

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

NOV 1 3 2007 West Valley Citizen's Task Force c/o The Logue Group P.O. Box 270270 West Hartford, CT 06127-0270



Dear Mr. Logue:

The purpose of this letter is to follow up my comments at the September 26th Citizen's Task Force (CTF) meeting and perhaps add some perspective. I thought this perspective might be useful to the CTF as the West Valley Core Team continues to work. I also want to again thank the CTF for inviting me, as a member of the West Valley Core Team.

During the September 26th meeting it occurred to me that several key events had occurred dating back from 2003 to the present which have changed the perspective from which our Agency views the issues attendant to the ultimate disposition of the West Valley site. One concern that was raised was the regulatory framework from which the various regulatory Agencies are operating. As I mentioned at the meeting, the Regulator's Communication Plan (Enclosure 1) that was prepared by the involved regulatory agencies meant to serve as that framework and endeavored to be comprehensive. I am enclosing a copy of that and I took time to re-read it again after our meeting. From an U.S. Environmental Protection Agency (EPA) perspective I believe this still remains the operable document and for those who would ask what yardstick we would use to measure a preferred alternative under an environmental impact statement (EIS) or for remedial work that would occur prior to the selection of such an alternative. As such, I would refer the CTF to this plan.

In June 2006 EPA Region 2 Administrator, Alan Steinberg, recommended the clean closure of the north plateau of the West Valley site. That is the area where commercial reprocessing operations took place and where high-level waste tanks were located. A copy of Mr. Steinberg's remarks at the time are also enclosed (Enclosure 2). At the same time the U.S. Department of Energy (DOE) proposed the Core Team approach to move forward on the project and shortly thereafter named a new Project Director, Bryan Bower. From that point until the Spring of 2007, the political leadership on both EPA and DOE entered into a dialogue with the purposes of assuring that EPA's vision for the site and the DOE's proposed process would have the best chance of being successful. That culminated in a series of two letters, one dated March 1, 2007 from EPA and the other May 8, 2007 from DOE which tried to state the objectives of the cleanup of the West Valley site. I have enclosed a copy of each of these letters so the CTF can have these to better understand the changing perspective for the site clean-up work (Enclosures 3 and 4). While this was being prepared the initial deliberations of the Core Team had begun to formulate a preferred alternate for the decommissioning EIS. Further remedial work was identified that could be either started and, in some instances completed before the EIS was completed. This would create an enhanced interim end state that would render good portions of

the site less contaminated or contamination free as a basis for the actual EIS document. It is my understanding that the CTF received a briefing on this work at a previous meeting.

On September 18, 2007 Mr. Steinberg and Assistant Secretary of Energy for Environmental Management, James Rispoli, met at the site, toured it and made some remarks. A copy of Mr. Steinberg's remarks are enclosed (Enclosure 5). I think these remarks highlight something that is important for the CTF to realize. There are a number of significant challenges that lie ahead that are not technical challenges. I think they address the concerns that several CTF members have raised about the technical issues for which the Core Team is dealing as well as the process for dealing with these issues. Mr. Steinberg's September 18th remarks points out the challenges that EPA and DOE have had to deal with in developing the Core Team process and, significantly, these aren't technical issues. These issues include: the lack of an ultimate repository for high-level waste containers that are stored on-site, legal issues involving what can and cannot be left on site, ultimate disposal for some of the radioactive waste that remains in at least two of the tanks, and finite clean-up budgets to perform the work as we move forward.

It is these issues that are truly driving the Core Team's efforts in preparing a preferred alternative that we can recommend. For example, the uncertainty of the status of the Yucca Mountain high-level nuclear waste repository makes it impossible to schedule the removal of the high-level canisters that were generated as part of the Department of Energy's responsibility under the West Valley Demonstration Project Act. These canisters currently are located in the Main Plant Process Building (MPPB). It is important that the contamination in the MPPB be addressed and it is desirable to remove the building so that the source of the Strontium-90 groundwater contamination can be addressed as rapidly as possible. The longer it takes to address the source of the groundwater contamination the more time and taxpayer money will be required for the watchful stewardship of the site. The ultimate fate of the four high-level waste tanks also depends not only on a final high-level waste repository but the outcome of several legal issues. While the current estimate for removing the remaining residues in these tanks and exhuming them stands somewhere between ½ and 1 billion dollars, future technology improvements may actually lower these costs but that is not predictable at this time.

I do not want to give the impression that EPA has changed its position articulated in June 2006 by Regional Administrator Alan Steinberg, at which time he called for the clean closure of the North Plateau portion of the West Valley site. We still believe this is an achievable goal. However, to reach this goal it appears a phased approach is absolutely necessary for several reasons. One major reason is that even if a high-level repository were to be agreed upon this year, it would be decades before the high-level radioactive wastes that have and will be generated at West Valley can be moved to such a repository. As such major work needs to be done to relocate waste on-site so that other remedial work can occur.

Hopefully, you will understand my belief that the real challenges that the Core Team faces in designing a preferred alternative that can be recommended as part of the draft environmental impact statement due for completion in 2009 are not technical ones. I do not see one technical problem that cannot be solved, but several of the solutions require solutions to national policy issues. During our September meeting several members of the CTF expressed frustration. I share your frustration. Before we can achieve our ultimate goals, decisions have to be made on a

national level that will include disposing of high-level nuclear waste either at Yucca Mountain or elsewhere. I believe that the avoidance of that ultimate decision is the main cause of our frustration. Until then, I think we need to follow the words of President Theodore Roosevelt who said, "do what you can, with what you have, where you are." Notwithstanding, we at EPA are trying to work with all, so we "have" more.

Again, thank you for your invitation. I hope this has provided some useful perspective and I look forward to meeting with the CTF again on a face to face basis after the first of the New Year.

