPARTMENT OF ENERGY WEST VALLEY DEMONSTRATION PROJECT RECORD OF REVISION CONTINUATION SHEET

DOCUMENT

If there are changes to the controlled document, the revision number increases by one. Indicate changes by one of the following:

- Placing a vertical black line in the margin adjacent to sentence or paragraph that was revised. Placing the words GENERAL REVISION at the beginning of the text.

		Revision On	
Rev. No.	Description of Changes	Page(s)	Dated
0	Original Issue		04/04/13

<u>DEPARTMENT OF ENERGY</u> WEST VALLEY DEMONSTRATION PROJECT RECORD OF REVISION CONTINUATION SHEET