

ENVIRONMENTAL COMPLIANCE SUMMARY

Compliance Program

The United States (U.S.) Department of Energy (DOE) is currently focusing on several goals at the West Valley Demonstration Project (WVDP or Project) to support completion of the requirements identified in the WVDP Act (Public Law 96-368).

Activities at the WVDP are regulated by various federal and state public, worker, and environmental protection laws. These laws are administered primarily by the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers (USACE), the New York State Department of Environmental Conservation (NYSDEC), and the New York State Department of Health (NYSDOH) through programs and regulatory requirements for permitting, reporting, inspecting, self-monitoring, and auditing.

The EPA, NYSDEC, and DOE have established standards for effluents that are intended to protect human health, safety, and the environment. The DOE applies to the EPA for permits to release limited amounts of radiological constituents to the air and

applies to NYSDEC for permits to release limited amounts of nonradiological constituents to the air and water, in concentrations determined to be safe for humans and the environment. In general, the permits describe release points, specify management and reporting requirements, list discharge limits on those pollutants likely to be present, and define the sampling and analysis regimen. Releases of radiological constituents in water are subject to the requirements in DOE Orders 450.1 (Environmental Protection Program) and 5400.5 (Radiation Protection of the Public and the Environment). A summary of permits is found in Table ECS-3. (See the compliance tables at the end of this chapter.) No releases above allowable permit or regulatory limits occurred in 2007.

Compliance Status

The following summary describes the WVDP's compliance status with applicable environmental statutes, DOE directives, executive orders, and state laws and regulations applicable to the Project activities.

**TABLE ECS-1
Compliance Status Summary for the WVDP in CY 2007**

<i>Citation</i>	<i>Environmental Statute, DOE Directive, Executive Order, Agreement</i>	<i>WVDP Compliance Status</i>
42 United States Code (USC) §2011 <i>et seq.</i>	The Atomic Energy Act (AEA) of 1954 was enacted to assure the proper management of source, special nuclear, and by-product materials. The AEA and the statutes that amended it delegate the control of nuclear energy primarily to the Department of Energy (DOE), the Nuclear Regulatory Commission (NRC), and the Environmental Protection Agency (EPA).	See discussions of the West Valley Demonstration Project (WVDP) Act and of DOE Orders 435.1, 450.1, and 5400.5.
Public Law 96-368	The WVDP ACT of 1980 authorized the DOE to carry out a high-level liquid nuclear waste demonstration project at the Western New York Nuclear Service Center (WNYNSC [the Center]) in West Valley, New York.	The DOE is focusing on goals that will lead to completion of responsibilities listed in the WVDP Act.

TABLE ECS-1 (*continued*)
Compliance Status Summary for the WVDP in CY 2007

Citation	Environmental Statute, DOE Directive, Executive Order, Agreement	WVDP Compliance Status
Cooperative Agreement between the DOE and the New York State Energy Research Development Authority (NYSERDA)	The Cooperative Agreement Between the DOE and NYSERDA on the WNYNSC established a cooperative framework for implementation of the Project, effective October 1980, as amended in September 1981.	The agreement arranged lease of the Project premises to the DOE in order to carry out responsibilities under the WVDP Act. The supplemental agreement defined special provisions for the preparation of a joint Environmental Impact Statement (EIS).
WVDP Memorandum of Understanding (MOU) between the DOE and the NRC	The 1981 MOU , mandated by the WVDP Act, established procedures for review and consultation by the NRC with respect to activities conducted at the WNYNSC by the DOE under the WVDP Act. The agreement encompassed development, design, construction, operation, and decontamination and decommissioning activities associated with the project as described in the WVDP Act.	The NRC was authorized through the WVDP Act to prescribe decommissioning criteria for the WVDP. In 2002, the NRC issued "Decommissioning Criteria for the WVDP (M-32) at the West Valley Site; Final Policy Statement" (67 FR 5003). The NRC visits the WVDP periodically to ensure that activities are performed in accordance with requirements of established programs.
DOE Order 231.1A	DOE O 231.1A, Environment, Safety, and Health Reporting , was issued to ensure timely collection, reporting, analysis, and dissemination of information on environment, safety, and health issues as required by law or regulations or as needed to ensure that the DOE and National Nuclear Security Administration are kept fully updated about events that could adversely affect the health and safety of the public or the workers, the environment, the intended purpose of DOE facilities, or the DOE's credibility.	This WVDP Annual Site Environmental Report (ASER) is prepared and submitted annually to DOE Headquarters, regulatory agencies, and interested stakeholders in compliance with DOE O 231.1A.
DOE Order 5400.5	DOE Order 5400.5, Radiation Protection of the Public and the Environment , established standards for DOE operations and DOE contractors to ensure that (1) operations are conducted to limit radiation exposure to members of the public pursuant to limits established in the Order, (2) potential exposures to members of the public are as low as reasonably achievable, (3) routine and nonroutine releases are monitored and dose to the public is addressed, and (4) the environment is protected from radioactive contamination to the extent practicable.	This ASER summarizes radiological estimates of dose to the public and the environment, and compares these values with release and dose standards established by this Order. In 2007, estimated doses from airborne and waterborne releases to the maximally exposed off-site individual (MEOSI) were 0.067% of the 100-mrem standard, and about 0.02% of natural background radiation. Refer to Chapter 3 "Dose Assessment" for further discussion.
DOE Order 435.1	DOE O 435.1, Radioactive Waste Management , was issued in 1999 to ensure that all DOE radioactive waste is managed in a manner that protects the public, the environment and workers, and complies with applicable state, federal and local laws and regulations. Under the Order, sites that manage radioactive waste are required to develop, document, implement, and maintain a site-wide radioactive waste management program which includes actions to minimize radioactive waste generation.	The WVDP maintains program documentation separately for each waste type. Management of high-level waste was conducted in accordance with the "WVDP Waste Acceptance Manual"; Transuranic (TRU) waste was managed in accordance with the "TRU Waste Management Program Plan"; low-level waste (LLW) was managed in accordance with the "LLW Management Program Plan"; and the radioactive component of mixed LLW was managed in accordance with the "Site Treatment Plan (STP) Fiscal Year 2007 Update".

TABLE ECS-1 (*continued*)
Compliance Status Summary for the WVDP in CY 2007

<i>Citation</i>	<i>Environmental Statute, DOE Directive, Executive Order, Agreement</i>	<i>WVDP Compliance Status</i>
DOE Order 450.1	DOE Order 450.1, Environmental Protection Program , issued in January 2003, required implementing an environmental management system (EMS) to conduct work at DOE sites to protect air, water, land, and other natural and cultural resources impacted by DOE operations. The DOE is required to conduct environmental effluent and surveillance monitoring to support the WVDP's Integrated Safety Management System (ISMS), to ensure early identification of, and appropriate response to, potential adverse environmental impacts associated with operations.	Since 1999, an EMS has been implemented via policies and procedures that provide an integrated site safety management program to accomplish work through proactive management, environmental stewardship, and integrating appropriate technologies across all Project functions. The EMS is an important part of the ISMS at the WVDP. During the annual ISMS review in September 2007, DOE concluded that ISMS mechanisms continued to be effective during contract transition to West Valley Environmental Services, LLC (WVES). Refer to Chapter 1 "Environmental Management System" for further discussion.
Title 10 Code of Federal Regulations (10 CFR) Part 830, Subpart A	10 CFR Part 830, Nuclear Safety Management, Subpart A, Quality Assurance Requirements provides the quality assurance (QA) program policies and requirements applicable to activities at the WVDP.	A QA program that provides a consistent system for collecting, assessing, and documenting data pertaining to radionuclides in the environment is implemented at the WVDP.
42 USC §4321 <i>et seq.</i>	The National Environmental Policy Act (NEPA) , of 1969 and as amended in 1970, established a national policy to ensure that protection of the environment is included in federal planning and decision-making. The President's Council on Environmental Quality established a screening system of analyses and documentation that requires each proposed action to be categorized according to the extent of its potential environmental impact.	DOE-WVDP has prepared various documents which describe potential environmental effects associated with proposed site activities. The level of documentation depends upon whether the action constitutes a major federal action affecting the quality of the human environment within the meaning of NEPA. Draft documents are then issued for public comment. Based on the analyses presented, and considering regulatory agency and public input, the DOE will determine the preferred alternative and issue a record of decision regarding the action. Refer to text later in this chapter for further discussion of NEPA activities.
Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 617 New York State (NYS) Environmental Conservation Law (ECL)	The NYS Environmental Quality Review (SEQR) Act , enacted in September 1976, requires adequate environmental review and assessment of whether a proposed action has the potential to have a significant environmental impact, prior to a decision regarding the action. Where a project involves both NYS and Federal approvals, it is preferred to coordinate the SEQR and NEPA processes.	The SEQR process is an action-forcing statute that requires state agencies to incorporate environmental considerations directly into their decision-making, and where necessary, to modify that action to mitigate adverse environmental effects. Although the NEPA Federal procedural statute requires documentation of the decision-making process, it does not require that environmental considerations be elevated above other factors. Efforts are being made at the WVDP to effectively coordinate information to utilize the Federal EIS process to make the required SEQR findings.
42 USC §6901 <i>et seq.</i> . NYS ECL	The Resource Conservation and Recovery Act (RCRA) of 1976 and the NYS Solid Waste Disposal Act (NYS ECL Article 27 [Title 9]) govern the generation, storage, handling, and disposal of hazardous wastes and closure of tank systems that handle these wastes. RCRA was enacted to ensure that hazardous wastes are managed in a way that protects human health, safety, and the environment.	Generation, storage, handling, and disposal of hazardous waste, and closure of tank systems that handle hazardous waste at the WVDP, are conducted in accordance with the RCRA Part A Permit Application. Refer later in this chapter for a detailed discussion of calendar year (CY) 2007 activities.