Sincerely,

Paul A. Giardina, Chief

Radiation and Indoor Air Branch

enclosures [5]

cc: Bryan Bower, U.S. Department of Energy Paul Bembia, N.Y.S. Energy Research & Development Authority Ed Dassatti, N.Y.S. Department of Environmental Conservation Keith McConnell, U.S. Nuclear Regulatory Commission

Revision 1, May 20, 2003

REGULATORS COMMUNICATION PLAN ON APPLICATION OF CLEANUP REQUIREMENTS FOR DECOMMISSIONING THE WEST VALLEY SITE

I SCOPE

On November 27, 2001, the US Environmental Protection Agency (EPA) Region 2, US Nuclear Regulatory Commission (NRC), New York State Department of Environmental Conservation (NYSDEC), and New York State Department of Health (NYSDOH) met to discuss applicable cleanup criteria and regulatory roles and responsibilities for the West Valley site. These agencies, together with New York State Department of Labor (NYSDOL), are herein referred to as the regulators. In this meeting, the regulators agreed to develop a communication plan that:

1) identifies applicable cleanup requirements and expectations that need to be addressed in decommissioning the West Valley site, and 2) describes the roles and responsibilities of involved regulatory agencies. While it may not represent consensus, compromise, or resolution of all differences between the regulatory agencies requirements or perspectives, the regulators intend to use this communication plan to foster a better understanding of cleanup requirements/expectations and roles/responsibilities related to decommissioning of the West Valley site. It is also intended to assist the scoping of issues that may need to be considered in the West Valley decommissioning Environmental Impact Statement (EIS) for the West Valley Demonstration Project (WVDP).

II GOALS AND OBJECTIVES

- Identify applicable regulatory cleanup requirements and expectations.
- Identify roles and responsibilities of involved regulatory agencies.

III BACKGROUND

In October 2000, the regulators initiated a dialogue on the various cleanup standards that apply at West Valley. It was recognized that different Federal and State agencies have different cleanup standards that need to be addressed. The regulators agreed that it is a desirable goal to work together and present these requirements in a clear and coordinated way which will help facilitate planning and decision-making processes, eliminate redundancy, and make better use of resources.

A General Accounting Office (GAO) report on West Valley was made public on June 12, 2001. The report (GAO-01-314) includes several recommendations, one of these recommendations pertains to coordination among agencies on cleanup requirements. Specifically, GAO recommended that NRC and EPA, in coordination with New York State, agree on how their different regulatory cleanup criteria should apply to the site. On November 27, 2001, regulatory agencies met to discuss these and related issues on the decommissioning of the West Valley site. In this meeting, the regulators agreed to develop a communication plan that identifies

applicable cleanup requirements and expectations, and describes the roles and responsibilities of involved regulatory agencies.

IV PRINCIPAL POINTS OF AGREEMENT

Regulators agreed upon a number of general points, including:

- To work together in identifying cleanup criteria and expectations.
- To participate in a planned public meeting on NRC decommissioning criteria.
- To develop a communication plan that includes a description of roles and responsibilities
 of involved regulatory agencies, and a matrix of cleanup requirements and expectations.
- To address and resolve issues through the Decommissioning EIS.
- To consider respective roles as a cooperating agency for the Decommissioning EIS.
- To address and resolve regulatory issues in a timely manner.
- To acknowledge that some waste may remain onsite.
- To acknowledge the possibility of partial site release and that some portion of the site may remain under license for the foreseeable future.
- To solicit stakeholder input on decommissioning and ability to meet site cleanup criteria.
- To agree in principle with cleanup to NRC dose limit of 25 mrem/yr with ALARA, for unrestricted release.

V REQUIREMENTS AND EXPECTATIONS

One objective of this plan is to identify the applicable cleanup requirements and expectations for decommissioning the West Valley site. Table 1 provides a matrix of requirements and expectations that all regulators endorse. Table 2 provides a matrix of requirements and expectations for individual regulators. Table 2 is intended to point out the various agencies clean-up standards and expectations resulting from the difference in the underlying statutes from which each agency has been charged with cleanup responsibility. It is designed to serve as a listing of applicable cleanup requirements and expectations that need to be addressed from the perspective of the listing agency. Together, these tables consolidate information in an effort to promote a common understanding among stakeholders involved in the West Valley site decommissioning.

VI AGENCY ROLES AND RESPONSIBILITIES

NRC Role and Responsibility

NRC has the regulatory responsibility under the Atomic Energy Act for the Western New York Nuclear Service Center (WNYNSC) which is the subject of the NRC license issued to NYSERDA pursuant to 10 CFR part 50, with the exception of the State-Licensed Disposal Area (SDA). The license is currently in abeyance pending the completion of the WVDP.

The West Valley Demonstration Project Act (WVDPA) specifies certain responsibilities for NRC, including: 1) prescribing requirements for decontamination and decommissioning; 2) providing review and consultation to DOE on the project; and 3) monitoring the activities under the project for the purpose of assuring the public health and safety. In addition, NRC has agreed to provide support as a cooperating agency with US Department of Energy (DOE) and New York State Energy Research and Development Authority (NYSERDA), under the National

Environmental Policy Act (NEPA), on the West Valley Decommissioning EIS. NRC may adopt this EIS for the preferred alternative, assuming that NRC will find it acceptable.

NRC expects DOE to submit a Decommissioning Plan (DP) for the WVDP portion of the site. While DOE is not a licensee, the use of the DP process will assist the staff in obtaining and analyzing information needed to evaluate the DOE proposal against the NRC decommissioning criteria. In February 2003, DOE agreed to submit a DP to NRC at approximately the same time it submits the draft Decommissioning EIS. NRC recognizes that the use of the preferred alternative in the DP, before the completion of the EIS, is preliminary and subject to change based on the final EIS.

Notwithstanding the WVDP, NRC retains the regulatory responsibility for the non-DOE activity in the non-project area and non-SDA area to the extent Part 50 contamination exist both on and offsite. Following the completion of the WVDP and reinstatement of the license, NRC will have the regulatory responsibility for authorizing termination of the license, should NYSERDA seek license termination.

