

## 3.0 COMPLIANCE SUMMARY

Environmental compliance activities at the Nevada Test Site (NTS) during calendar year (CY) 1999 involved the permitting and monitoring requirements of numerous state of Nevada and federal regulations. Primary activities included the following: (1) National Environmental Policy Act (NEPA) documentation preparation; (2) Clean Air Act (CAA) compliance for asbestos renovation projects, radionuclide emissions, and state air quality permits; (3) Clean Water Act (CWA) compliance involving state wastewater permits; (4) Safe Drinking Water Act (SDWA) compliance involving monitoring of drinking water distribution systems; (5) Resource Conservation and Recovery Act (RCRA) management of hazardous wastes; (6) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) reporting; (7) Toxic Substances Control Act (TSCA) management of polychlorinated biphenyls; (8) Endangered Species Act (ESA) compliance involving the conduct of pre-construction and site-wide surveys to document the status of state and federally listed endangered or threatened plant and animal species; and (9) National Historic Preservation Act (NHPA) compliance for the protection of Cultural and Native American Resources. There were no activities requiring compliance with Executive Orders (EOs) on Flood Plain Management or Protection of Wetlands.

Throughout 1999 the NTS was subject to several formal compliance agreements with various regulatory agencies. Agreements with Nevada include a Memorandum of Understanding covering releases of radioactivity; a Federal Facilities Agreement and Consent Order (FFACO), an Agreement in Principle covering environment, safety, and health activities; a Settlement Agreement to manage mixed transuranic (TRU) waste; and a Mutual Consent Agreement on management of mixed land disposal restriction (LDR) wastes, among others. Emphasis on pollution prevention and waste minimization at the NTS continued in 1999.

Compliance activities at non-NTS facilities of DOE Nevada Operations Office (DOE/NV) involved the permitting and monitoring requirements of (1) the CAA for airborne emissions, (2) the CWA for wastewater discharges, (3) SDWA regulations, (4) RCRA disposal of hazardous wastes, and (5) hazardous substance reporting. Pollution prevention and waste minimization efforts continued at all locations.

### 3.1 COMPLIANCE STATUS

#### NATIONAL ENVIRONMENTAL POLICY ACT

**R**ulings by the Council on Environmental Quality, "Regulations of the National Environmental Policy Act" [40 Code of Federal Regulations (CFR) 1500 - 1508] require federal agencies to consider environmental effects and values

and reasonable alternatives before making a decision to implement any major federal action that may have a significant impact on the human environment.

Since November 1994, DOE/NV has had full delegation of authority from DOE Headquarters (DOE/HQ) for Categorical Exclusion Determinations (CXs), Environmental Assessments (EAs), issuing Findings of No Significant Impact, and floodplain and wetland action documentation related to DOE/NV proposed actions.

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DOE uses three levels of documentation to demonstrate compliance with NEPA: (1) an Environmental Impact Statement (EIS) is a full disclosure of the potential environmental effects of proposed actions and the reasonable alternatives to those actions; (2) an EA is a concise discussion of a proposed action and alternatives and the potential environmental effects to determine if an EIS is necessary; and (3) a Categorical Exclusion (CX) is used for classes of action which have been found to have no adverse environmental impacts, based on similar previous activities. DOE/NV activities involved only CXs and EAs during 1999.

Completion of a NEPA Environmental Evaluation Checklist is required under the DOE/NV Work Acceptance Process Procedural Instructions (DOE 1997a) for all proposed projects or activities. The Checklist is reviewed by the DOE/NV NEPA Compliance Officer to determine whether the project or activity is included in the NTS/EIS and record of decision (ROD) or other previously completed NEPA analysis. During calendar year (CY) 1999, checklists were completed for 60 proposed projects or activities at the NTS. Nineteen of these 60 were exempted from further NEPA analyses by being a CX; 37 were exempted due to previous analysis in the NTS/EIS and ROD; four were exempted due to previous NEPA analysis and determinations in EA's; and three were exempted based on previous NEPA determinations. The EA for Intermodal Transportation of Low-Level Radioactive Waste to the NTS was canceled on May 6, 1999. The Nellis Air Force Range (NAFR) EIS, in which DOE/NV was a cooperating agency, was completed, and on October 5, 1999, Congress renewed withdrawal of the NAFR for another 20 years.

Still pending are the following documents developed by or with DOE/NV involvement:

- Kistler Aerospace Corporation in Areas 18 and 19 EA.
- Withdrawal of public lands for range safety and training purposes at the Naval Air Station in Fallon, Nevada EIS.

- Desert Rock Sky Park in Area 22, EA. Throughout CY 1999, the staff of the DOE Environment, Safety, and Health Division (ESHD) continued to maintain and update the NEPA Compliance Guide (Volume III), a quick reference handbook containing procedures, formats, and guidelines for those personnel responsible for NEPA compliance activities. The staff of the DOE ESHD prepared Volume III to supplement the NEPA Compliance Guides, Volumes I and II, prepared and distributed by the Office of NEPA Policy and Assistance, DOE/HQ.

## **CLEAN AIR ACT (CAA)**

The CAA and the state of Nevada air quality control compliance activities were limited to asbestos abatement, radionuclide monitoring, reporting under the National Emission Standards for Hazardous Air Pollutants (NESHAP), and air quality permit compliance requirements. There were no criteria pollutant or prevention of significant deterioration monitoring requirements for NTS operations.

## **NTS NESHAP ASBESTOS COMPLIANCE**

The state Division of Occupational Safety and Health regulations (Nevada Administrative Code [NAC] 618.850, 1989) requires that all asbestos abatement projects in Nevada, involving friable asbestos in quantities greater than or equal to three linear feet or three square feet, submit a Notification Form. Notifications are also required to be made to the U.S. Environmental Protection Agency (EPA) Region 9 for projects which disturb greater than 260 linear ft or 160 ft<sup>2</sup> of asbestos-containing material, in accordance with Title 40 Code of Federal Regulations 61.145-146 (CFR 1989).

During 1999, there were no projects that required state of Nevada notifications be made. The annual estimate for non-scheduled asbestos demolition/renovation for FY 2000 was sent to EPA Region 9 on December 23, 1998.

## RADIOACTIVE EMISSIONS ON THE NTS

NTS operations were conducted in compliance with the NESHAP radioactive air emission standards of Title 40 CFR 61, Subpart H. In compliance with those requirements, a report on airborne radioactive effluents is provided to DOE/HQ and to EPA's Region 9.