TABLE ECS-1 (*continued*)
Compliance Status Summary for the WVDP in CY 2007

<i>Citation</i>	<i>Environmental Statute, DOE Directive, Executive Order, Agreement</i>	<i>WVDP Compliance Status</i>
Amendment to 42 USC §6961	The Federal Facilities Compliance Act (FFCA) of 1992 (an amendment to RCRA) requires DOE facilities to prepare an STP for treating mixed waste inventories to meet land disposal restrictions and to update the plan (i.e., annually) to account for changes in mixed waste inventories, capacities, and treatment technologies. The DOE entered into a Consent Order with the New York State Department of Environmental Conservation (NYSDEC) for the WVDP in 1996.	The WVDP STP consists of two volumes, the background volume and the plan volume. The FFCA requires completing milestones identified in the plan volume. During fiscal year (FY) 2007, there were no milestones or proposed milestones for waste streams managed under the WVDP STP. There were no mixed waste shipments from the WVDP in FY 2007. The STP was revised in February 2008.
Docket No. II RCRA 3008(h) 92-0202	The DOE and NYSERDA entered into a RCRA §3008(h) Administrative Order on Consent (the Consent Order) with NYSDEC and the EPA in March 1992. The Consent Order pertains to management of hazardous waste and/or hazardous constituents from solid waste management units at the WNYNSC.	Written procedures and site activities are compliant with the Consent Order. In accordance with the Consent Order, quarterly reports are submitted to NYSDEC from DOE which summarize all RCRA §3008(h) activities conducted at the WVDP for the representative quarter. Refer later in this chapter for a detailed discussion of CY 2007 activities.
RCRA 3016 Statute	The RCRA 3016 Statute applies to all Federal hazardous waste facilities which are currently owned or operated by the government. It requires that facility hazardous waste information be submitted to the EPA and authorized states.	Contract # DE-AC30-07CC30000, Section J, Item 11 requires that WVDP facility hazardous waste activities be reported biennially to NYSDEC. This report was submitted in December 2007.
NYS Navigation Law and NYS ECL	NYS ECL Article 17 , (Titles 10 and 17) 6 NYCRR 612-614 and Parts 595-599, and 6 NYCRR Subpart 360-14 regulate design, operation, inspection, maintenance, and closure of aboveground and underground bulk petroleum and bulk chemical storage tanks. They also regulate spill reporting and cleanup. Under terms of a 1996 agreement, amended in 2005, the DOE is not required to report a spill of petroleum product onto an impervious surface if the spill is less than 5 gallons and is cleaned up within two hours of discovery.	The last chemical bulk storage tank at the WVDP was closed under these regulations in 2006. There remain 10 registered petroleum bulk storage tanks (nine aboveground and one underground) that are periodically inspected and maintained. Spills are reported and cleaned up in accordance with written policies and procedures. In 2007 there were no spills in excess of the reportable quantities.
Executive Order (E.O.) 13423	E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management , issued in January 2007, replaced several executive orders known as the Greening the Government Executive Orders (E.O. 13101 and E.O. 13148). The Order did not rescind any of the requirements found in the earlier orders, but updated previous goals and their baselines and added new initiatives. The Order set goals in areas of energy efficiency, renewable energy, acquisition, toxics reduction, recycling, sustainable buildings, electronics stewardship, and water conservation.	Waste minimization, pollution prevention, recycling, and affirmative procurement objectives are achieved in accordance with the WVDP "Waste Minimization/Pollution Prevention Awareness Plan." (See Tables ECS-6 and ECS-7.) The WVDP renewed the EPA National Environmental Performance Track Program membership in 2007, and has committed to four new goals to reduce the following; (1) total non-transportation energy by 5%, (2) liquid nitrogen use by 10%, (3) resins used for treatment of radiologically contaminated wastewater by 10%, and (4) sulfur oxide (SO _x) air emissions from non-transportation purposes by 10%. The goals are to meet or exceed these commitments by the end of 2009, compared with 2006 as the baseline.

TABLE ECS-1 (*continued*)
Compliance Status Summary for the WVDP in CY 2007

Citation	Environmental Statute, DOE Directive, Executive Order, Agreement	WVDP Compliance Status
42 USC §7401 et seq.; Title 40 of the Code of Federal Regulations (CFR) 61, Subpart H; 6 NYCR	The Clean Air Act of 1970 and the NYS ECL regulate the release of air pollutants through permits and air quality limits. Emissions of radionuclides are regulated by the EPA via the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations. Nonradiological emissions are permitted under 6 NYCRR Part 201-4 (Minor Facility Registrations).	During CY 2007, the DOE maintained six NESHAP permits for radiological emissions and one Air Facility Registration Certificate for nonradiological emissions at the WVDP. An annual NESHAP Report summarizing radiological emissions and estimating dose is submitted to the EPA. Estimated dose from radiological air emissions to the MEOSI in 2007 was 0.010% of the 10-millirem Subpart H standard. Refer to Chapter 3 "Dose Assessment" for discussion. Two utility steam boilers were responsible for nonradiological emissions of nitrogen oxides at 3.6% and sulfur oxides at 0.0013% of the capping limit for maintaining the registration certificate.
33 USC §1251 et seq. and NYS ECL	The Federal Water Pollution Control Act of 1977 (Clean Water Act [CWA]) and NYS ECL (Article 17 [Title 8]) seek to improve surface water quality by establishing standards and a system of permits. Wastewater and storm water discharges are regulated by NYSDEC permits through the State Pollutant Discharge Elimination System (SPDES). Discharges of fill material are regulated through permits issued by the U.S. Army Corps of Engineers (USACE) and water quality certifications issued by NYSDEC.	Monthly SPDES Discharge Monitoring Reports are submitted to NYSDEC. In 2007, no SPDES Permit exceedences were noted. Compliance with permit requirements was confirmed by a NYSDEC annual inspection that included facility walk downs of the NRC-Licensed Disposal Area, select storm water outfalls, the sewage treatment plant, and the Lagoon 3 discharge weir, along with operational discussions. No findings or concerns were indicated. SPDES-permitted storm water monitoring was successfully completed during 2007 by sampling the eight drainage basins during qualifying storm events. Refer to Chapter 2 "Environmental Monitoring" for further discussion.
E.O. 11990	E.O. 11990, Protection of Wetlands , directed federal agencies to avoid, where possible, impacts (e.g., destruction, modification, or new construction) that would adversely effect wetlands wherever there is a practical alternative. Activities in wetlands are regulated by the USACE and NYSDEC permits. The wetlands on the WVDP are subject to regulation under section 404 of the CWA.	Wetlands are periodically identified, delineated, and mapped on the WVDP. In 2006, the USACE performed a field assessment of a wetland delineation report and confirmed that 34.09 acres of wetlands, subject to federal jurisdiction, exist within and adjacent to the WVDP. A wetland complex of 17.3 acres is subject to NYSDEC jurisdiction. During 2006–2007, a re-delineation was done to determine if any portion of the Live-Fire Range (LFR) on the WNYNSC property fell within a 100-foot buffer of any adjacent wetlands and to locate a new storm water outfall in the basin area. Adjacent to the LFR, a new wetland of 0.09 acres was identified that is hydrologically connected to the NYSDEC jurisdictional wetlands.
42 USC §9601 et seq.	The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA , including the Superfund Amendments and Reauthorization Act of 1986 [SARA]) provided the regulatory framework for remediation of releases of hazardous substances and remediation of inactive hazardous waste disposal sites.	Based on the results of a Preliminary Assessment Report prepared for the DOE, it was determined that the WVDP did not qualify for listing on the national priorities list. Therefore, no further investigation pursuant to CERCLA was warranted. However, if a hazardous substance spill exceeds a reportable quantity, CERCLA reporting requirements may be triggered.