License termination is conducted under the Atomic Energy Act. If NYSERDA decides to terminate the license, NYSERDA will be required to submit a DP. NYSERDA's license is presently in abeyance. Therefore, NRC cannot perform a licensing action until DOE completes its obligations under the WVDP Act and the license is reinstated. However, NRC encourages NYSERDA to submit a proposed DP at approximately the same time as DOE's DP. This will assist the NRC in evaluating DOE's proposal and understanding the planned remediation for the entire site for dose modeling purposes. NYSERDA's proposed DP will be considered to be part of a pre-licensing action and will not be docketed or approved until after the license has been reinstated. After the license is reinstated, NRC expects NYSERDA to formally submit for docketing an updated DP to reflect the actions DOE has completed and any changes to NYSERDA's planned remediation activities. The NRC will review the DP in accordance with NRC's standard decommissioning review process and will take into account, as warranted, the previous information obtained during the review of DOE's DP. If NYSERDA pursues either license termination or partial site release, NRC will need to conduct an environmental review to determine if an EIS is necessary to support this licensing action.

EPA Role and Responsibility

EPA agrees to be a cooperating agency with DOE and NYSERDA, under NEPA, on the West Valley decommissioning EIS. EPA will review the cleanup plan, EIS and other documents developed by DOE in conjunction with NYSERDA to provide early input so the remediated site will also meet the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) risk range to avoid the potential need to list the WVDP on the National Priority List (NPL). Currently, the WVDP is not an NPL listed site. EPA will inspect and review West Valley's radionuclide air emissions for compliance with 40 CFR 61 limit of 10 mrem/yr. Since a number of EPA programs have been delegated to New York State agencies, EPA will provide consultation and oversight for State implementation of the delegated Clean Air Act (CAA), Clean Water Act (CWA), Safe Drinking Water Act (SDWA) and Resource Conservation and Recovery Act (RCRA) programs that are applicable to the West Valley site.

NYSDEC Role and Responsibility

Agreement State Authority

In 1962, pursuant to Section 274b. of the Atomic Energy Act of 1954, New York State entered into an agreement with the Atomic Energy Commission (AEC), the predecessor to the NRC, whereby the Commission discontinued certain of its regulatory authority over byproduct, source, and small quantities of special nuclear material within the State. The State and AEC also adopted a related Memorandum of Understanding in 1965 clarifying certain mutual obligations relating to the regulation of Commission licensed activities within the State. As a result, the regulation of radioactive materials, except as pertains to production and utilization facilities, and facilities under exclusive federal jurisdiction, generally falls within the State's responsibilities for protecting the public health and safety under its police powers. (Please note that NRC relinquishes its regulatory authority to the State. This is fundamentally different than the delegation to the State approach used by the EPA.)

As part of these responsibilities, NYSDEC regulates environmental discharges and disposal of radioactive materials, and transportation of low level radioactive waste within the State for non-federal facilities. Thus, the NYSDEC regulates the State-Licensed Disposal Area (SDA) through issuance of permits under 6 NYCRR Part 380 Rules and Regulations for Prevention and Control of Environmental Pollution by Radioactive Materials, and the transportation of Low-Level Radioactive Waste (LLRW) under 6 NYCRR Part 381 Low-level Radioactive Waste Transporter Permit and Manifest System.

NYSDEC's role at the SDA is to ensure that the site owner/operator, NYSERDA, properly maintains the integrity of the SDA, minimizes discharges of radioactive materials to the environment, and properly closes the facility in a manner that is protective of the public health and environment and in compliance with Part 380. NYSDEC also has a broader mandate under the Environmental Conservation Law (ECL) § 3-301, 1. i., to protect the public health and environment from sources of radioactive materials contamination beyond the specific regulation of sites subject to Part 380 permitting.

RCRA - Hazardous Waste and Mixed Waste

In 1990, the NYSDEC received authorization from the EPA to regulate Federal Facilities which manage Hazardous and Mixed Waste pursuant to 6 NYCRR Part 370 Series. This includes permitting activities under Interim Status for RCRA regulated units (storage areas and tanks involved with treating or storing hazardous or mixed waste) and Corrective Action Requirements for investigation and if necessary, remediation of hazardous constituents from Solid Waste Management Units (SWMU - any area or unit that has the potential or suspect for releases of hazardous waste or hazardous constituents into the environment.)

RCRA Permitting

NYSDEC's role is to ensure compliance with applicable permitting requirements for RCRA regulated units storing or treating hazardous or mixed waste. For the USDOE and NYSERDA, this includes all tanks and storage areas identified on each of their respective Hazardous Waste Permit Application - Part A, and any subsequent addenda. It is required that the appropriate 6 NYCRR Part 370 regulations be followed for the operations, closure and, if necessary, post-closure care of these units.

RCRA Corrective Action

NYSDEC's role is to ensure compliance with the1992 joint-NYSDEC/USEPA 3008 (h) [New York State Environmental Conservation Law, Article 27, Titles 9 &13] Order issued to the USDOE and NYSERDA. The purpose of the Order is to protect human health and the environment from releases of hazardous waste and/or constituents. To achieve such protection, DOE and NYSERDA were required, among other things, to (a) perform Interim Measures to reduce or eliminate immediate threats to human health and the environment; (b) perform a RCRA investigation to fully determine the nature and extent of any release of hazardous constituents into the environment; and (c) if any releases exceed action limits set by the NYSDEC/USEPA or it is necessary to reduce or eliminate potential threats, a Corrective Measures Study (CMS) will be performed to determine the most environmentally beneficial corrective measure(s) for each SWMU. NYSDEC has agreed to utilize the EIS process as a means to comply with the CMS requirements. NYSDEC's role is to ensure that the remedial option(s) and selection(s) under the EIS meet the requirements and standards for RCRA corrective action. NYSDEC expects that the EIS will meet all of the CMS requirements set forth in the Order and its attachments for any and all SWMUs as described in (c) above.