There are two locations on the NTS where airborne radioactive effluents may be emitted from permanent stacks: (1) the tunnels in Rainier Mesa, and (2) the analytical laboratory hoods in the community of Mercury. Based on the amount of radioactivity handled, the exhaust from the analytical laboratories is considered negligible compared to other sources on the NTS and the tunnels have been sealed (although water still seeps from one). Present sources are evaporation of tritiated water (HTO) from containment ponds, diffusion of HTO vapor from the Area 5 Radioactive Waste Management Site (RWMS-5), the SEDAN test in Area 10, the SCHOONER test in Area 20, and resuspension of plutonium contaminated soil from nuclear device safety test and atmospheric test locations.

In the 1999 NTS NESHAP report for airborne radioactive effluents (Grossman 2000), airborne emission of HTO vapor from the containment ponds was conservatively reported as if all the liquid discharge into the ponds had evaporated and become airborne. For HTO vapor diffusing from the RWMS-5, SEDAN, and SCHOONER, plutonium particulate resuspension from Areas 3 and 9, and various other areas on and near the NTS, the airborne effluents were conservatively estimated as follows. For those HTO sources with nearby monitoring stations, the station with the maximum annual average concentration of HTO was selected from among the surrounding sampling stations. An effective dose equivalent (EDE) was then calculated

for that concentration. EPA's Clean Air Package 1988 (CAP88-PC [DOE 1997c]) software program was used to determine what total emission from the geometric center of the region in question would be required in order to produce that EDE. Resuspended radioactivity was estimated by employing a published formula and confirming the estimate with offsite air sampling data.

Using these conservative estimates of air emissions in 1999 as input to the CAP88-PC computer model, the EDE was calculated to be only 0.12 mrem ( $1.2 \times 10^{-3}$  mSv), much less than the 10-mrem limit that is specified in Title 40 CFR 61.

## NTS AIR QUALITY PERMIT COMPLIANCE

Compliance with air quality permits is accomplished through permit reporting and renewal and ongoing verification of operational compliance with permit-specified limitations. A summary of NTS permits is in Table 3.1. (See Chapter 4 for a listing of active permits.) Common air pollution sources at the NTS include aggregate production, surface disturbances, fugitive dust from unpaved roads, fuel burning equipment, open burning, and fuel storage facilities.

Quantities of emissions from operations at the NTS are calculated and submitted each year to the state of Nevada using forms provided by the state. The report also includes aggregate production amounts, operating hours of permitted equipment, and surface disturbance information for all disturbances of five acres or greater. During 1998, approximately 23 tons of pollutants were estimated to be emitted from permitted operations at the NTS. The 1998 Air Quality Permit Data Report was sent to the state of Nevada on February 18, 1999.

On June 16, 1999, the state inspected the permitted facilities/equipment associated with the Underground Testing Area (UGTA)

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project which has operations on NAFR and on the NTS. The UGTA is regulated under Class II Air Quality Operating Permit AP9711-0785. On June 17, 1999, the state inspected the permitted facilities/equipment associated with the Hazardous Materials Spill Center (HSC) and the Tactical Demilitarization Development (TaDD) project located in Areas 5 and 11, respectively. The HSC is regulated under Class II Air Quality Operating Permit AP9711-0556, and the TaDD project is regulated under Class II Air Quality Operation Permit AP9711-0814. There were no findings as a result of the inspections.

### **NON-NTS OPERATIONS**

Under normal conditions, the six non-NTS facilities operated by the DOE/NV do not produce radioactive effluents. The six are the North Las Vegas Facility (NLVF) and Remote Sensing Laboratory (RSL) in North Las Vegas; Special Technologies Laboratory (STL) in Santa Barbara, California; Livermore Operations (LO) in Livermore, California; Los Alamos Operations (LAO) in Los Alamos, New Mexico; and Washington Aerial Measurements Operations (WAMO) in Washington, D.C.

### **CLEAN WATER ACT (CWA)**

The Federal Water Pollution Control Act, as amended by the CWA, establishes ambient water quality standards and effluent discharge limitations, which are generally applicable to facilities, that discharge any materials into the waters of the United States (CFR 1977). Discharges from DOE/NV facilities are primarily regulated under the laws and regulations of the facility host states. Monitoring and reporting requirements are typically included under state or local permit requirements. A summary of NTS permits is displayed in Table 3.1, and a separate list of applicable permits appears in Chapters 4, 5, and 6. There are no National Pollutant Discharge

Elimination System permits for the NTS, as there are no wastewater discharges to onsite or offsite surface waters.

### **NTS OPERATIONS**

Discharges of wastewater are regulated by the state of Nevada under the Nevada Water Pollution Control Law (Nevada Revised Statutes 1977). The state of Nevada also regulates the design, construction, and operation of wastewater collection systems and treatment works. Wastewater monitoring at the NTS was limited to sampling wastewater influents to sewage lagoons and containment ponds.

State general permit GNEV93001, which regulates the ten usable sewage treatment facilities on the NTS, was issued by the Nevada Division of Environmental Protection (NDEP) and became effective on February 1, 1994. The general permit was renewed for five (5) years on December 7, 1999. The permit was structured to allow DOE more flexibility in bringing new industrial processes on line. There were no significant changes to permit parameters.

Downsizing of NTS operations has resulted in low flow conditions at sewage lagoon systems servicing the Area 5 RWMS, Area 12, and the Area 25 Central Support Facility. Automated flow meters are subject to incorrect flow measurements at low flows; therefore, a system was tested this year which incorporated a tipping bucket and timer. This system proved effective for accurate flow measurements in low flow situations. The use of this measuring system was noted in the Quarterly Discharge Monitoring Reports submitted to the state.

In the first and second quarters of 1999, the Area 25 Central Support sewage lagoon exceeded the organic load and flow compliance requirements. A modification to the organic load and flow requirements was initiated in November 1998 and approved in 1999. This modification appeared in the new permit on December 7, 1999.

During the third Quarter of 1999, the Area 5 RWMS sewage lagoon exceeded the mean daily Biological Oxygen Demand limit. After investigation, it was determined that a calculation error had been made and the amended loading (which was below the regulatory limit) was resubmitted to the state.

There were no formal state inspections of the sewage lagoons in 1999. During an informal visit to the Area 25 Central Support sewage lagoon, the state issued a finding of alleged violation for "disposal of portable toilet wastes" into this system. Area 25 Central Support is not permitted to receive this type of waste. Upon investigation, it was determined that the state had mistakenly assumed that wastewater in the primary lagoon was from portable toilet discharge. The situation was discussed and resolved with the DOE, the state, and Bechtel Nevada (BN).