TABLE ECS-1 (*continued*)
Compliance Status Summary for the WVDP in CY 2007

<i>Citation</i>	<i>Environmental Statute, DOE Directive, Executive Order, Agreement</i>	<i>WVDP Compliance Status</i>
42 USC §11001 et seq.	The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (also known as SARA Title III) was designed to create a working partnership between industry, business, state and local government, and emergency response representatives to help local communities protect public health, safety, and the environment from chemical hazards.	Chemical inventories for the WVDP are reported quarterly under EPCRA as appropriate. There were no releases of hazardous substances in 2007 that triggered release notifications under EPCRA. No new chemicals exceeded their threshold planning quantities. Refer to Tables ECS-9 and ECS-10 at the end of this chapter.
42 USC §300f et seq.	The Safe Drinking Water Act (SDWA) of 1974 requires that each federal agency operating or maintaining a public water system must comply with all federal, state, and local requirements regarding safe drinking water. Compliance in New York State is verified by oversight of the New York State Department of Health (NYSDOH), through NYS Public Health law, and the Cattaraugus County Department of Health.	The WVDP drinking water plant is considered a Class "C" system. All CY 2007 results from analyses of drinking water were reported within limits to the Cattaraugus County Health Department (CCHD). The annual drinking water system inspection was performed by the CCHD on November 28, 2007, during which backflow prevention testing documentation and operator training certifications were reviewed. All results were satisfactory.
10 CFR 851	10 CFR 851 " Worker Safety and Health Program " of 2006 requires DOE contractors to provide their workers with a safe and healthful workplace. To accomplish this objective, the rule established program requirements specific to management responsibilities, worker rights, hazard identification and prevention, safety health standards, required training, recordkeeping, and reporting.	WVES personnel revised procedures and programs to establish requirements to comply with 10 CFR 851. Any proposed modification, addition, or deletion that may invalidate a portion of the worker health and safety program at the WVDP must be approved by DOE-WVDP.
15 USC §2601 et seq .	The Toxic Substances Control Act of 1976 regulates the manufacture, processing and distribution of chemicals, including asbestos-containing material (ACM) and polychlorinated biphenyls (PCBs). Effective September 2006, the New York State Department of Labor (NYSDOL) significantly revised the asbestos regulations, cited in 12 NYCR Part 56.	Due to regulation changes, operating procedures were revised, special training for asbestos workers was conducted, and the WVDP applied for and was granted site-specific variances. During 2007, all ACM activities were managed in accordance with the site "Asbestos Management Plan" and activities were completed by personnel certified by NYSDOL. Refer to Table ECS-5 for a summary of asbestos waste management activities. Management of PCBs was done in accordance with the WVDP "PCB and PCB-Contaminated Material Management Plan." The WVDP operators maintain an annual document log that details PCB use and changes in storage or disposal status.
7 USC §136 et seq.	The Federal Insecticide, Fungicide, and Rodenticide Act of 1996 and NYS ECL provided for EPA and NYSDEC control of pesticide distribution, sale, and use.	Chemical pesticides are applied at the WVDP only after alternative methods are evaluated by trained and NYSDEC-certified professionals and determined to be unfeasible. In 2007, approximately 450 pounds of a NYSDEC-registered biocide was added to the cooling water system. Control is necessary to minimize the potential for system damage due to algal buildup and the potential for worker exposure to waterborne pathogens such as <i>Legionella</i> .

TABLE ECS-1 (*continued*)
Compliance Status Summary for the WVDP in CY 2007

<i>Citation</i>	<i>Environmental Statute, DOE Directive, Executive Order, Agreement</i>	<i>WVDP Compliance Status</i>
NYS ECL, Article 15, Title 5, <i>et seq.</i>	NYS ECL , Article 15, Title 5, Protection of Water regulates the safety of dams and other surface water impounding structures, including construction, inspection, operation, maintenance and modification of these structures.	Two surface water impounding dam structures on the WNYNSC were inspected in July and August 2007. The routine inspections identified corrective maintenance activities that were completed prior to the end of CY 2007.
NYS Public Health Law	Public Health Law , Article 5 (Laboratories), Section 502 (Environmental Laboratories, Examinations, and Certifications of Approval)	The WVDP Environmental Laboratory (the URS Corporation Laboratory) is certified by NYSDOH for certain radiological and nonradiological constituents in potable and nonpotable water, as well as for asbestos in solids.
49 CFR Part 172, and 6 NYCRR Part 364.9	6 NYCRR Part 364.9 regulates handling and storage of potentially infectious regulated medical waste (RMW). 49 CFR Part 172, Subpart H regulates transportation safety and disposal of RMW at a licensed facility.	The on-site health services office is registered with NYS as a "Small Quantity Generator" of RMW. Medical services generate potentially infectious medical wastes that are securely stored in approved containers and periodically shipped off site. There were no RMW shipments in 2007. WVES does not currently maintain a contract with an approved RMW carrier.
16 USC §703 <i>et seq.</i>	The Migratory Bird Treaty Act of 1918 implemented various treaties and conventions between the U.S. and foreign countries for the protection of migratory birds. Under the Act, taking, killing, or possessing migratory birds is unlawful.	The DOE maintains, and complies with, a NYSDEC Division of Fish and Wildlife Bird Depredation License and a U.S. Fish and Wildlife Bird Depredation Permit for the WVDP.
16 USC §1531 <i>et seq.</i>	The Endangered Species Act of 1973 provided for the conservation of endangered and threatened species of fish, wildlife, and plants.	Several ecological surveys of the WNYNSC premises have been conducted. Except for "occasional transient individuals," no plant or animal species protected under the Endangered Species Act are known to exist at the Center.
16 USC §470	The National Historic Preservation Act of 1966 established a program for the preservation of historic properties throughout the nation.	Surveys have been conducted of the WNYNSC for historic and archaeological sites.
E.O. 11988	E.O. 11988, Floodplain Management , was issued to avoid adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.	No activities were performed during 2007 at the WVDP that would develop or be adversely impacted by the 100-year floodplain within the premises.
Stipulation Pursuant to NYS ECL Section 17-0303, and Section 176 of the Navigation Law	In accordance with Stipulation No. R9-4756-99-03 , dated March 1999, the DOE agreed to install a soil bioventing system to remediate petroleum contaminated soils in the warehouse underground tank site (NYSDEC Spill number 9708617). The remediation plan was to construct a bioventing system, operate it for two calendar years, assess performance, and report to NYSDEC.	The system stimulated natural in-situ biodegradation of petroleum hydrocarbons in the soil by providing abundant oxygen to existing microorganisms. After reviewing soil and water sampling, analyses, and evaluations, NYSDEC determined that no further remediation was required. Final disposition of this area is pending decision in the Decommissioning and/or Long-Term Stewardship Environmental Impact Statement (EIS) for the WVDP and the WNYNSC.