Protection of the Environment

NYSDEC is responsible for ensuring the protection of the State's environment under ECL and delegated federal responsibilities. This entails all aspects of the protection of natural resources, including the lands, streams, wetlands, groundwaters, mineral resources, and wildlife of the State not reserved by a federal agency.

In addition, NYSDEC program staff regularly consult with their counterparts in the NYSDOH to ensure that the DOH, in their role as lead agency for the protection of public health, is in concurrence with the remedial actions under review by the NYSDEC.

NYSDOH Role and Responsibility

As established in NYS Public Health Law, NYSDOH is the lead State agency for protection of public health from any public health threat, including ionizing radiation. However NYSDEC, under its responsibility as established in Environmental Conservation Law (ECL), will serve as the lead State agency for the decommissioning project. NYSDOH will ensure its responsibility for protection of public health via participation with NYSDEC staff in reviewing and concurring with NYSDEC on any remedial actions. It is not expected that NYSDOH will routinely interact with DOE or NYSERDA. Additionally, NYSDOH regulates public water supply operators, including any that may be impacted by the site, to ensure compliance with the requirements of Part 5 of 10NYCRR.

NYSDOL Role and Responsibility

NYSDOL has issued regulations under Industrial Code Rule 38 (12 NYCRR 38) for the commercial and industrial use of radioactive materials, not subject to the regulatory powers and jurisdiction of the NYSDOH. Statutory authority for these regulations derives from Section 483 of the General Business Law, and Section 27 of the Labor Law. Pursuant to Industrial Code Rule 38, NYSDOL has issued radioactive materials license number 0382-1139, authorizing NYSERDA to possess and manage emplaced radioactive waste at the SDA. The license

requires NYSERDA to conduct its operations in accordance with a radioactive safety program, reviewed and approved by the Department, to minimize radiation exposures to workers and the public resulting from SDA operations.

VII DECOMMISSIONING ISSUES

Significant issues exist that will need to be addressed in the West Valley Decommissioning EIS. The NEPA process will be used to address these issues, to the extent practical. Regulators have also agreed to consider working in the role of a cooperating agency to support the development of this EIS. The following issues are examples of the types of issues that will be addressed in the West Valley decommissioning EIS. If there are decommissioning issues that cannot be addressed through this EIS, these issues should be identified early in the NEPA process.

- NRC Licensed Disposal Area (NDA) This 5-acre disposal area was used from 1966 to 1986 and includes a variety of waste types, activities and packaging configurations. The NDA was used for the disposal of radioactive waste from fuel reprocessing and associated processing, such as decontamination and decommissioning. Wastes were placed in the NDA both during the NRC-licensed commercial operation of the site by Nuclear Fuel Services and under the WVDPA during the initial cleanup of the former reprocessing facility by the DOE. The buried waste includes: reactor hardware (all components, including hulls), spent fuel from the Hanford Site's N-Reactor (which was not processed because of ruptured cladding), ion exchangers and sludges, filters, failed and discarded equipment, and contaminated soil. The Decommissioning EIS may evaluate unrestricted and restricted release scenarios, the possibility that the NDA may remain under license for some period of time, and the extent of the DOE's responsibility for wastes which they placed there.
- State Licensed Disposal Area (SDA) This 16-acre commercial disposal area was operated from 1963 to 1975. It received radioactive wastes from various government, commercial, medical, and academic facilities, including the reprocessing operations at West Valley. Since the type of disposal operation that took place at the SDA falls under Agreement State authority, it is licensed by the NYSDOL and permitted by the NYSDEC. Thus the NRC does not have regulatory authority to set decommissioning criteria for the SDA. This responsibility is held by the NYSDEC and the NYSDOL. However, since the cleanup activities at the site are subject to both NEPA and SEQRA, the decommissioning EIS will include consideration of closure of the SDA in order for NYSERDA to fulfill its SEQRA obligations.
- High-Level Waste (HLW) Tanks There are four underground tanks that were used for storing and processing over 600,000 gallons of liquid HLW generated during the reprocessing era. This liquid waste has been solidified via a vitrification process. Total Cs-137/Sr-90 radioactivity vitrified is approximately 11.7 million Curies. DOE completed the vitrification of liquid HLW in 2002. DOE is presently examining concentrations of residual contamination in these tanks. Regulators have stressed the need to remediate residual contamination associated with these tanks, to the extent practical, due to long term risk to public health posed by this contamination. The Decommissioning EIS will evaluate options for decommissioning and closing these tanks in-place, or removing

these tanks. The impacts of identifying the waste in the tanks as incidental to reprocessing, and not HLW, should be considered in the Decommissioning EIS.

- Groundwater Plume Radioactively contaminated groundwater, which emanated from the reprocessing building and migrated on-site, has probably existed since the late 1960s to early 1970s, but was not identified or characterized until the mid-1990s. Under the building, the plume consists of several isotopes, but beyond the building footprint it consists only of the isotope Strontium-90. The plume now covers an area that is approximately 300 feet by 900 feet. Groundwater in the main flow path of this plume is being pumped and treated, and a below-grade permeable wall intended to prevent further migration is being tested on an arm of this plume. The Decommissioning EIS will evaluate options to remediate or monitor this plume.
- Partial Site Release Partial site release, in the context of West Valley, refers to the
 situation where a portion of the site is released for unrestricted use, while other portions
 of the site's use may remain restricted or under license. Regulators acknowledge the
 reality of partial site release and that some portion of the site may remain under license
 for some period of time. The Decommissioning EIS should evaluate the scenario of
 partial site release.