In May of 1999, DOE and BN inspected Area 25 facilities to meet the "administrative controls" requirements for industrial discharges. All facilities and operations were determined to be in compliance with the permit.

### **NON-NTS OPERATIONS**

Three permits for wastewater discharges were held by non-NTS facilities. One permit is required for the NLVF, and the STL holds wastewater permits for the Botello Road and Ekwill Street locations. No wastewater permits were required for the LO, LAO, or RSL-Andrews facilities in 1999.

The Wastewater Contribution Permit for NLVF was renewed in 1999, with an effective date of January 1, 2000.

## **SAFE DRINKING WATER ACT (SDWA)**

### **NTS OPERATIONS**

The SDWA primarily addresses quality of potable water supplies through sampling and monitoring requirements for drinking water systems. The state of Nevada has enacted

and enforces SDWA regulations including system management such as operation and maintenance, water haulage, operator certification, permitting, and sampling requirements. A list of state potable water permits is shown in Chapter 5.

As required under state health regulations (NAC 445A 1996), potable water distribution systems at the NTS are monitored for residual chlorine content and coliform bacteria. NTS potable water distribution systems are also monitored for volatile organic compounds, inorganic compounds, synthetic organic compounds, and other water quality parameters.

During 1999, lead was found above the acceptable level in the Area 1 and the Area 2-12 systems. Corrective action was initiated in 1999 to resolve this problem. All other monitoring results for 1999 were within regulatory limits and are discussed in Chapter 5.

### **NTS WATER HAULAGE**

To accommodate the diverse and often transient field work locations at the NTS, a water haulage program is used. To ensure potability of hauled water, permitted water hauling trucks use a sanitary connection to obtain and deliver potable water from a permitted water system. In 1999, the NTS maintained three permitted water hauling trucks. Water hauling permits are renewed annually at the same time as the regular water system permits. Water hauling trucks are sampled monthly for coliform bacteria. There were no positive coliform bacteria sample results in 1999.

### **NON-NTS OPERATIONS**

All non-NTS operations are on municipal water systems and have no compliance activities under the SDWA.

## **RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)**

RCRA (RCRA 1976) and the Hazardous and Solid Waste Amendments of 1984 constitute the statutory basis for the regulation of

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hazardous waste and underground storage tanks (USTs). Under Section 3006 of RCRA, the EPA may authorize states to administer and enforce hazardous waste regulations. Nevada has received such authorization and acts as the primary regulator for many DOE/NV facilities. The Federal Facilities Compliance Act (FFCAct) of 1992 extends the full range of enforcement authorities in federal, state, and local laws for management of hazardous wastes to federal facilities, including the NTS.

### **NTS RCRA COMPLIANCE**

In 1995, DOE/NV received a RCRA Hazardous Waste Operating Permit for the Area 5 Hazardous Waste Storage Unit (HWSU) and the Area 11 Explosive Ordnance Disposal (EOD) Unit. In addition, the Part B Permit application was revised to include the Mixed Waste Storage Pad (now under interim status) and updated information concerning general facility conditions. During 1996, the permit was modified to include the change in contractor and operational changes concerning the EOD and HWSU. The permit application modification for the Pit 3 Mixed Waste Disposal Unit was completed and submitted to the state in 1997 (NAC 1982). Several other minor modifications were made to the permit during 1997 and 1998, mostly relating to updated personnel and training records. The current permit expires in May 2000, and DOE/NV submitted an application for reissuance of the permit to the state in November 1999. The state is currently reviewing the application.

In 1999, DOE/NV received a RCRA Research Development and Demonstration Permit for the construction and operation of the TaDD facility. This facility will develop treatment methods for deactivating waste missiles.

On January 5, 1994, the state of Nevada and DOE/NV entered into a Mutual Consent Agreement that allowed low-level radioactive

mixed wastes generated on the NTS to be moved into storage at the RWMS-5 TRU pad. This was amended in June 1994 to include mixed waste generated in Nevada via environmental restoration work. Waste in storage at this facility will continue to be held in storage until a final determination of the proper treatment and disposal technology is established by the EPA. A FFACO (FFACO 1996) was signed, effective March 27, 1996, requiring compliance with a Site Treatment Plan (DOE 1996a), which was also finalized in March 1996. Compliance with the FFACO exempts the NTS from potential enforcement action resulting from the mixed waste storage prohibition under RCRA.

The NDEP conducted its annual Compliance Evaluation Inspection (CEI) from May to June 1999. Only a few minor areas of concern were identified in the report, and NDEP did not pursue any formal enforcement actions as a result of the CEI.

### **HAZARDOUS WASTE REPORTING FOR NON-NTS OPERATIONS**

The LO, STL, and LAO locations generate hazardous waste and have EPA Identification numbers, but have no reporting requirements because they are operated as conditionally exempt small quantity generators of hazardous waste.

### **UNDERGROUND STORAGE TANKS (USTs)**

#### **NTS OPERATIONS**

The NTS UST program continues to meet regulatory compliance schedules for the reporting, upgrading, or removal of documented USTs. Efforts are continuing to identify undocumented USTs at the NTS. Once identified, undocumented USTs are reported to the NDEP to satisfy state regulatory reporting requirements. During 1999, there were no regulated USTs removed or upgraded, as all requirements

had been satisfied in 1998. In 1999, there was one nonregulated heating oil UST removed from the Area 6 decontamination Facility.

The DOE/NV operates one deferred UST and three excluded USTs at the Device Assembly Facility. The DOE/NV also maintains a fully-regulated UST that is not currently in service at the Area 6 heli-pad. There are no other known USTs at the NTS.

**NON-NTS OPERATIONS**

The RSL operates three fully-regulated USTs, one deferred UST, and two excluded USTs. All are in compliance with the regulations.

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA)**

In April 1996, the DOE/NV, Department of Defense, and the NDEP entered into a FFACO pursuant to Section 120(a)(4) of CERCLA (CERCLA 1980) and Sections 6001 and 3004(u) of RCRA (RCRA 1976) to address the environmental restoration of historic contaminated sites at the NTS, parts of Tonopah Test Range (TTR), parts of the NAFR, the Central Nevada Test area, and the Project SHOAL area. Appendix VI of the FFACO describes the strategy that will be employed to plan, implement, and complete environmental corrective action at facilities where nuclear-related operations were conducted.

**EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA)**

Compliance with this Act (EO 1986, CFR 1986) is discussed in the paragraphs below and summarized in the following checklist:

SARA Title III Reports

EPCRA <u>Section</u>	NTS Compliance	
	<u>Yes</u>	<u>No</u> <u>Required</u>
302-302: Planning Notification	x	
304: EHS Release Notification		x
311-312: Material Safety Data Sheet/Chemical Inventory	x	
313: TRI Reporting		x

Additional compliance activities under CERCLA/SARA for 1999 included the Nevada Combined Agency Report, which combines reporting under SARA Section 312, Tier II and Nevada Chemical Catastrophe Prevention Program requirements. The latter program covers extremely hazardous substances (EHSs).

The 1999 Nevada Combined Agency Hazardous Substances Reports for the NTS, NLVF, and RSL were submitted to the state as required and included chemical categories and mixtures and single constituents. The report also included the EHSs present.

A separate Nevada Combined Agency Report was submitted for the Area 5 HSC as required.

In compliance with EO 12856 (EO 1986), a Toxic Release Inventory Report required by Section 313 of the SARA Title III must be provided if the facility, any time in the prior CY, exceeds any section 313 threshold for manufacture, process, or other use. In CY 1998, no thresholds were exceeded, so no report was required in 1999.

**NON-NTS TIER II REPORTING UNDER SARA TITLE III**

The reports for the off-NTS Nevada facilities, RSL and NLVF, are described under EPCRA above.

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Other non-Nevada operations either had no chemicals above reporting thresholds or submitted their chemical inventories to the cities/counties as part of their business plans.

## **STATE OF NEVADA CHEMICAL CATASTROPHE PREVENTION ACT**

The state of Nevada Chemical Catastrophe Prevention Act of 1992 contains regulations for facilities defined as Highly Hazardous Substance Regulated Facilities (NAC 1992). This law requires registration of facilities storing highly hazardous substances above listed thresholds. Reporting for this program is also covered by the Nevada Combined Agency Report discussed under EPCRA above.

A Chemical Catastrophe Accident Prevention registration form was submitted by DOE for nitrogen dioxide, sulfur dioxide and thionyl chloride in July 1999. These substances were stored and released as part of HSC operations in 1998.

There were no reportable EHS chemicals at other DOE facilities (NTS, RSL, NLVF) in 1999.

## **TOXIC SUBSTANCES CONTROL ACT (TSCA)**

State of Nevada regulations implementing the TSCA require submittal of an annual report describing polychlorinated biphenyl (PCB) control activities. The 1998 NTS PCB annual report was transmitted to DOE/NV in May 1999. During 1999, there was one offsite shipment of PCBs consisting of capacitors and PCB oil.

## **FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA)**

Pesticide usage included insecticides, herbicides, and rodenticides. Insecticides were applied twice a month at the food

service and storage areas. Herbicides were applied once or twice a year at NTS sewage lagoon berms. All other pesticide applications were on an as-requested basis. General-use pesticides are used exclusively at the NTS. Contract companies applied pesticides at all non-NTS facilities in 1999.

On April 14, 1999, representatives of EPA Region 9 conducted a Federal Facility Inspection of the FIFRA program at the NTS. The inspection was requested by the Nevada Department of Business and Industry-Agriculture Division. No violations of federal laws were noted during the site inspection.

## **HISTORIC PRESERVATION**

The NHPA (CFR 1966; EO 1971), as amended, requires federal agencies to inventory and manage the cultural resources under their stewardship. In 1999, the Cultural Resources Management Plan for the NTS was completed to facilitate compliance with these responsibilities. This plan provides DOE/NV, the state of Nevada, contractors, and the public with the appropriate information regarding cultural resources requirements and their implementation on the NTS.

Towards meeting the goal of inventorying cultural resources, a survey of the atmospheric nuclear testing remains in and near Frenchman Lake was conducted in 1999. More than 150 historic structures were identified and deemed worthy of inclusion in a proposed Frenchman Flat historic district. The technical report for this task is in preparation.

Prior to all undertakings that may affect cultural resources, DOE/NV conducts cultural resources surveys and historical evaluations in order to determine what, if any, impact of their actions may have on archaeological sites, historic sites, historic structures, and traditional cultural properties. In 1999, seven cultural resource surveys were conducted to determine if significant sites or structures were within proposed project areas. Although seven

archaeological sites were identified, only one was determined to be eligible for listing in the National Register of Historic Places (NRHP). This location contains the remnants of Camp Desert Rock, the camp where the military troops that participated in atmospheric testing exercises resided during their stay at the NTS. The proposed actions associated with the Desert Rock Sky Park were modified to avoid affecting the Camp Desert Rock remains. Consultation with the appropriate American Indian tribes was also conducted for this location. No remedial actions were needed for any of the other proposed projects. Additionally, a historic evaluation of the train engine used in the 1960s at the Nuclear Research and Development Station was completed and the train engine was determined eligible for listing in the NRHP. An agreement was reached with the Nevada State Historic Preservation Office to move the engine to the train museum in Boulder City. A technical report on the archaeological study of a site near the proposed Kistler Launch Facility was finalized and issued in 1999.

The NHPA also requires that federal agencies curate the archaeological collections from the lands under their jurisdiction. DOE/NV continued to maintain a curatorial facility with security and environmental controls that houses more than a half million artifacts and associated records. In 1999, a long-term project to consolidate and coordinate the various artifact databases was completed with data verification in progress.

The Native American Graves Protection and Repatriation Act (NAGPRA) requires federal agencies to consult with Native Americans regarding items in their artifact collections that may be associated funerary items, human remains, sacred objects, or objects of cultural patrimony. The NAGPRA consultations for the main DOE/NV collection were completed in 1997. However, three small collections from DOE/NV lands that were added to the collection recently were the focus of a new round of NAGPRA consultations in 1999. A subgroup representing the Western

Shoshone, Southern Paiute, and Owens Valley Paiute Tribes viewed the items and made recommendations for repatriation that were adopted by the Consolidated Group of Tribal Organizations meeting sponsored by DOE/NV.

## THREATENED AND ENDANGERED SPECIES PROTECTION

The ESA (CFR 1973) requires federal agencies to insure that their actions do not jeopardize the continued existence of federally listed endangered or threatened species or their critical habitat. The desert tortoise (*Gopherus agassizii*) and bald eagle (*Haliaeetus leucocephalus*) are the only threatened species which occur on the NTS. No endangered animals and no threatened or endangered plants are known to occur on the NTS. Consultation with the United States Fish and Wildlife Service (USFWS) resulted in receipt of a non-jeopardy Biological Opinion in August 1996 for planned activities at the NTS for a ten-year period (USFWS 1996).