TABLE ECS-1 (*concluded*)
Compliance Status Summary for the WVDP in CY 2007

<i>Citation</i>	<i>Environmental Statute, DOE Directive, Executive Order, Agreement</i>	<i>WVDP Compliance Status</i>
6 NYCRR 360	NYS ECL Solid Waste Management Facility Regulations define requirements for closure of nonradioactive solid waste disposal facilities in a manner that protects the environment.	In 1986, an engineering closure plan was submitted to and approved by NYSDEC for the Construction and Demolition Debris Landfill (CDDL). The closure was performed in accordance with landfill closure regulatory requirements specified in the approved closure plan. The plan also requires post-closure perpetual maintenance and annual reporting in this ASER. The CDDL cover was inspected for integrity and bare areas and the culverts were inspected for erosion and silting. All areas were found intact and the cover was rolled and mowed during 2007.

2007 Project Highlights

The WVDP Transition. The first phase of the WVDP Act, the immobilization of the liquid high-level radioactive waste (HLW) in borosilicate glass through vitrification, is complete and the focus of WVDP operations has changed. On June 29, 2007, the DOE awarded a new four-year West Valley Demonstration Project Interim End-State Contract (Contract DE-AC30-07CC30000) for management operations at the WVDP to West Valley Environmental Services Company LLC (WVES). The contract with West Valley Nuclear Services Company (WVNSCO) was transitioned to WVES on September 1, 2007, and work continued without interruption. All permits, licenses, and agreements were transitioned to WVES as appropriate. The scope of the new contract includes waste disposition, decontamination, deactivation, disposition of facilities, and infrastructure/landlord activities.

Activities during 2007 included: shipping the remainder of the cemented waste from the drum cell; decontamination and demolition of four more unneeded facilities; processing and packaging of low-level radioactive waste (LLW) for off-site shipment and disposal; continued operation of the remote-handled waste facility; treatment of radioactively contaminated groundwater; and environmental monitoring.

National Environmental Policy Act (NEPA). Under NEPA, the DOE is required to consider the overall environmental effects of its proposed actions. Draft documents are prepared that describe potential environmental effects associated with proposed Project activities. The level of evaluation and documentation depends upon whether the action constitutes a

major federal action affecting the quality of the human environment within the meaning of NEPA. The categories of documentation include categorical exclusions (CXs), environmental assessments (EAs) and environmental impact statements (EISs).

CXs document actions that, by their nature, will not have a significant effect on the environment. EAs are used to evaluate the extent to which a proposed action, not categorically excluded, will affect the environment. Based on the analyses presented in an EA and considering regulatory agency, stakeholder, and public comment, the DOE may determine that the proposed action is not a major federal action significantly affecting the quality of the human environment within the meaning of NEPA. As a result, the DOE may issue a notice indicating the finding of no significant impact (FONSI) and therefore would not be required to prepare an EIS. If a proposed action has the potential for significant environmental effects, an EIS would be prepared that describes proposed alternatives to an action and explains the effects of each. Based on the analyses presented, and considering regulatory agency and public input, the DOE will determine the preferred alternative and issue a record of decision (ROD) regarding the action.

Since the Project began under the WVDP Act, a number of proposed site activities have warranted evaluations of overall environmental impact and preparations of draft EA and EIS documents to evaluate alternatives. Decisions resulting from the final EISs and associated RODs and EAs facilitate ongoing waste management and remediation activities at the Project. Those specific to activities at the WVDP are presented in Table ECS-2.

TABLE ECS-2
National Environmental Policy Act (NEPA) Documents Affecting DOE Activities at the WVDP

Year	Action	Outcome
1982	The final Environmental Impact Statement (EIS) and associated Record of Decision (ROD) were issued outlining the actions the United States (U.S.) Department of Energy (DOE) proposed for solidification of the liquid high-level waste (HLW) contained in the underground tanks (DOE-EIS-0081).	The first phase of the West Valley Demonstration Project (WVDP) Act, completed in September 2002, removed the HLW from the tanks and immobilized it into borosilicate glass through vitrification. The glass canisters remain on site in storage.
1988	The DOE published a Notice of Intent (NOI) with the New York State Energy Research and Development Authority (NYSERDA) to prepare the EIS for Completion of the WVDP and Closure or Long-Term Management of the Facilities at the Western New York Nuclear Service Center (WNYNSC).	
1996	The DOE and NYSERDA issued the "Draft EIS for the Completion of the WVDP and Closure or Long-Term Management of the Facilities at the WNYNSC" (DOE/EIS-0226-D).	The draft EIS was issued without a preferred alternative for a six-month review and comment period. After issuance of the draft EIS, and despite long negotiations, the DOE and NYSERDA were unable to reach an agreement on the future course of action for closure at the Center (see Government Accounting Office [GAO 2001]).
1997	Following issuance of the draft 1996 EIS, NYSERDA and the DOE formed a stakeholder advisory group (the West Valley Citizen Task Force [CTF]) to provide additional input to the public comment process required by NEPA.	The CTF mission is to provide stakeholder input to decision-making for development of a closure option for the WVDP and the WNYNSC. The mission has expanded to future site use, long-term stewardship, and regulatory issues.
1997	The DOE Headquarters issued the "Final Waste Management Programmatic EIS," (WM PEIS [DOE/EIS-0200F]) to evaluate nationwide management and siting alternatives for treatment, storage, and disposal of five types of radioactive and hazardous waste.	The EIS was issued with the intent to issue a separate ROD for each type of waste generated, stored, or buried over the next 20 years at 54 sites in the DOE complex.
1999	The DOE issued a ROD for nationwide management of HLW, Vol. 64, Federal Register (FR), p. 46661 (64 FR 46661)	The ROD specified that WVDP-vitrified HLW will remain in storage on site until it is accepted at a geologic repository.
2000	The DOE issued a ROD for nationwide management of low-level waste (LLW) and mixed LLW (65 FR 10061).	The Hanford site in Washington State and the Nevada Test Site were designated as national DOE disposal sites for LLW and mixed LLW.
2001	The DOE published an NOI (66 FR 16447) formally announcing its reslicing plan and preparation of the waste management EIS for the WVDP.	The reslicing plan split the scope of the 1996 WVDP Draft EIS into two phases: (1) near-term waste management decision-making and (2) final decommissioning and/or long-term stewardship decision-making.
2003	The DOE issued a notice of availability of the "WVDP Draft Waste Management EIS" (68 FR 26587).	The draft EIS presented alternatives for near-term management of WVDP LLW, mixed LLW, transuranic (TRU) waste, and HLW.
2003	The DOE, in cooperation with NYSERDA, issued an NOI (68 FR 12044) to issue an EIS for "Decontamination and/or Long-Term Stewardship at the WVDP and the WNYNSC."	As a result of comments in the scoping process and the complexity of issues relating to long-term agency responsibility, this EIS was put on hold (DOE-EIS-0226-R).
2005	The DOE issued a ROD, based on alternative A, for the "WVDP Waste Management EIS (WVDP WM EIS-0337)" (70 FR 35073).	As a result, the HLW canisters remain in storage on site until transfer to a geologic repository, the decision on TRU waste would be deferred until certification is obtained from the Waste Isolation Pilot Plant in Carlsbad New Mexico, and LLW and mixed LLW would be shipped off site according to the ROD for nationwide management of LLW and mixed LLW.
2006	Environmental Assessment (EA) DOE/EA-1552 and finding of no significant impact (FONSI).	The EA, with the associated FONSI, cleared the way for removal of 36 facilities that are (or in the next four years will be) no longer required to support activities at the WVDP.
2007	DOE issued an NOI to prepare an EIS for the disposal of Greater-Than-Class-C LLW Waste (72 FR 40135).	Nine scoping meetings were held and the scoping comment period ended in September 2007. The Draft EIS has not been issued.

The Draft EIS and the WVDP Core Team. The "EIS for the Decommissioning and/or Long-Term Stewardship at the WVDP and the WNYNSC," evaluating different scenarios for completing the DOE's mission at the Project, has been stalled for several years as involved agencies struggle with many of the difficult issues that the WVDP presents. As mentioned in Table ECS-2, in 2003 the DOE and the New York State Energy Research and Development Authority (NYSERDA) announced the intent to prepare the "EIS for the Decommissioning and/or Long-Term Stewardship at the WVDP and the WNYNSC." The DOE and NYSERDA are joint lead agencies on this EIS, and the EPA, Nuclear Regulatory Commission (NRC), and NYSDEC are cooperating agencies. As recently as September 2005, the DOE released a revised internal multi-agency pre-decisional draft. After agency reviews, a large number of comments on the pre-decisional draft were received. These comments addressed a wide range of technical issues and challenges.