VIII AUDIENCE

This plan will help regulators communicate with both internal and external audiences. Internal audiences refer to the regulators with their respective management and staff. External audiences may include the following stakeholders and interest groups:

- DOE-
- NYSERDA
- West Valley Citizen Task Force
- Seneca Indian Nation
- General public which include residents living near the West Valley site
- Environmental organizations
- Community, professional, civic and public interest groups
- Business organizations and Chambers of Commerce
- Congressional representatives and their staff
- Media representatives
- Other Federal, State and local Governments
- Canada

IX **ACRONYMS**

AEC Atomic Energy Commission

ALARA As Low as Reasonably Achievable

CAA Clean Air Act

CERCLA Comprehensive Environmental Response Compensation and Liability Act

CMS Corrective Measures Study

CWA Clean Water Act

DCGLs Derived Concentration Guideline Limits

DOE US Department of Energy DP Decommissioning Plan

ECL **Environmental Conservation Law** EIS **Environmental Impact Statement** EPA US Environmental Protection Agency **FFCA** Federal Facilities Compliance Act GAO US General Accounting Office

HEAST Health Effects Assessment Summary Tables

HLW High-Level Waste

Integrated Risk Information System IRIS LLRW Low-Level Radioactive Waste LTR License Termination Rule

MARSSIM Multi-Agency Radiation Survey and Site Investigation Manual

MCL. Maximum Contaminant Level NRC-Licensed Disposal Area NDA NEPA National Environmental Policy Act

NESHAP National Emission Standards for Hazardous Air Pollutants

NPL National Priority List

NRC **US Nuclear Regulatory Commission** NYCRR New York Code of Rules and Regulations

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health New York State Department of Labor NYSDOL

NYSERDA New York State Energy Research and Development Authority

RCRA Resource Conservation and Recovery Act

SDA State-Licensed Disposal Area SDWA Safe Drinking Water Act

SEQRA State Environmental Quality Review Act SPDES State Pollutant Discharge Elimination System

SWMUs Solid Waste Management Units

Technical Administrative Guidance Memorandum TAGM

WNYNSC Western New York Nuclear Service Center WVDP West Valley Demonstration Project WVDPA

West Valley Demonstration Project Act

All Agencies Agreement on Requirement/Expectation

* = Agree

Requi	irement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
LL AGEN	ICIES					
	All actions and final status adhere to the ALARA principle.	*	*	*	*	✓
The second second second	Agree in principle with cleanup to NRC dose limit of 25 mrem/yr for unrestricted release ¹ .	*	*	*	*	1
	Acknowledge different portions of site may be released for unrestricted use, restricted use with institutional controls, and portions likely to remain under license.	*	*	*	*	
	DOE EIS should identify and satisfactorily address applicable cleanup guidance for all relevant regulatory agencies; the preferred alternative needs to meet the applicable regulatory requirements for the WVDP.	*	*	*	*	/
	Identify DCGL for unrestricted and/or restricted release scenarios.	*	*	*	*	
ned and an	Follow Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) guidance, or some other statistically valid and technically defensible approach, for the demonstration of compliance during the final status survey.	*	*	*	*	
	Solicit stakeholder input on decommissioning and ability to meet site cleanup criteria.	*	*	*	*	1

Individual Agency Requirement/Expectation

Requirement/Expe	ctation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
ENVIRONMENTAL	PROTECTION AGENCY (EPA)					
consisten	for unrestricted release, to DCGLs developed with NRC guidance to meet 10 CFR 20 Subpart E CERCLA ² risk range.	X	:			1
DCGLs de	for restricted release with restrictions in place, to eveloped consistent with NRC guidance to meet 10 ubpart E will likely meet CERCLA ² risk range.	×				/
SDWA ap has prima	plies, and where applicable, must be met. State cy for determining compliance with SDWA.	+		+	Х	/
40 CFR61	(rad-NESHAP) applies and must be met.	Х		+	,	/
RCRA app complianc	olies, and State has primacy for determining e with RCRA.	+		Х		
NUCLEAR REGULA	TORY COMMISSION (NRC)					
Preferred will meet N	alternative for West Valley Decommissioning EIS IRC decommissioning criteria for West Valley.		Х			1

Individual Agency Requirement/Expectation

Requirement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
NRC's LTR is the criteria for the WVDP, reflecting the fact that the applicable decommissioning goal for the entire NRC-licensed site is compliance with the requirements of the LTR. The criteria of the LTR shall apply to decommissioning of: HLW tanks and other facilities in which HLW was stored; facilities used in solidification of waste; and any material and hardware used in connection with the WVDP.		X			•
The following criteria should be applied to incidental waste determinations: (1) the waste should be processed (or should be further processed) to remove key radionuclides to the maximum extent that is technically and economically practical; and (2) the waste should be managed so that safety requirements comparable to the performance objectives in 10 CFR Part 61 subpart C, are satisfied.		X			,
Calculated dose for incidental waste to be integrated with all other doses from remaining material at the NRC-licensed site.		×			1
Allow consideration of long-term or perpetual license or other approaches for parts of the site where cleanup to LTR is prohibitively expensive or technically impractical.		Х			/
LTR is decommissioning criteria for NDA.		Х		:	-

Individual Agency Requirement/Expectation

Requirement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
The decommissioning EIS will consider analysis of impacts beyond 1000 years.		Х			1
Coordinated approach with State in applying LTR criteria to NDA and SDA.		Х			1
LTR applies to termination of NRC license after the license is reactivated. NRC's intent is that any exemptions or alternative criteria authorized to meet provisions of WVDPA will also apply to termination of NRC license.	·	х			1
Site-specific analysis of impacts and costs in deciding on whether or not to exhume previous burials.	·	X (NDA)	X (SDA)		1
Allow consideration of exemptions for unique past burials on case-by-case basis.		X (NDA)	X (SDA)		1
₩ YORK STATE DEPARTMENT OF HEALTH (DOH)				-	
State regulates public drinking water supplies and sets Maximum Contaminant Levels (MCLs) for man-made beta and gamma emitters based on a 4 mrem/yr dose limit. Limit applies to community water systems, including any that might utilize waters from West Valley site.	+		+	X	

individual Agency Requirement/Expectation

Requ	uirement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
	RK STATE DEPARTMENT OF ENVIRONMENTAL VATION (NYSDEC)					
	Radiological					
	Groundwater and surface water standards are based on State drinking water standards and includes Sr-90 and H-3 concentrations and a 4 mrem/yr dose limit. NYSDEC considers that best usage for all Class GA (fresh) groundwater is as source of potable drinking water (Part 701.15).			. X		,
	TAGM-4003 Soil cleanup guidance of 10 mRem/year should be considered. Differences in modeling approaches generally make NYSDEC's 10 mRem/year equivalent to NRC's 25 mRem/year plus ALARA.			X		, 1
	Part 380					
-,5111	SDA must remain in compliance with 6 NYCRR Part 380.			X		/
	Parts 382 and 383					1

