

United States Government

memorandum

DATE: August 11, 1995
REPLY TO: DP-21 (Dunn, 202-586-5504)
ATTN OF:
SUBJECT: DEPARTMENT OF ENERGY (DOE) NEVADA OPERATIONS OFFICE (NV) 1995 NUCLEAR EXPLOSIVE SAFETY (NES) APPRAISAL REPORT
TO: T. A. Vaeth, Acting Manager, DOE Nevada Operations Office

Attached is the final report of the Office of Weapons Surety (DP-21) independent appraisal of NV NES activities. The purpose of the appraisal was to verify the effectiveness of the NV management controls and work processes implemented in accordance with the requirements of the DOE 5610 Series Orders and interim policy and guidance documents of the Deputy Assistant Secretary for Military Application and Stockpile Support (DP-20).

As noted in the report and previously discussed with you and your senior staff during the appraisal exit meeting, the appraisal team verified that NV is in compliance with applicable directives and has effectively implemented a NES Program with the following exceptions: (1) NV has not incorporated all of the interim guidance/policy memorandums promulgated by DP-20 into the NES Program; (2) NV does not maintain an up-to-date Personnel Assurance Program (PAP) certification list; and (3) NV has not fully implemented an effective appraisal program to both identify and correct nuclear explosive safety problems. The importance of these failures to effectively implement NES program requirements is mitigated by the President's decision to suspend underground nuclear testing. Consequently, any actions taken and planned to correct these deficiencies should take into consideration any change in the President's decision.

My staff has reviewed the memorandum submitted by your staff dated July 7, 1995, stating your plans to address the findings based on the preliminary information provided at the appraisal exit meeting. Your prompt consideration of these findings is appreciated and commended; however, the following additional information is requested:

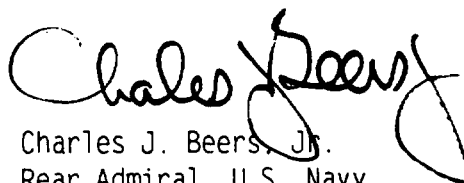
Finding 95-02: The proposed corrective action addresses only one example of NV's failure to incorporate DP-20's interim guidance/policy. Please identify what actions are proposed regarding other DP-20 interim directions, taking into consideration that the changes being made as a result of the DNFSB Recommendation 93-1 will incorporate and may modify the interim directions.

Finding 95-01, 02, and 03: Provide a schedule of expected completion dates for the proposed corrective actions.



A revised corrective action plan should be submitted within 60 days of receipt of the attached report.

Please accept my appreciation for the support and cooperation extended to the team during the performance of the appraisal. If you have any questions regarding the appraisal report, please call me or have your staff contact Terry Dunn or Jim Yeager of my staff at (202) 586-5504 or (202) 586-7461.



Charles J. Beers, Jr.
Rear Admiral, U.S. Navy
Deputy Assistant Secretary for
Military Application and
Stockpile Support
Defense Programs

Attachment

U.S. DEPARTMENT OF ENERGY
DEPUTY ASSISTANT SECRETARY FOR MILITARY APPLICATION AND STOCKPILE SUPPORT
OFFICE OF WEAPONS SURETY

REPORT OF THE NUCLEAR EXPLOSIVE SAFETY APPRAISAL
OF
THE NEVADA OPERATIONS OFFICE

JUNE 12-16, 1995

Submitted: *Terrance E. Dunn*
Terrance E. Dunn, Team Leader

Date: 7/19/95

Approved: *Charles J. Beefs, Jr.*
Charles J. Beefs, Jr.
Deputy Assistant Secretary for
Military Application and
Stockpile Support
Defense Programs

Date: 8/11/95

EXECUTIVE SUMMARY

Between June 12-16, 1995, a team of representatives of the Deputy Assistant Secretary for Military Application and Stockpile Support (DASMSS) conducted an independent appraisal of the Department of Energy (DOE) Nevada Operations Office (NV) Nuclear Explosive Safety (NES) Program. The appraisal was performed to verify the existence and evaluate the effectiveness of management controls and work processes established by NV to comply with policy and requirements contained in the DOE 5610 Series Orders and interim policy and guidance documents.