In August 2006, in an effort to continue progress toward Project completion, the DOE-WVDP requested that the NRC, the EPA, NYSDOH, NYSDEC, and NYSERDA participate in a collaborative process (i.e., Core Team) to resolve technical issues and make recommendations associated with the draft Decommissioning and/or Long-Term Stewardship EIS. The WVDP Core Team was formed in November 2006. The Core Team approach is a formalized, consensus-based process in which those individuals with decision-making authority work together to reach agreement on key remediation decisions. Equally important, the Core Team worked to ensure that technical support staff were involved and communicating effectively throughout the decision-making process and that stakeholders were informed of the Core Team progress.

The Core Team meets regularly to evaluate site challenges and make recommendations to move the focus of the Project forward. In early 2008, the Core Team proposed a preferred alternative for the Draft Decommissioning EIS that would be implemented in two phases (phased decisionmaking).

Phase 1 would include removal of a number of the major facilities at the WVDP: relocation of the HLW canisters to a new facility to place them in a cost-effective configuration for future shipment, demolition of the main plant process building (MPPB), removal of the contaminated soil under the MPPB (i.e., the source area of the north plateau groundwater plume contamination), and the removal of the low-

level waste treatment facility and lagoons. Essentially, this would include all facilities not needed to maintain the waste tank farm, the remainder of the north plateau plume, the NRC-licensed disposal area (NDA), and general site maintenance and monitoring. Removal of areas of higher surface soil contamination would advance overall WVDP soil management. After completion of Phase 1 activities, the following facilities/areas/materials would remain: (1) the waste tank farm, (2) the NDA and the state-licensed disposal area (SDA), (3) HLW solidified in waste canisters, (4) the remaining portion of the contaminated north plateau groundwater plume, (5) areas of low-level surface contamination, and (6) waste without off-site disposal options.

A decommissioning decision (Phase 2) for the remaining facilities/areas would be made no later than 30 years after the Phase 1 ROD.

Integration of decisions and actions over time is challenging, but essential to progressing toward completion of the WVDP Act. The revised draft decommissioning EIS is scheduled to be released for cooperating agency review in late 2008, followed by a six-month public review and comment period.

Resource Conservation and Recovery Act (RCRA)

RCRA and its implementing regulations govern the life cycle of hazardous waste from "cradle-to-grave" and mandate that generators take responsibility for ensuring the proper treatment, storage, and ultimate disposal of their wastes.

The EPA is responsible for issuing guidelines and regulations for the proper management of solid and hazardous waste (including mixed [radioactive and hazardous] waste). In New York, the EPA has delegated the authority to issue permits and enforce these regulations to NYSDEC. In addition, the U.S. Department of Transportation is responsible for issuing guidelines and regulations for labeling, packaging, and spill reporting for hazardous and mixed wastes while in transit.

Hazardous Waste Permitting. A hazardous waste permit is required for facilities that treat or store large quantities of hazardous waste for more than 90 days or dispose of hazardous waste at the facility. In 1984, the DOE notified the EPA of hazardous waste activities at the WVDP and identified the DOE as a generator of hazardous waste.

RCRA Part A Permit Application. In 1990, to comply with Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 373-3, a RCRA Part A (i.e., Interim Status) Permit Application for the WVDP was filed with NYSDEC for storage and treatment of hazardous and mixed wastes. The WVDP has operated under interim status ever since. Facility operations are limited to those described in the RCRA Part A Permit Application and must comply with the interim status regulations; therefore, it must be revised prior to changes to the Project's waste management operations. The February 2007 update of the RCRA Part A Permit Application is currently under NYSDEC review.

In accordance with the RCRA Part A Permit, the DOE prepared closure plans for the hazardous waste management units at the WVDP. The closure plans were transmitted to NYSDEC in anticipation of closure activities, and are revised as appropriate to address NYSDEC comments or changes in activities. In 2006, the DOE initiated clean closure of two units. Activities included NYSDEC notification of the closure schedule, removal of the waste, and decontamination of the impacted areas. As specified in the interim waste storage facility (IWSF) closure plan, clean closure confirmation sampling and analysis were performed and results were evaluated for presentation in a closure certification report. Once NYSDEC approved the IWSF closure plan, the closure certification report was submitted and subsequently approved.

The closure plan was also submitted to NYSDEC for the lag storage building (LSB), and clean closure of the unit was performed under interim status. NYSDEC approval of the LSB closure plan is pending; once approved, the closure certification report will be submitted.

A third unit, the lag storage area (LSA) #1 (a unit that was not used for the management of hazardous or mixed waste) was also demolished. A correspondence was transmitted to NYSDEC that documented the waste management history of the unit and requested removal from the RCRA Part A Permit Application.

6 NYCRR Part 373-2 Permit Application. In 2003, NYSDEC made an official request for the submittal of a 6 NYCRR Part 373-2 Permit Application (i.e., Part B) for the WVDP. The complete 6 NYCRR Part 373-2 Permit Application was transmitted to NYSDEC in December 2004. This application included RCRA closure

plans for all interim status units that continued to be managed in accordance with 6 NYCRR Part 373-3 until a final determination by NYSDEC on this permit application is made and a 6 NYCRR Part 373-2 permit is issued.

RCRA §3008(h) Administrative Order on Consent. Section 3008(h) of RCRA authorizes the EPA to issue an order requiring corrective action to protect human health or the environment if there has been a release of hazardous waste or hazardous constituents to the environment from an interim status facility. The DOE and NYSERDA entered into a RCRA §3008(h) Administrative Order on Consent (the Consent Order) with NYSDEC and the EPA in March 1992.

- RCRA Facility Investigation (RFI)

The Consent Order required NYSERDA and the DOE's WVDP office to conduct RFIs (unit-specific environmental investigation) at solid waste management units (SWMUs) to determine if there had been a release or if there were a potential for release of RCRA-regulated hazardous constituents from SWMUs.

Because many SWMUs are contiguous, or so close together as to make their separate monitoring impractical, many SWMUs have been grouped into larger units, referred to as super SWMUs (SSWMUs). This terminology is unique to the WVDP, and is not an official regulatory term. Descriptions of the SSWMUs, with the associated constituent SWMUs, as well as the individual SWMUs, are presented in Table ECS-4. Figures A-8 and A-9 in Appendix A show the locations of the WVDP SSWMUs. The final RFI reports were submitted in 1997, completing the investigative activities associated with the Consent Order. No corrective actions were required at that time as a result of the RFIs.

Groundwater monitoring, as recommended in the RFI reports and approved by the EPA and NYSDEC, continued during 2007 in compliance with the requirements of the Consent Order. The groundwater monitoring results and the groundwater program at the WVDP are discussed in Chapter 4 "Groundwater Protection Program."

- Current Conditions Report

Pursuant to a request from NYSDEC, a report entitled "West Valley Demonstration Project Solid Waste Management Unit Assessment and Current

"Conditions Report" was submitted in November 2004. This report summarized the historic activities at individual SWMUs through the RFI activities and provided environmental monitoring data and information on site activities performed since the completion of the RFI reports.

- Corrective Measures Study (CMS)

After review of the Current Conditions Report, NYSDEC determined that CMSs pursuant to the Consent Order were required for six select SWMUs at the WVDP. Draft revisions to the "CMS Work Plan for Select SWMUs" were submitted to NYSDEC. Current revisions of the draft CMSs remain in review with the DOE.

- Interim Measures (IM)

NDA Cap - The NDA has been identified as an SWMU, regulated under the Consent Order. As result of the "CMS Work Plan for Select SWMUs" and in response to Core Team comments on the work plan, the DOE evaluated engineering controls to improve the integrity of the NDA cap. Pursuant to Section VI, paragraph 7 of the Consent Order, the DOE is implementing an IM to ensure a minimum four-foot-thick earthen cap, minimize the potential release of impacted groundwater from the NDA, and minimize water infiltration into the NDA until the final disposition of the NDA is determined and can be implemented. The activity included the installation of a geosynthetic cap over the NDA and a low-permeability subsurface groundwater cutoff wall (slurry wall) upgradient of the NDA. The proposed action falls within the scope and intent of the categorical exclusion for small-scale, short-term cleanup actions, described in 10 Code of Federal Regulations (CFR) §1021, Subpart D, Appendix B, CZ B6.1.