Individual Agency Requirement/Expectation

Requirement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
Any closure alternative for the SDA must make every reasonable effort to meet the Performance Objectives of 6 NYCRR Part 382.			х		1
Any option requiring a new LLRW disposal facility, or expansion of an existing facility, would have to comply with the performance and dose objectives of Parts 382 and 383.			х		1
NYSDEC expects that concentration averaging for the high-level radioactive waste tanks will conform to Part 382.80 (h)(2).	:		х		1
Any residual waste left in place would fall under Agreement State authority.		,	Х		1
Any LLRW facility considered for siting under the ECL, Title 3 Section 29, can not be considered for placement at West Valley.			×		- /
RCRA					
Operation, storage, closure and post-closure of RCRA Regulated Units must comply with all applicable NYCRR Part 370 series regulations.	+		х		1

Individual Agency Requirement/Expectation

Requirement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
3008(h) RCRA Consent Order					
A CMS, remedial activities and long-term monitoring and maintenance of Solid Waste Management Units (SWMUs) must comply with the Order and utilization of appropriate NYSDEC Technical Administration Guidance Memorandums, including TAGM-4046, "Contained-In" TAGM-3028, and other such pertinent documents including, but not limited to the NYS Groundwater standards 6 NYCRR Part 703, ASTM Risk-Based Corrective Action, USEPA Risk Assessment Guidance for Superfund utilizing the Integrated Risk Information System (IRIS) and Health Effects Assessment Summary Tables (HEAST), etc.	X		X	+	•
Interim Measures may be required if EPA/NYSDEC determines that they are necessary under the terms of the Order.	×		X		/
A public participation program shall include the RCRA components to be addressed in the EIS (CMS).	X		Х		/
Federal Facilities Compliance Act (FFCA)					

Individual Agency Requirement/Expectation

Requirement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
Maintain compliance with the FFCA requirements during closure activities.	+ ·		Х		/
CWA					1
All actions at the site are subject to State Pollutant Discharge Elimination System (SPDES) requirements under 6 NYCRR Part 750 - 758.	+		Х		1
Surface and Groundwater Standards 6 NYCRR Part 700-705.	+		Х		1
Cleanup complies with NYSDEC 208 planning objectives.			Х	-	1
Cleanup meets requirements for 401 certification under CWA.			Х	•	1
OTHER					
Air discharges subject to the CAA, including Title V.	+		Х		1
Endangered species laws under 6 NYCRR Part 182 must be complied with.		,	Х		1
Cleanup activities that would leave solid waste on the site must comply with 6 NYCRR Part 360.			×		/

Individual Agency Requirement/Expectation

Requirement/Expectation Agency	EPA	NRC	NYSDEC	NYSDOH	ADDRESS IN EIS
Cleanup meets NYSDEC requirements for closure of abandoned oil and gas wells under 6 NYCRR Part 555.			Х		1
Cleanup meets ECL Article 15 stream protection requirements.			Х		1
Cleanup complies with Storage Tank closure requirements under 6 NYCRR Part 613.	+		Х		1
Federal and State wetlands protection requirements (33 CFR Part 320 and 6 NYCRR Parts 608 and 663) must be met.	+		Х		1
Use of WNYNSC soils for caps and erosion controls on the WVDP have to comply with Mined lands regulations in 6 NYCRR Parts 420 - 425.			х		. 1

^{1.} Assumes issues (such as, modeling methods and assumptions) related to application of this dose limit are resolved.

^{2.} DOE Decommissioning EIS must demonstrate that DCGLs based on 10 CFR 20 Subpart E dose limits meet CERCLA risk range consistent with EPA Risk Assessment Guidance for Superfund.

Regional Administrator Talking Points West Valley Demonstration Project June 15, 2006 Meeting

The EPA Region 2 Office, virtually since its inception in 1970, has been involved with the West Valley Site.

- In the mid-1970s, when the caps over the shallow land burial area failed and trench water threatened to overflow out of the burial trenches we provided support to the State.
- In the late1970s, when the private company operating the reprocessing operation turned the site over to the State we supported the need for federal legislation which became the West Valley Demonstration Project Act (WVDP) of 1980 and brought the U.S. Department of Energy (DOE) onto the West Valley site to demonstrate it can solidify liquid high level radioactive waste (HLW).
- In the following decade, we supported DOE during its very successful vitrification of over 600,000 gallons of high level radioactive waste that was stored in two underground tanks. We did that as both a regulator and a Federal partner.
- In 2003 we worked together with the other Regulatory Agencies to put forward a compilation of cleanup criteria that will lead to the successful completion of the DOE's work under the WVDP Act. We joined with the Nuclear Regulatory Commission (NRC) and Department of Environmental Conservation (DEC) to be a Cooperating Agency with DOE and the New York State Energy Research & Development Agency (NYSERDA) to develop the Environmental Impact Statement (EIS) required to decommission this site.

Obviously, we are not casual observers but have a long-term interest in seeing the West Valley site reach a safe resolution. Three of my staff: Jeanette Eng, Michael DeBonis, and Paul Giardina, have been directly involved with West Valley since those early days in the mid 1970s.

The West Valley experience was a pioneering one in the atomic energy industry. It opened its doors to commercial disposal of low-level radioactive waste in 1963 and to commercial reprocessing of spent nuclear fuel in 1966. Lots of lessons were and can be learned from being first.