The Desert Tortoise Compliance Program implemented the terms and conditions of the USFWS Biological Opinion and documented compliance actions taken by DOE/NV. The terms and conditions, which were implemented in 1999, included (1) tortoise clearance surveys for 12 projects, (2) onsite monitoring of construction for 14 projects when heavy equipment was being used, (3) periodic monitoring of tortoise-proof fencing around the ER-5-2 Well and at sewage treatment ponds in Areas 6 and 23, and (4) preparation of an annual compliance report for the USFWS of NTS activities that were conducted in CY 1999. Project activities conducted in CY 1999 resulted in the loss of 25.38 acres of undisturbed tortoise habitat. Since issuance of the first non-jeopardy Biological Opinion in 1992, no tortoises have been accidentally injured or killed; no tortoises have been captured and displaced from project sites; and a total of 168.57 acres of desert tortoise habitat has been disturbed as a result of NTS activities.

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In September 1999, a team of volunteer biologists, led by the Biological Resources Division of the U.S. Geological Survey, captured, measured, and weighed desert tortoises within three 21-acre circular enclosures in Rock Valley. The circular enclosures were constructed during 1962-1963 to study the effects of chronic, low-level ionizing radiation on the desert flora and fauna. Over the past decades, at least 24 tortoises have been found, individually marked, and periodically measured. There are approximately 18 adult tortoises remaining in the enclosures. They are considered captive by the USFWS and are not protected under the 1996 Biological Opinion. In 1999, 16 tortoises, including one new hatchling, were captured, measured, and weighed.

The threatened bald eagle is an uncommon transient to the NTS and is not expected to be impacted by NTS activities. No site-wide surveys to determine its distribution or abundance have been conducted. Records of all bird sightings, which are made opportunistically, are maintained to provide some data on the occurrence of various birds on the NTS. There were no reported sightings of bald eagles on the NTS in 1999.

### **EXECUTIVE ORDER (EO) 11988 FLOODPLAIN MANAGEMENT**

NTS design criteria do not directly address floodplain management; however, all projects are reviewed for areas which would be affected by a 100-year flood pursuant to DOE Order 6430.1A (DOE 1989). There were no projects in 1999 that required consultation for floodplain management.

### **EXECUTIVE ORDER (EO) 11990 PROTECTION OF WETLANDS**

There were no projects in 1999 which required consultation for protection of wetlands. NTS design criteria do not specifically address protection of wetlands; however, all projects are reviewed pursuant to the requirements of DOE Order 5400.1 (DOE 1990a). Limited monitoring of

selected wetlands occurred during 1999 to further characterize the biological and physical conditions at the five new wetlands discovered during 1998.

## **3.2 AGREEMENTS WITH STATES AND AGENCIES**

During 1999, the NTS was subject to several agreements with regulatory agencies and states. These agreements are listed below.

- an Interagency Agreement with EPA covering environmental monitoring, emergency response, and related activities.
- a MOU with EPA regarding NESHAP compliance.
- a MOU with Nevada covering releases of radioactivity.
- a MOU with Nellis Air Force Base for environmental restoration on the Tonopah Test Range.
- a FFACO with the state of Nevada on environmental restoration activities.
- a FFCAct Site Treatment Plan and Consent Order with the state of Nevada regarding legacy mixed waste streams on the NTS.
- an Agreement in Principle (AIP) with Nevada on environment, safety, and health oversight activities.
- an AIP with Mississippi on environment, safety, and health oversight activities.
- an AIP with Alaska on environment, safety, and health oversight activities.
- a Settlement Agreement with Nevada on storing existing inventory of mixed TRU waste.
- a Mutual Consent Agreement with Nevada on storage and management of newly generated mixed LDR wastes on NTS.

### 3.3 CURRENT ENVIRONMENTAL COMPLIANCE ISSUES AND ACTIONS

There were numerous activities and actions relating to environmental compliance issues in 1999. These activities and actions are discussed below, grouped by general area of applicability.

#### CLEAN AIR ACT (CAA)

Under Title V, Part 70 of the CAA amendments, all owners or operators of Part 70 sources must pay annual fees that are sufficient to cover costs of state operating permit programs.

Sources such as the NTS that have a potential to emit 50 tons or more of any regulated pollutant, except carbon monoxide, must pay an annual fee of \$3,000. Sources that have a potential to emit less than 25 tons per year, such as the TaDD and UGTA projects, must pay an annual fee of \$250. Maintenance and emissions fees of \$3,500 were paid to the NDEP on June 23, 1999.

The NTS Class II Air Quality Operating Permit AP9711-0549 was revised once during 1999. Modifications included the reassignment of generators to different groupings within the permit and the transfer of a conveyor, hopper, and storage silos from the NTS permit to the UGTA air permit. A modification package for the NTS air permit was submitted to the state in November 1999. The main purpose of the modification was to add smaller "insignificant" fuel-burning sources to the permit with an annual limit on the number of hours the sources could operate. Fuel burning sources include generators, compressors, boilers, and miscellaneous equipment such as pumps. The modification

was necessary due to the "potential to emit" nitrogen oxide, one of the criteria pollutants, approaching the 100-ton limit that is the cut off between being designated a minor (Class II) or a major (Class I) source. The potential emission nitrogen oxides on the NTS is approximately 85 tons.

One open burn permit was renewed by the state in 1999, which included Permit 99-13 for the Area 27 burn box. This permit was issued in February 1999. The NTS open burn permit for fire training exercises expired in October 1998. DOE ESHD was initially informed that annual "blanket" permits would no longer be issued and that an individual Burn Variance would need to be obtained prior to each burn. However, the state reversed this policy and issued a blanket NTS open burn permit, 99-25, in March 1999.

The NTS has a Nevada Hazardous Materials Storage Permit 13-99-0034-X, and the HSC has Permit 13-99-0037-X. These are issued by the state Fire Marshall and are renewed annually when a facility makes a report required by the state's Chemical Catastrophe Prevention Act (NAC 1992).

Table 3.1 contains a summary of the permits issued for NTS activities and for offsite activities that support the NTS.

#### NON-NTS AIR QUALITY PERMITS

The UGTA General Air Quality Permit was modified twice in 1999: (1) to add a conveyor, hopper, and storage bin, and (2) to add several diesel generators as rental units. With the addition of the equipment, the status of the permit was changed to a Class II air quality operating permit.

Six air quality operating permits were active for emission units at the NLVF, and seven permits were active for the RSL. These permits were issued through the Clark County Health District. Annual renewal is

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contingent upon payment of permit fees. Permits are amended and revised only if the situation under which the permit has been issued changes. For the other non-NTS operations, no permits have been required, or the facilities have been exempted.