Soil test borings were completed in late 2007 to determine the till interface conditions around the NDA to support the slurry wall installation. Excavation for the slurry wall was completed on July 28, 2008. Completion of the field work and installation of the cap was accomplished in the 2008 construction season.

Storm Water Runoff at the NDA - To evaluate storm water discharges associated with construction activities for capping of the NDA and installation of the slurry wall, a supplement to the existing sitewide "Storm Water Pollution Prevention Plan" (SWPPP) was prepared. The plan's intent was to identify potential sources of pollution in storm

water runoff at the construction site, and to develop practices to limit potential impacts from runoff. Since this is an IM conducted under the Consent Order, NYSDEC determined that the SWPPP met the substantiative requirements of the SPDES general permit for storm water discharges from construction activities. Therefore, discharges of storm water from the construction activities were monitored and evaluated in accordance with the existing SPDES permit.

Refer to Chapter 4, "Groundwater Protection Program," for a discussion of groundwater in the vicinity of the NDA.

- Quarterly Reporting to NYSDEC

In accordance with the Consent Order, the DOE transmits a quarterly progress report to NYSDEC that summarizes all Consent Order activities conducted at the WVDP for the previous quarter. The summary includes progress and accomplishments, contacts with local community interest groups and regulatory agencies, changes to personnel, projected future work activities, and an inventory of mixed waste that was generated from decontamination activities during the reporting period.

Hazardous Waste Management. Under RCRA, hazardous wastes at the WVDP are managed in accordance with 6 NYCRR Parts 370–374 and 376. Hazardous and mixed waste activities are reported to NYSDEC annually in the WVDP's Annual Hazardous Waste Report, which specifies the quantities of waste generated, treated, and/or disposed of, and identifies the treatment, storage, and disposal facilities used. The Annual Hazardous Waste Report for 2007 was submitted to NYSDEC in February 2008.

Additional reports are submitted each year to document hazardous waste reduction efforts. Pursuant to Article 27, Section 0908 of New York State Environmental Conservation Law (ECL), an annual update of the WVDP's Hazardous Waste Reduction Plan must be submitted to NYSDEC. The updates are submitted in two forms which differ slightly in scope. The plan is updated biennially to reflect changes in the types and amounts of hazardous wastes generated at the WVDP. The biennial update to the Hazardous Waste Reduction Plan for CY 2006 was submitted to NYSDEC on June 20, 2007. Every other year, the Annual Status Report, essentially an abbreviated version of the biennial update, is submitted. The CY 2007 Annual Sta-

tus Report for the Hazardous Waste Reduction Program was submitted to NYSDEC on June 25, 2008.

Mixed Waste Management. Mixed waste was managed according to the WVDP "Site Treatment Plan." No mixed waste was shipped from the WVDP in 2007. (See Table ECS-5.)

Nonhazardous, Regulated Waste Management. Non-radioactive, nonhazardous material was shipped off site to solid waste management facilities in 2007. Certain components of this waste (lead-acid batteries and spent lamps [universal wastes]) were reclaimed or recycled at off-site, authorized reclamation and recycling facilities. Digested sludge from the site sanitary and industrial wastewater treatment facility was shipped to the Buffalo Sewer Authority for disposal. Sanitary treated wastewater is routinely sampled and discharged to Erdman Brook under the auspices of the WVDP's SPDES permit. Quantities of nonhazardous wastes handled in 2007 are summarized in Table ECS-5.

Waste Minimization and Pollution Prevention. Waste minimization and pollution prevention objectives are summarized under Executive Order 13423 in Table ECS-1. WVES submits an annual pollution prevention report to the DOE summarizing recycling and waste generation information. See Table ECS-6, "Pollution Prevention Progress for FY 2007;" Table ECS-7, "Affirmative Procurement Accomplishments for FY 2007;" and Chapter 1, Environmental Management System.

Accomplishments at the WVDP in 2007

As a result of decisions made under the WVDP Waste Management EIS, Class A, B, and C LLW and mixed LLW have a disposal path to off-site facilities. Therefore, waste management, characterization, packaging, and shipping activities continued in 2007. In addition, DOE/EA-1552 and the associated FONSI cleared the way for continued decontamination, demolition, and removal of more obsolete structures. The major accomplishments in 2007 were:

- Drum Cell Waste Shipped

By the end of October 2007, the remainder of the approximately 20,000 half-ton drums of cemented Class CLLW were removed from storage in the drum cell and shipped to the Nevada Test Site for disposal. The drum cell shipping campaign was expected to take 2.5 years when it began in mid-2006.

Instead, process improvements and efficiencies allowed the work to be completed more than one year ahead of schedule and nearly 50% below the original cost estimate.

- MPPB Decontamination, Decommissioning, and Waste Management

Decontamination work was completed in the fuel receiving and storage area pump pit. Other waste processing and shipping activities included removing stored waste for processing and shipping waste off site for disposal.

- South Plateau Hardstand Cleanup

A concerted effort was made to remove excess materials from the south plateau. Legacy waste was shipped for disposal, a leaded glass window was returned to the manufacturer, a used fiberglass oil tank was transferred to a local town for waste oil storage, and two used nonradioactive stainless-steel tanks were sent off site for recycling.

- Infrastructure Reduction

Four more structures, identified in DOE/EA-1552, were demolished and removed from the site. The test and storage building, maintenance shop, main 1 warehouse, and the schoolhouse were demolished and removed. Combined with the 11 structures removed in 2006, 15 of the 36 structures scheduled for removal in DOE/EA-1552 have been demolished.

Refer to Table ECS-5 for a breakdown of waste volumes (by classification) shipped for disposal in 2007.

Environmental Issues

Unplanned Releases. No unplanned releases of pollutants or hazardous substances, radiological or nonradiological, from the WVDP occurred in 2007.

Final Decision on Coalition Suit Over the WVDP EIS Process. On August 26, 2005, the Coalition on West Valley Nuclear Wastes (the Coalition [a citizens' group]) filed a complaint in the U.S. District Court, Western District of New York, against the DOE regarding the NEPA process at the WVDP.

In the complaint, the Coalition contended that the March 26, 2001 DOE announcement which revised

the EIS for completion of the WVDP Act violated NEPA and the Stipulation of Compromise Settlement between the DOE and the Coalition. It also requested that the DOE be ordered to complete the EIS process as outlined in 1988, requested a declaration that stated separating the EIS into two EISs violated NEPA, and sought a declaration that the DOE is not empowered to reclassify waste at the WVDP using the “waste incidental to reprocessing” determination process.

On September 28, 2007, the U.S. District Court, Western District of New York ruled to dismiss the complaint. Refer to Case 1:05-cv-00614-JTC, Document 41, filed September 28, 2007, for the ruling in its entirety.

Proposed Congressional Legislation. In mid-2005, proposed legislation addressing the long-term responsibility for the WVDP was introduced into the U.S. House of Representatives by Congressmen Kuhl, Boehlert, Reynolds, and Higgins, and a companion bill was introduced into the U.S. Senate by Senators Schumer and Clinton. The bill, entitled “West Valley Remediation Act of 2005,” included provisions for federal (DOE) takeover of the responsibility for the WVDP and the entire WNYNSC from the current owner, the state of New York. The legislation directed the DOE to complete and issue a draft of the site’s decommissioning and long-term stewardship EIS within two years of enactment of the law. The bill also included a provision for minimum funding levels and prohibited any new waste from being transported to West Valley.

In 2007, the bills were reintroduced in the U.S. Senate and House of Representatives as the “West Valley Remediation Act of 2007.” This legislation remains in committee in both houses of Congress.

NYSERDA Files Suit to Determine Federal Responsibilities at the West Valley Site. On December 11, 2006, the NYSERDA Board of Directors voted to authorize legal action against the DOE over issues related to ongoing cleanup responsibilities at the West Valley site. The legal complaint was filed in U.S. District Court in Buffalo on behalf of New York State against the federal government regarding the cleanup at West Valley. NYSERDA is a plaintiff in the lawsuit, along with the state of New York and NYSDEC. New York is suing the U.S. government to clarify federal responsibilities for the West Valley site.

Since the end of 2007, the litigation has been stayed pending the outcome of discussions between the parties regarding respective cleanup responsibilities.