We had lots of comments on the multi-agency document, and we do believe the document provides invaluable information to help us think through "What would be a safe and equitable resolution for the West Valley site?" It is clear to us at EPA that we need a clear vision for a preferred alternative for the draft EIS. That vision is dictated by certain factors that appear inescapable.

- The only way to meet RCRA under the WVDP is clean closure on the North Plateau
- Leaving high-level radioactive waste on non-Federal lands just isn't a precedent that can be set here.
- The 1.5 million cubic meters of radioactive waste in the South Plateau will need to remain under long-term regulatory oversight.

The most important reason for this vision may be a non-regulatory one. Clean closure of the North Plateau is the only alternative that clearly is going to have the most political and public support from the Stakeholders involved in this matter.

My staff tells me that the biggest technical obstacle to clean closure on the north plateau is the four remaining high-level radioactive waste tanks and their highly radioactive waste residues. There are 243 high-level radioactive waste tanks containing over 80 million gallons of waste nationwide and yet the four at West Valley, containing less than 20 thousand gallons of residue, are the only ones not on Federal land. It is clear that in the spirit of the West Valley Demonstration Project Act, it is time for one more demonstration project, one that would demonstrate the feasibility and cost-effectiveness of high-level rad waste tank removal. My guess is that someday the technology we demonstrate might be useful at one of the remaining 239 tanks on Federal land.

As such, I have directed my staff to propose to you later today a joint Pilot Demonstration Tank Removal Project with our Federal stakeholders for the purpose of removing the four West Valley tanks within the next 10 years so that we can provide clean closure on the North Plateau and that the EIS reflect this as part of the preferred alternative.

I see benefits to both the Federal government and to New York State with this proposal. I see DOE able to complete its mission under the West Valley Demonstration Project Act without setting precedence for tank removal at the DOE sites. I see New York State able to close this chapter on pioneering fuel reprocessing and revert to being a steward of the West Valley site.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

MAR - 1 2007

Frank Marcinowski
Deputy Assistant Secretary for Regulatory Compliance
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

Dear Mr. Marcinowski:

Thank you and Bruce Diamond for taking the time on February 6, 2007 to speak with me and my colleagues about the West Valley site in New York. We understand from that conversation, and from the February 2 meeting between Environmental Protection Agency (EPA) Region 2 Regional Administrator Alan Steinberg and Department of Energy (DOE) Assistant Secretary James Rispoli, that the Core Team has suggested an additional alternative for inclusion in the Draft Environmental Impact Statement (DEIS) for the West Valley site. Identification of this new proposal as DOE's Preferred Alternative in the EIS process would satisfy our immediate concerns. This Alternative would include:

- removal of the Process Building, all structures (except the High Level Waste (HLW)
 Tank Farm), and contaminated soils on the North Plateau consistent with the NRC Policy
 Statement on West Valley for unrestricted release or release with restrictions to achieve
 25 mrem/year; and
- management of the HLW Tank Farm and the NRC-licensed Disposal Area (NDA), with periodic reviews (probably on a five-year cycle) to identify long-term solutions that are technically feasible and economically viable; the goal is to implement such long-term solution(s) when identified. (Like other Alternatives, this one would also include appropriate management of the New York State-licensed Disposal Area (SDA).)

Consistent with applicable environmental statutes and regulations (including NEPA) and availability of appropriations, the enhanced interim end state for the West Valley site will be achieved by implementing certain activities, which will begin promptly and prior to the completion of a Record of Decision (ROD), though these activities may not be completed before the ROD is completed. The objective of these activities will be to:

- reduce, to the maximum extent practicable, any remaining liquid in the HLW tanks;
- take actions to maintain and improve the continued containment of HLW tank residues without jeopardizing the viability of potential future long-term solutions;
- minimize the further spread of the Sr-90 groundwater contaminant plume;
- take interim corrective action, including but not limited to installation of a cap, to prevent water infiltration into the NDA; and

• facilitate removal of the Process Building and the soils beneath by relocating, as soon as practicable, the HLW canisters to an alternate location on the West Valley site or elsewhere.

We are encouraged by this approach and anticipate that this path forward will provide a protective, long-term solution for West Valley. We look forward to working with you through the Core Team process to further develop this Alternative, and encourage all involved agencies to do likewise.

Sincerely,

Walter Mugdan, Director

Division of Environmental Planning & Protection



Department of Energy

Washington, DC 20585

MAY 0 8 2007

Mr. Walter Mugdan
Director, Division of Environmental
Planning & Protection
United States Environmental
Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

DIV. ENV. PLNG. & PROT.

Dear Mr. Mugdan:

Thank you for your letter dated March 1, 2007, expressing your support for the Core Team proposal which the Department of Energy (DOE) intends to identify as the Preferred Alternative in the Draft Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center (DEIS). This letter clarifies and supersedes the response I provided on April 17, 2007.

As all parties agreed at the Interagency Meeting on March 7, 2007, the Core Team will concentrate on the particulars within this proposal over the next several months and report back to the participants at the next Interagency Meeting in July 2007. Generally, however, the Preferred Alternative in the DEIS will include:

- removal of the Process Building, all structures (except the Waste Tank Farm
 (WTF)), and contaminated soils on the North Plateau consistent with the Nuclear
 Regulatory Commission Decommissioning Criteria for the West Valley
 Demonstration Project at the West Valley Site, Final Policy Statement. DOE will
 strive to achieve unrestricted release or release with restrictions to achieve 25
 millirem/year; and
- management of the WTF and the NRC-Licensed Disposal Area (NDA), with periodic reviews (probably on a five-year cycle) to identify and implement longterm solution(s) that are technically feasible and economically viable (as with all Alternatives, this one would also include appropriate management of the New York State-licensed Disposal Area (SDA)).