During 1998 the Air Pollution Control Division (APCD) of the Clark County Health District began requiring an "Emissions Inventory" submittal for all permitted sources. The 1998 Emissions Inventory was submitted by BN to the APCD on May 27, 1999.

### **CLEAN WATER ACT (CWA)**

Low flows in several NTS sewage lagoons has reduced the efficiency of the lagoons to properly treat effluents. In response, DOE has requested funding to install septic tank systems in these areas.

Site utilization by new projects will result in increased permitting activities for existing septic systems. In the past, the state regulated septic tanks and leachfields by issuing a "permit to construct" after review of percolation test data and engineering drawings. New regulations (NAC 444 Sections 1-119, 756, 774, 800, 802, 812, 814, 816, 830, 832, 834, 836, 838, and 840) adopted by the State Board of Health effective March 25, 1999, require application for an operating permit covering existing and new septic systems. The permits do not require renewal and are good for the life of the system. Several existing systems will be permitted in 2000.

### **SAFE DRINKING WATER ACT (SDWA)**

The Operations and Maintenance Manual for the NTS water distribution systems was updated to incorporate some recent revisions to state regulations.

The Nevada Bureau of Health Protection Services (BHPSs) conducted a sanitary survey of the water distribution systems in May 1999. Monitoring results for secondary

standards showed that all supply wells met the standards. The BHPSs also issued 16 survey findings, mostly relating to the reservoir storage tanks, with the final report of the survey. DOE/NV resolved all but one of those findings in 1999. The remaining finding, a pinhole leak in a storage tank, will be addressed in 2000.

### **COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)**

Other than the reporting covered in Section 3.1, there is no formal CERCLA program at the NTS. The FFACO, with the state, may preclude the NTS from being placed on the National Priority List. More of a RCRA approach in remediating environmental problems will be taken under the FFACO.

### **HISTORIC PRESERVATION**

In 1999, a formal consultation with Native Americans was conducted in regard to the area proposed for the NTS Development Corporation's Desert Rock Sky Park.

Under the NHPA, all DOE/NV cultural resources reports and plans are reviewed by the Nevada State Historic Preservation Office (NSHPO) for compliance with the NHPA. All consultations with the NSHPO were completed successfully, permitting proposed projects to proceed and documents to be finalized for distribution to the Nevada State Cultural Resources Archives.

The American Indian Religious Freedom Act of 1978 affirms Native Americans right to religious freedom and defines the responsibility of federal agencies to consult with Native Americans in developing policies and procedures to protect and preserve cultural and spiritual traditions and sites. Executive Order 13007 of 1996 obligates federal agencies to accommodate the access to and ceremonial use of Native American sacred sites and to maintain their

integrity. In 1999, a draft technical report of NTS rock art sites was completed, complementing a previous ethnographic study of the area. Both reports recommend protection for the rock art and emphasize the religious importance of the sites.

In 1999, the Cultural Resources Management Plan for the NTS was completed for the purpose of facilitating compliance with DOE/NV's legal responsibilities. This plan provides DOE/NV, the state of Nevada, contractors, and the public with appropriate information regarding cultural resources requirements and their implementation on the NTS.

## **POLLUTION PREVENTION (P2) AND WASTE MINIMIZATION**

The 1999 P2, waste minimization, and recycling efforts for waste generated at the NTS, NLVF, and offsite locations complied with DOE Order 5400.1 requirements for a P2 program. The DOE/NV P2 program establishes a process to reduce the volume and toxicity of hazardous waste generated at all locations and ensures that the proposed method of treatment and/or disposal minimizes the present and future threat to human health and the environment.

It is a priority of DOE/NV to minimize the generation, release, and/or disposal of pollutants to the environment by implementing cost-effective P2 technologies, practices, and policies in partnership with government and industry. A commitment to P2, waste minimization, and recycling manages operations in such a way as to minimize impact on the environment, improve the safety of operations and energy efficiency, and promote the sustainable use of natural resources. This commitment includes providing adequate administrative and financial materials on a continuing basis to ensure source reduction, recycling, and affirmative procurement goals are achieved.

Section 6.3 provides a summary of the P2 program, P2 accomplishments achieved during CY 1999, notable activities that

achieved reduction in volume and toxicity of waste, and recycling activities and quantities.

## **SOLID/SANITARY WASTE**

During 1999, landfills were operated in Areas 6, 9, and 23. The amount of waste disposed of in each is shown in Chapter 6.0, and their operating permits are in Table 3.1.

The NTS Cleanup Project, initiated in 1994, is an activity devised to remove and dispose of or recycle, where applicable, nonhazardous debris and material and readily identify hazardous debris and material. In 1999, some cleanup activities were completed at inactive facilities throughout the NTS. During this cleanup, solid wastes were disposed of in the U10c Landfill, and reusable materials were delivered to the NTS Salvage Yard for recycling and reclamation.

## **FEDERAL FACILITIES AGREEMENT AND CONSENT ORDER (FFACO)**

### **REMEDIAL ACTIVITIES - SURFACE AREAS**

Environmental restoration activities continued at the NTS and TTR in 1999. These activities followed the agreements specified in the FFACO signed between the DOE/NV and the NDEP.

These activities follow a formal work process beginning with a Data Quality Objectives (DQO) meeting between DOE, NDEP, and contractors. The purpose of the DQO meeting is to define the scope of work, how the site characterization is to be done (sampling strategy), and to develop the conceptual model for the site. The conceptual model defines the nature and extent of waste in the subsurface and guides the investigation. A Corrective Action Investigation Plan is prepared providing the information on how the site is to be characterized.

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Site characterization is carried out and documented in the Corrective Action Decision Document (CADD). This report provides the information that either confirms the conceptual model or modifies it. If suitable information is available to make a decision, a remedial alternative is selected from several identified for analysis that best provides site closure. In some instances, additional site characterization may be required before the CADD can be prepared. The CADD may also include a risk assessment to better define the risk to humans and the environment.

If a site requires remediation, a Corrective Action Plan (CAP) is prepared that provides the necessary design and other information on the method of remediation. A CAP includes the proposed methods to be used to close a site, quality control measures, waste management strategy, design drawings (when appropriate), verification sampling strategies (for clean closures) and other information necessary to perform the closure. Some sites also require a Post Closure Plan as the site or parts of the site are closed in place. Information on inspections and monitoring are provided in an Annual Post Closure Monitoring Report.