Project Assessment Activities in 2007

Throughout CY 2007, assessments were conducted through the Integrated Assessment Program (IAP) at the WVDP. This program effectively complies with applicable DOE Directives, Regulations, Standards, and Integrated Safety Management System requirements. The IAP applies to all disciplines including, but not limited to, safety and health, operations, maintenance, environmental protection, quality, decontamination and decommissioning, HLW activities, emergency management, business processes, and management. During CY 2007, there were 57 formal surveillances, assessments, and audits performed. In addition, inspections, reviews, and oversight activities are routinely conducted to evaluate performance, reduce risk, and identify improvement opportunities.

The local DOE Project office and other agencies with responsibilities for the WVDP also independently reviewed various aspects of the environmental and waste management programs. At the conclusion of the reporting period, there were no outstanding issues that had not been satisfactorily addressed. Overall results reflected continuing, well-managed environmental programs at the WVDP.

TABLE ECS-3
WVDP Environmental Permits

Permit Name and Number	Agency/Permit Type	Description	2007 Changes	Status
West Valley Demonstration Project (WVDP) Resource Conservation and Recovery Act (RCRA) Part A Permit Application (EPA ID #NYD980779540)	NYSDEC/Hazardous Waste	Provides interim status under RCRA for treatment and storage of hazardous waste.	The DOE is currently operating under the June 2001 NYSDEC-approved RCRA Part A Permit Application.	No expiration date. A RCRA Part 373-2 Permit (i.e., Part B) Application was submitted for review and approval to NYSDEC on December 23, 2004.
Air Facility Registration Certificate (9-0422-00005/00099)	NYSDEC/Air Emissions	Certificate caps NO _x and SO _x emissions from 2 boilers.	None	No expiration date.
Slurry-fed ceramic melter (modification to WVDP-687-01) process building ventilation	EPA/NESHAP	Slurry-fed ceramic melter radionuclide emissions — main plant stack modified February 18, 1997.	On September 1, 2007, EPA was advised that WVES, LLC is the new operating contractor.	Permit approved February 18, 1997. No expiration date.
Vitrification Facility Heating, Ventilation, and Air-Conditioning System (no permit number)	EPA/NESHAP	Vitrification facility HVAC system for radionuclide emissions	On September 1, 2007, EPA was advised that WVES, LLC is the new operating contractor.	Permit approved February 18, 1997. No expiration date.
01-14 Building Ventilation System (WVDP-187-01)	EPA/NESHAP	Liquid waste treatment system ventilation of radionuclide emissions in the 01-14 building.	On September 1, 2007, EPA was advised that WVES, LLC is the new operating contractor.	Issued October 5, 1987. Modified May 25, 1989. No expiration date.
Contact Size-Reduction Facility (WVDP-287-01)	EPA/NESHAP	Contact size-reduction and decontamination facility radionuclide emissions	On September 1, 2007, EPA was advised that WVES, LLC is the new operating contractor.	Issued October 5, 1987. No expiration date.
Supernatant Treatment System/Permanent Ventilation System (WVDP-387-01)	EPA/NESHAP	Supernatant treatment system ventilation for radionuclide emissions	On September 1, 2007, EPA was advised that WVES, LLC is the new operating contractor.	Modified January 1, 1997. No expiration date.
Outdoor Ventilated Enclosures (WVDP-587-01)	EPA/NESHAP	Fifteen portable ventilation units for removal of radionuclides.	EPA granted approval to expand usage of PVUs from 10 to 15. The DOE will track usage on the basis of annual cumulative estimated dose.	Issued December 22, 1987. Permit modification issued on December 10, 2007.

Note: Permit and license expiration dates are current as of November 2008.

TABLE ECS-3 (*concluded*)
WVDP Environmental Permits

Permit Name and Number	Agency/Permit Type	Description	2007 Changes	Status
State Pollutant Discharge Elimination System (NY0000973)	NYSDEC/Water	Regulates discharges to surface waters from various on-site sources.	An amended permit went into effect on September 1, 2006. NYSDEC was advised that WVES is the new WVDP operator.	Permit expires February 1, 2009. A SPDES permit application modification was submitted to NYSDEC in July 2008.
NYSDOH Environmental Laboratory Approval Program (ELAP) Certification to URS Corporation, Lab ID #10474	NYSDOH/ environmental laboratory certification	Certification of the Environmental Laboratory for the analysis of potable and nonpotable water samples for specific radiological and nonradiological constituents and for asbestos in friable material.	Certification was transferred from WVNSCO to URS Corporation in April 2006. The certificate was revised throughout the year as new constituents were added. Certification was renewed on April 1, 2008.	Certification expires April 1, 2009.
Buffalo Pollutant Discharge Elimination System (08-05-TR096)	Buffalo Sewer Authority/ sanitary sewage and sewage sludge disposal	Permit issued to hauler of waste from the wastewater treatment facility.	Hauler renewed permit in August 2008.	Permit expires June 30, 2009
Chemical Bulk Storage (CBS) (#9-000158)	NYSDEC/ regulated chemical bulk storage tanks	Registration of bulk storage tanks used for listed hazardous chemicals.	As of May 2006, the WVDP no longer has tanks regulated under chemical bulk storage regulations (6 NYCRR Parts 595–599).	If regulated CBS tanks are added, WVES will include the existing CBS Registration when submitting the application.
Petroleum Bulk Storage (#9-008885)	NYSDEC/ petroleum bulk storage tank	Registration of bulk storage tanks used for petroleum.	License was renewed on August 18, 2006.	License expires September 2, 2011.
Asbestos-Handling License WVNSCO # 99-0427 WVES # 33657	NYSDOL/ Asbestos handling and sampling activities	WVES maintains the asbestos-handling license and specific variances for asbestos handling and monitoring.	License was transferred from WVNSCO to WVES and renewed in September 2008.	License expires on September 30, 2009; each variance has a unique expiration date.
Bird Depredation License (32)	NYSDEC/ Division of Fish and Wildlife	State license for the removal of nests of migratory birds.	License was renewed on June 30, 2007.	License was applied for and awaiting issuance.
Bird Depredation Permit (MB747595-0)	U.S. Fish and Wildlife Service	Federal permit for the limited taking of migratory birds and active bird nests.	Permit was renewed on October 8, 2008.	Permit expires September 30, 2009.

Note: Permit and license expiration dates are current as of November 2008.

TABLE ECS-4
Solid Waste Management Units at the WVDP

<i>WVDP RCRA SSWMUs and Constituent SWMUs Identified in the RFI</i>		
SSWMU	SWMU #	Constituent SWMUs
SSWMU #1 – Low-Level Waste Treatment Facilities (LLWTF)	3, 4, 17, 17a, and 17b	Former Lagoon 1 LLWTF and LLWTF Lagoons 2, 3, 4, and 5 Neutralization pit and interceptors
SSWMU #2 – Miscellaneous Small Units	5, 6, 7, and 10	Deminerilizer sludge ponds, and solvent dike Effluent mixing basin Waste paper incinerator
SSWMU #3 – Liquid Waste Treatment System (LWTS)	18, 22, and 18a - Sealed Rooms	LWTS Cement Solidification System Sealed Rooms in the Main Plant Process Building
SSWMU #4 – High-Level Waste (HLW) Storage and Processing Area	12/12a, 13, 19, and 20	HLW Vitrification Facility and HLW Tank Farm Vitrification Test Facility waste storage areas Supernatant Treatment System
SSWMU #5 – Maintenance Shop Leach Field	8	Maintenance Shop Leach Field
SSWMU #6 – Low-Level Waste Storage Area	9/9a, 15, and 16/16a	Lag Storage (LSA #1 [old] and #2 [new] Hardstands) Lag Storage Building, Lag Storage extension and Lag Storage Addition (LSA #3 and #4)
SSWMU #7 – Chemical Process Cell (CPC) Waste Storage Area	14	CPC Waste Storage Area
SSWMU #8 – Construction and Demolition Debris Landfill (CDDL)	1	Construction and Demolition Debris Landfill
SSWMU #9 – NRC-Licensed Disposal Area (NDA)	2, 11/11a, 23, and 39	NDA Kerosene tanks and NDA container storage area Trench interceptor project and staging area for NDA
SSWMU #10 – Integrated Radwaste Treatment System (IRTS)	21	IRTS Drum Cell
SSWMU #11 – New York State Licensed Disposal Area (SDA)	NA	The SDA is a closed radioactive waste landfill that is contiguous with the Project premises and is owned and managed by the New York State Energy Research and Development Authority (NYSERDA). For more information, see the NYSERDA website at www.nyserda.org .
SSWMU #12 – Hazardous Waste Storage Lockers	24	Hazardous waste storage lockers 1 to 4