Also, DOE will promptly initiate several near-term actions at the site, consistent with applicable environmental statutes and regulations (including the National Environmental Policy Act (NEPA)), and the availability of appropriations. Although the Core Team will address details, the objective of these activities will be:

- reducing, to the maximum extent practicable, any remaining liquid in the WTF tanks;
- taking actions to maintain and improve the continued containment of the WTF tank residues without jeopardizing the viability of potential future long-term solutions;
- minimizing the further spread of the Sr-90 contaminated groundwater plume;
- taking interim corrective actions, including but not limited to installing a cap, to prevent water infiltration into the NDA; and
- completing, as soon as practicable, an assessment of when, where and how to relocate the high level waste canisters to an alternate location on the West Valley site or elsewhere; relocation of the canisters is necessary to enable subsequent removal of the Process Building and the soils beneath as soon as practicable, assuming such removal is selected in a Record of Decision.

There are outstanding issues regarding financial responsibility for the above actions, and state and federal parties have scheduled a meeting in early April to explore means to resolve these differences. However, like you, we are encouraged by this approach and look forward to working with you in the Core Team process.

Sincerely,

Frank Marcinowski

Deputy Assistant Secretary for

Regulatory Compliance

Office of Environmental Management

WEST VALLEY REMARKS – AJS Tuesday, September 18, 2007

- Thank you Vice Admiral Konetzni and good afternoon everyone. Thank you all for joining us on what I think we can all describe as an historic occasion.
- The West Valley Demonstration Project site has a bit of history to it. Back in 1966 it was envisioned that this would be the place where spent nuclear fuel would be reprocessed, not by the government, but by a commercial venture. At the time, everyone involved believed that the reprocessing scheduled to take place here would reform the industry.
- Unfortunately, things didn't quite work out that way. Spent nuclear fuel was reprocessed for less than six years before the site operator decided that safety upgrades to the facility couldn't be made and closed their operation in 1976.
- When the decision was made a year later that nuclear fuel reprocessing would be discontinued for reasons of nuclear non-proliferation, this site went from a noble experiment to a predicament that required Federal government intervention.
- The Department of Energy (DOE) was given the responsibility for demonstrating that the high level radioactive waste left over from this facility could be made safe for disposal at a nuclear waste repository which was also to be designed and operated by the DOE.
- The people here at West Valley, both the DOE staff and its contractor, proved innovative by inventing a process for turning this type of high-level waste into glass logs, a process we call vitrification.
- 750,000 gallons of high-level waste have been processed and turned into 275 10 foot tall stainless steel canisters filled with radioactive glass. The canisters stand ready for repository disposal when the Yucca Mountain facility opens.

- Today, we are gathered to see some of the last of nearly 20,000 drums of radioactive waste resulting from that process leave the Drum Cell destined for off-site disposal.
- EPA has acted as a cooperating Agency with DOE and our State colleagues to come up with a plan that can ultimately lead to what we refer to as an environmentally acceptable "end state" for the West Valley site.
- That is why 15 months ago, after consulting with my technical staff, I recommended that we take the momentum from the successful vitrification and turn it toward a vision for the successful environmental cleanup of the site.
- As we see it, \$75-\$80-a- barrel crude oil prices and all of the other environmental and policy issues related to a nation that has too great a dependency on fossil fuels means that nuclear energy must continue to be in the mix as an energy source for the future.
- President Bush's Global Nuclear Energy Partnership is a key tool in balancing our nation's energy needs. We need to show that we can handle all the issues and legacies related to nuclear power in the past.
- The West Valley Demonstration Project afforded us the opportunity to show that we can handle the challenges of nuclear power. If we are to ask Americans to accept the nuclear alternative as a possibility for the future, we need to show that we can overcome or have overcome past problems and issues.
- So last year I called for the clean closure of North Plateau portion of the site where reprocessing operations had taken place. Since that time, there has been quite a bit of hard work done by the Federal and State Agencies involved. EPA, DOE, the U.S. Nuclear Regulatory Commission and our State colleagues at the Departments of Environmental Conservation, and Health, and the New York State Energy Research and Development Authority have worked toward that closure.
- Over the past 15 months my staff has briefed me on the progress made and I have personally sat down and met with the DOE and my colleague, Assistant Secretary James Rispoli. In this time the agencies have had to deal with a number of significant challenges.

- Not only is the Yucca Mountain repository unavailable for the high-level waste canisters, but we also don't have disposal capacity for some of the other wastes.
- There are legal issues that have not been resolved which govern what ultimately can and cannot be left on site.
- Managing the groundwater problems will take long term management on the order of a few hundred years. And of course, disposal budgets are not limitless.
- While it has been a challenge to get to this point, the good news is we do have a plan coming together what we're calling "The Way Ahead."
- The plan we are looking at today will address the environmental issues in the best possible way. It makes recommendations for what we can do in the short term to reach an enhanced interim end state as we continue to move forward prior to selecting an alternative for decommissioning West Valley.
- The Team's recommendations will accomplish this with a proposed preferred alternative that is a collaborative effort. And, of course, the draft Environmental Impact Statement will be subject to public comment.
- My colleagues here will fill you in on the details of the plan, however, I can tell you that it will provide for the clean closure of most of the site used for fuel reprocessing on the north plateau.
- What will remain at the site will be managed to minimize any impact on groundwater, subject to continual federal and state oversight until such time as a safe disposal alternative can be arranged.
- Two of the high-level waste tanks will be decontaminated completely with 14,000 curies of radioactivity shipped offsite, and all the tanks will be maintained in a dry state to prevent any groundwater contamination in the future.

- My vision for this site in June of 2006 was a way forward that would assure that as much of the waste on the West Valley site that could be removed would be removed in a time frame that was expeditious and yet safe.
- Like our other partners, we wanted a path forward that would ultimately lead to a place where the final state was environmentally acceptable and that along the way we could assure the public health and safety while we were getting there. I feel confident that we will be able to achieve that vision.
- At this point I'd like to turn the microphone over to Assistant Secretary James Rispoli. Jim....