Once the closure has been completed, a Closure Report is prepared. This document provides information on the work performed, results of verification sampling, as-built drawings (if appropriate), waste management, etc.

The NDEP is a participant throughout the remediation process. The Community Advisory Board is also kept informed by DOE/NV of the progress made.

Some small sites are closed under the Streamlined Approach for Environmental Restoration (SAFER) process. These sites typically have small amounts of contamination and can be remediated by simple excavation and sampling to verify that the remediation level has been reached. A SAFER plan is prepared providing the

methods to be used to close the site. After closure, a SAFER closure report is prepared documenting the work performed.

During 1999 all FFACO deadlines were met and actions taken are summarized below:

- The Area 6 Decontamination Pond (CAU 92) RCRA Closure Unit design and field testing for the engineered cover was completed in 1998. Closure activities started in 1998 were completed in early 1999. The Closure Report was prepared and sent to the NDEP in 1999.
- Annual Post Closure Monitoring Reports were submitted to comply with the conditions of the RCRA Part B Permit for the Area 2 Bitcutter Shop and LLNL Post Shot Containment Building Injection Wells (CAU 90), Area 23 Landfill Hazardous Waste Trenches (CAU 112), and the U3fi Injection Well (CAU 91) RCRA Closure Units.
- Closure of the Area 12 Fleet Operations Steam Cleaning Discharge Area (CAU 339) was completed and a Closure Report was submitted in 1998. During 1999 NDEP initiated a quarterly monitoring requirement for the next six years of undisturbed impacted areas to evaluate whether or not sufficient degradation of the petroleum hydrocarbons has been demonstrated. Two reports were completed and sent in 1999.
- The contents of the aboveground tanks located at the Area 23 Fire Training Pit (AU 340D) were characterized and disposed of as a RCRA hazardous waste (approximately 3,000 gal [11.4 m<sup>3</sup>]).
- The SAFER Closure Plan for the Area 5 and 6 aboveground tanks (CAU 120) was prepared, completed, and approved by the NDEP. Closure activities were completed in 1998. In 1999 the Closure Report was prepared and sent to NDEP.

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- Characterization activities were completed for the TTR Area 3 Landfill Complex (CAU 424) and Area 9 UXO Landfill (CAU 453). The CADD and CAP were prepared and transmitted to the NDEP for concurrence during 1998. Remedial activities were completed in 1999 and the Closure Report was prepared and sent to NDEP.
  - Characterization activities were started at the TTR Building 360 Underground Discharge Point (CAU 427) and Areas 2 and 6 Septic Systems (CAU 423). The Corrective Action Decision Document and Corrective Action Plan were prepared and transmitted to the NDEP for concurrence during 1998. During 1999, the closure was accomplished, and the Closure Report was prepared and sent to NDEP.
  - In 1998, the Building A-1 (Atlas) tritium decontamination was completed. All decontaminated areas have been free-released with the condition that a weekly long-term monitoring program be conducted for a least one year. This monitoring began during 1998 and was completed during 1999.
  - The draft Characterization report for the U3ax/bl Subsidence Crater (CAU 110) was prepared and sent to the NDEP in 1999.
  - The draft CAP for the DOUBLE TRACKS radiological safe area, (CAU 486) Nellis Air Force Range was prepared and sent to the NDEP.
  - The Area 25 sewage Lagoons (CAU 232), Area 25 Building 4839 Leachfield (CAU 263), Area 25 Building 3124 Leachfield (CAU 266), and Area 25 Test Cell A Septic Systems (CAU 500) were characterized and Best Management Practices were used to close all but (CAU 263) in 1999.
  - The ROLLER COASTER radiological safe area (CAU 407) in TTR was characterized. Preparation of the draft Closure Plan began.
  - The Area 25 Waste Dumps (CAU 143) were characterized.
  - The Area 25 Storage Tanks (CAU 135) were removed from an underground vault and the tank contents and vault were characterized.
  - The Area 25 Vehicle Washdown Sites (CAU 240) were characterized and the draft CAP began.
  - The TTR Unconfirmed Joint Test Assembly Sites (CAU 461) were closed and a SAFER Closure Report prepared and sent to the NDEP.
  - The U2bu Subsidence Crater (CAU 109) was characterized, the Closure Plan prepared, and the site closed. The Closure Report was prepared and sent to the NDEP.
  - The NTS Pesticide Release Site (CAU 340) was characterized and a CAP prepared and sent to the NDEP. The site was clean closed and preparation of the Closure Report began.
  - The Draft Facility Disposition Process: Surveillance and Maintenance Activities Master Plan was prepared for the D & D Facilities.
  - The Housekeeping Report for the Area 25 E-MAD Vacuum Pump Oil Recovery Housekeeping Closure was sent to NDEP. The closure was completed in 1999.
  - Housekeeping activities at the E-MAD yard were done. Approximately 426,000 pounds of material was sent to salvage and 396,000 pounds of debris were sent to a landfill for disposal.
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## **RADIATION PROTECTION**

### **NTS OPERATIONS**

Results of monitoring during 1999 indicated full compliance with the radiation exposure guidelines of DOE Order 5400.5, "Radiation Protection of the Public and the Environment", and the Title 40 CFR 141 National Primary Drinking Water Regulations. Onsite air monitoring results for the networks showed average annual concentrations ranging from 0.25 percent of the DOE Order 5400.5 guidelines for HTO in air to 5.0 percent of the guidelines for <sup>239+240</sup>Pu in air. Drinking water supplies on the NTS contained no man-made radioactivity above detection limits, and levels of naturally occurring radioactivity were in compliance with the National Primary Drinking Water Regulation.

Offsite monitoring in the vicinity of the NTS confirmed that emissions of radioactivity from the NTS did not exceed 2 percent of the guideline set forth in Title 40 CFR 61, Subpart H (CFR 1989).

### **NON-NTS BN OPERATIONS**

Results of environmental monitoring at the off-NTS operations performing radiological work during 1999 indicate full compliance with the radiation exposure guidelines of DOE Order 5400.5. With one exception, no radioactive or nonradioactive surface water/liquid discharges, subsurface discharges through leaching, leaking, or seepage into the soil column, well disposal, or burial occurred at any of the BN operations. The exception was the NLVF Building A-1 radiation source well in which water was found with concentrations of tritium that were above the drinking water standard of 20,000 pCi/L. From a review of geologic reports, historical aerial photos, Geoprobe borings, installation of temporary monitoring wells, and water analyses, the tritium was concluded to be from past local operations and was not found in ground water surrounding the facility.