TABLE ECS-4 (*concluded*)
Solid Waste Management Units at the WVDP

WVDP RCRA Individual SWMUs Not Associated with an SSWMU		
Individual SWMUS	25	Inactive scrap metal landfill adjacent to bulk storage warehouse
	26	Subcontractor maintenance area
	27	Fire brigade training area
	28	Vitrification hardstand
	29	Industrial waste storage area
	30	Cold hardstand area near the CDDL
	31	NDA trench soil container area
	32	Old sewage treatment facility
	33	Existing sewage treatment facility
	34	Storage locations for well purge water
	35	Construction and demolition area
	36	Old school house septic system
	37	Contact size-reduction facility
	38	Drum super compactor
	39	Staging area for the NDA
	40	Satellite Accumulation Areas and 90-day storage areas
	41	Designated roadways
	42	Product storage area
	43	Warehouse extension staging area
	44	Fuel receiving and storage area; high-intensity container and SUREPAK™ staging area
	45	Breach in laundry wastewater line
	46	Vitrification vault and empty container hardstand
	47	Remote-handled waste facility

TABLE ECS-5
Summary of Waste Management Activities at the WVDP in CY 2007

<i>Waste Description</i>	<i>Type of Project</i>	<i>2007 Weight or Volume</i>	<i>Discussion</i>
LLW	Legacy waste disposition	109 thousand ft ³ (3.09 thousand m ³)	Waste processed, packaged, and shipped
Drum cell waste	Waste shipping	241.5 thousand ft ³ (6.8 thousand m ³)	Waste shipped
Mixed low-level waste	Waste management according to the Site Treatment Plan	None shipped	No mixed waste was shipped during 2007
Radiological wastewater from the low-level liquid waste treatment facility (LLW2 [WNSP001])	NYSDEC regulates point-source liquid effluent discharges of treated process and sanitary wastewater through the State Pollutant Discharge Elimination System (SPDES) Permit for the WVDP.	About 10.8 million gallons (40.7 million liters)	During 2007, six batches of wastewater were processed through the LLW2. There were no effluent limit exceptions to the requirements in the DOE's SPDES permit.
Treated sewage and industrial wastewaters (WNSP007)	Wastewater processing, discharge	3.1 million gallons (11.7 million liters)	The wastewater treatment facility (WWTF) treated sanitary wastewaters that were discharged through WNSP007.
North plateau groundwater recovery system (NPGRS)	Pump and treat strontium-90 (Sr-90) contaminated groundwater	3.02 million gallons (11.5 million liters)	The NPGRS operated to recover groundwater from an area near the leading edge of the Sr-90 plume on the north plateau. Water was treated by ion exchange to remove Sr-90, then transferred to the LLW2.
NRC-licensed disposal area groundwater interceptor trench (WNNDATR)	Interceptor trench and groundwater pre-treatment	390 thousand gallons (1.48 million liters)	Groundwater was pumped and transferred to the LLW2. No n-dodecane or tributyl phosphate were encountered in 2007, therefore, no pre-treatment was necessary.
Sanitary and industrial	Cleanup-stabilization	1,389 tons (1,260 metric tons)	Debris around the site disposed as trash.
Digested sanitary sludge	Waste shipping and disposal	162 tons (147 metric tons)	Digested sludge from the WWTF was shipped to the Buffalo Sewer Authority for disposal.
Asbestos	Asbestos management and abatement	36 linear feet of pipe insulation, 14 linear feet of fire proofing, and 150 square feet of non-friable heat shields.	Removal of the asbestos supported demolitions of the test and storage building, the maintenance shop, and the main warehouse.

TABLE ECS-6
Pollution Prevention Progress for FY 2007

<i>Recycled Materials</i>	<i>2007 Quantity (tons/metric tons)</i>
Office and mixed paper	26.6 tons (24.2 metric tons)
Corrugated cardboard	16.9 tons (15.4 metric tons)
Stainless steel	43.1 tons (39.2 metric tons)
Copper	1.9 tons (1.77 metric tons)
Iron	383 tons (348 metric tons)
Aluminum cans	0.20 tons (0.18 metric tons)
Precious metals (platinum)	1.69 lbs (0.768 kg)
Engine oils	1.29 tons (1.17 metric tons)
Toner cartridges	0.60 tons (0.54 metric tons)
Batteries	2.82 tons (2.57 metric tons)
Concrete	471 tons (429 metric tons)
Fluorescent bulbs	0.70 tons (0.64 metric tons)
Plastic	0.65 tons (0.60 metric tons)
Styrofoam	0.010 tons (0.009 metric tons)
Wood	1.47 tons (1.34 metric tons)
Electronics	4 desktop computers, 55 monitors and 6 laptops

TABLE ECS-7
Affirmative Procurement Accomplishments for FY 2007

<i>Environmentally Preferable Products</i>	<i>Amount Purchased</i>
Plastic envelopes	\$1,048.00
Plastic trash bags	\$54,432.65
Printer ribbons	\$1,287.26
Toner cartridges	\$7,799.86
Sanitary tissue products	\$20,747.35
Paperboard and packaging products	\$512.00
Uncoated printing papers	\$24,588.52
Re-refined lubricating oil	\$237.15

TABLE ECS-8
WVDP 2007 Air Quality Noncompliance Episodes

<i>Permit Type</i>	<i>Facility</i>	<i>Parameter</i>	<i>Date(s) Exceeded</i>	<i>Description/Solutions</i>
EPA NESHAP	All	All	None	None
NYSDEC Air	All	All	None	None

Note: There were no episodes of noncompliance in 2007.

TABLE ECS-9
Status of EPCRA (SARA Title III) Reporting at the WVDP in 2007

<i>EPCRA Section</i>	<i>Description of Reporting</i>	<i>Status</i>
EPCRA 302–303	Planning Notification	Not Required
EPCRA 304	Extremely Hazardous Substance Release Notification	Not Required
EPCRA 311	Material Safety Data Sheet	Not Required
EPCRA 312	Chemical Inventory	Required
EPCRA 313	Toxic Release Inventory Reporting	Not Required

^a “Required” indicates that the site reported under the provision.

“Not Required” indicates that the site was not required to report under the provision.

TABLE ECS-10
**Reportable Chemicals Above EPCRA 312 Threshold Planning Quantities
Stored at the WVDP in 2007**

Hydrogen peroxide solution (35%)	Portland cement	Ion-exchange media
Liquid nitrogen ^a	Diesel fuel #2	Sodium hydroxide
Oils - various grades	Gasoline	Sulfuric acid

^a The liquid nitrogen tank was emptied in August 2007.

TABLE ECS-11
WVDP 2007 NPDES/SPDES^a Permit Noncompliance Episodes

<i>Permit Type</i>	<i>Outfall(s)</i>	<i>Parameter</i>	<i>No. of Permit Exceptions</i>	<i>No. of Samples Taken</i>	<i>No. of Compliant Samples</i>	<i>Percent Compliant Samples</i>
SPDES	All	All	0	1,531	1,531	100%

^a Radionuclides are not regulated under the site’s SPDES permit. However, special requirements in the permit specify that the concentration of radionuclides in the discharge is subject to requirements of DOE Order 5400.5.

TABLE ECS-12
WVDP Migratory Bird Nest Depredation Episodes in 2007

Permit/License Type	Parameter	Permit/License Limit	Total Removed in 2007
U.S. Fish and Wildlife - Bird Depredation Permit	Removal of Active Barn Swallow Nests	15	5
U.S. Fish and Wildlife - Bird Depredation Permit	Removal of Active American Robin Nests	15	1
U.S. Fish and Wildlife - Bird Depredation Permit	Removal of Active Eastern Phoebe Nests	5	0
U.S. Fish and Wildlife - Bird Depredation Permit	Removal of Active Canada Goose Nests	5	0
NYSDEC - Bird Depredation License	Removal of Inactive Migratory Bird Nests	Not limited	6