Use of radioactive materials is primarily limited to sealed sources. Facilities, which use radioactive sources or radiation producing equipment, with the potential to expose the general population or non-project personnel to direct radiation, are the Atlas NLVF A-1 Source Range, RSL-Andrews (formerly called WAMO), and the STL during the operation of the sealed tube neutron generator or during operation of the Febetron. Sealed sources are tested every six months to ensure there is no leakage of radioactive material. Operation of any radiation generating devices is controlled by BN procedures. At least two TLDs are placed at the fence line of these facilities or where non-project personnel could be for limited periods and are exchanged quarterly. Additional control TLDs accompanying the exchanged TLDs are kept in a shielded safe. The TLD results were consistent with previous data indicating no exposures to the public from any of the monitored facilities, except for the TLDs placed in a hanger at RSL-Andrews. Here the TLDs were placed around a radiation source cage near a walkway in the hanger. Although the readings for these TLDs were higher than normal background, non-project personnel were just passing by and not residing near the source cage. During the latter part of 1999, the sources in the cage were moved to a location more removed from areas frequented by non-project personnel when construction of a new laboratory building was completed.

## **ENVIRONMENTAL COMPLIANCE AUDITS**

There were eight Environmental Compliance Management Assessments of specific operations, facilities, or project for calendar year 1999. These assessments focused, in most cases, on one or two major areas of Environmental Compliance, e.g. hazardous waste or universal waste management.

## **OCCURRENCE REPORTING**

Occurrences are environmental, health, and/or safety-related incidents, which are reported in several categories in accordance

with the requirements of DOE Order O232.1A, "Occurrence Reporting and Processing of Operations Information," (DOE 1997b). The 15 reportable environmental occurrences for 1999 on NTS facilities appear in Table 3.2.

## **LEGAL ACTIONS**

No legal actions were filed against DOE/NV during 1999.

## **3.4 PERMIT SUMMARY**

For facilities used in the operation and maintenance of the NTS and non-NTS facilities, the contractors providing such operation and support activities for the

DOE/NV have been granted numerous permits by the appropriate regulatory authorities. To facilitate management of environmental compliance and save costs, several operating permits have been combined into general permits. This reduced the number of permits, but all facilities remain regulated and permitted. In addition to the existing number of permits in 1999 (Table 3.1), the EOD Facility and the Area 5 Storage Facility of the RCRA Part B permit application were permitted, while the other units in the application are in various stages of the NDEP review for permission to construct or operate. The TaDD facility was also granted a RCRA Research Development and Demonstration permit in 1999 under the same NTS generator number.

Table 3.1 Environmental Permit Summary - 1999

	Air Pollution	Wastewater	Drinking Water	Waste Disposal	Number of EPA Generator User IDs	Hazardous Materials Storage Permit	Endangered Species Act
NTS	5	7	7	3	1 <sup>(a)</sup>	2 <sup>(c)</sup>	2
NAFR	1						
Las Vegas Area Operations Office	13 <sup>(b)</sup>	1			1 <sup>(a)</sup>	2 <sup>(d)</sup>	
Livermore Operations	1				1		
Los Alamos Operations					1		
Special Technologies Laboratory (Santa Barbara)		2			2	1	
TOTAL	20	10	7	3	6	5	2

(a) Biennial Report Required.

(b) Routine Monitoring of Emissions is Not Required.

(c) Includes the HSC.

(d) NLVF and RSL.

Table 3.2 Off-Normal Occurrences at NTS Facilities - 1999

<u>Date</u>	<u>Report Number</u>	<u>Description</u>	<u>Status</u>
01/11/1999	NVOO-BNLV-NTS-1999-0001	Sewage lagoon permit violation when sewage vacuum discharged propylene glycol into active lagoon.	Closed
01/21/1999	NVOO-BNLV-NTS-1999-0003	Historical hydrocarbon spill discovered at E-MAD Facility from a closed vacuum pump oil recovery System.	Closed
01/27/1999	NVOO-BNLV-NTS-1999-0004	Samples were transported from TTR to the NTS without the proper DOT shipping papers.	Closed
02/08/1999	NVOO-BNLV-NTS-1999-0005	Site Specific Health & Safety Plan violated when excavation exceeded two feet without having EOD personnel on site.	Open
02/08/1999	NVOO-BNLV-DECN-1999-0001	Approximately six yards of soil were contaminated from a leaking underground heating oil storage tank at the Area 6 Waste Handling Facility.	Closed
02/22/1999	NVOO-BNLV-NTS-1999-0006	Violation of Air Quality Operating Permit when opacity limit at the Area 1 Aggregate Plant was exceeded and no written notice to state was made.	Closed
02/25/1999	NVOO-BNLV-NTS-1999-0007	Operations at the Waste Examination Facility were suspended due to the inability to complete the Limiting Conditions of Operation checklist.	Closed
03/23/1999	NVOO-BNLV-NTS-1999-0010	Grease trap at Area 23 Cafeteria loading dock backed up causing a spill of 20 gallons of waste water.	Closed
05/13/1999	NVOO-BNLV-NTS-1999-0012	Approximately 70 gallons of hydraulic oil leaked from a Dover-Rotary Hoist.	Closed
06/23/1999	NVOO-BNLV-NTS-1999-0015	A Limiting Condition of Operation at the WEF was violated when a backup generator was disabled for maintenance during WEF operations.	Closed
07/06/1999	NVOO-BNLV-NTS-1999-0016	Non-PCB transformer oil leaked from drums being stored at the Area 6 Linemen Yard, causing about 15 yards of soil contamination.	Closed
07/06/1999	NVOO-BNLV-NTS-1999-0017	Non-PCB transformer oil leaked from transformers being moved at the Area 6 Linemen Yard, causing about 5 yards of soil contamination.	Open

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Table 3.2 (Off-Normal Occurrences at NTS Facilities - 1999, cont.)

<u>Date</u>	<u>Report Number</u>	<u>Description</u>	<u>Status</u>
09/27/1999	NVOO-BNLV-BNNTS-1999-0001	An abandoned five-gallon open-top container was discovered at Building 3152 in Area 25 that had radiation readings above background.	Open
11/10/1999	NVOO-BNLV-BNNLV-1999-0001	Low level tritium contamination discovered in a source storage vault located in Building A-1 at the North Las Vegas Facility.	Open
12/16/1999	NVOO-BNLV-NTS-1999-0025	Hydrocarbon spill discovered in the Area 6 Utilities Yard affecting an area of soil about 10 ft by 15 ft. Source of the spill is unknown.	Open