The appraisal team determined that NV is in compliance with applicable directives and has effectively implemented a NES Program with the following exceptions: (1) has not incorporated all of the interim guidance/policy memorandums promulgated by DASMSS into its NES Program; (2) does not maintain an up-to-date Personnel Assurance Program (PAP) certification list to provide a ready reference of laboratory and contractor PAP certified personnel; and (3) has not implemented an effective appraisal program to both identify and correct nuclear explosive safety problems.

Since the suspension of underground nuclear testing by the President, and the relaxation of test readiness to a condition of being able to resume underground testing on not less than 6 months prior notification, nuclear explosive operations at the Nevada Test Site have come to a virtual halt. DASMSS has not correspondingly relaxed any requirements or expectations with respect to the implementation of the NES Program in the field. If the relaxation of readiness condition to resume testing is further extended to 2 or more years, DASMSS should consider the implications of that decision to nuclear explosive safety and provide direction to the field accordingly.

1. Purpose and Scope

This appraisal of NV was conducted to verify the existence and evaluate the effectiveness of management controls and work processes established by NV to comply with policy and to implement requirements contained in the DOE 5610 Series Orders and supplemental/interim policy and guidance documents. It is intended to provide Defense Programs and NV management with objective and timely information on NES program compliance and effectiveness; identify deficiencies in management controls and work processes; and verify that adequate implementing documents are in place, current, and being properly used.

The appraisal was performed by a team composed of DOE Headquarters DASMSS personnel, in accordance with an appraisal plan dated May 10, 1995. The appraisal plan identifies the requirements documents that form the basis of the appraisal, and includes a checklist used by the appraisal team to evaluate NV compliance with those requirements. A listing of appraisal team members, personnel contacted during the appraisal, and entrance and exit meeting attendees is contained at Appendix A.

2. Mission and Activities

Authority to implement the NES Program at NV, and to establish and maintain continuing Federal oversight of DOE/NV contractors (EG&G Energy Measurements, Inc. [EG&G/EM]; Wackenhut Services, Inc. [WSI]; and Reynolds Electrical & Engineering Co., Inc. [REECO]), and test-site users (Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), and Sandia National Laboratories (SNL)) with respect to all nuclear explosive operations at the test site, has been delegated to the Director of the Nuclear Explosive Safety Division (NESD). The Director, NESD, reports to the Assistant Manager for Operations, and supervises a staff of nuclear explosive safety engineers and a PAP specialist. The NESD staff members ensure that NES activities are conducted in accordance with policies and requirements contained in DOE orders and provide direct assistance to the Manager, NV, and NV Test Controllers in NES matters. NESD staff members also serve as the NV Manager's representative at the Department of Defense or DOE accident or incident sites involving nuclear explosives.

No Federal NV employees are assigned to nuclear explosive duties. Nuclear explosive operations and activities at the test site are performed by test-site users and NV contractors.

Since the suspension of underground nuclear testing and the President's directive to be prepared to resume testing within 6 months, the level of activity at NTS has declined significantly. This reduction in the level of

activity and the corresponding perception that the nuclear weapons program is not as important or meaningful to the Nation as it was in the past appear to have had a detrimental impact on the effectiveness of the NES Program. Add to this the fact that very soon NTS may go to a condition of readiness only sufficient to be able to conduct a nuclear test within 2 years of notification, and it becomes understandable why it may be very difficult, perhaps even impossible, to sustain a sense of the importance of maintaining a rigorous NES Program at NV (or elsewhere in the weapons complex).

Although testing has been suspended, there has been no DASMSS direction to relax the implementation of NES requirements. The team suggests that if testing activities are further suspended to a condition requiring 2 years preparation for conducting a test, NV should request DASMSS approval to suspend implementation of the NES Program, or selected portions of it. Having no DASMSS direction suspending any NES requirement, the appraisal team conducted the appraisal of NV expecting full compliance with current NES requirements.

3. Detailed Program Evaluation

DOE Order 5610.10, Nuclear Explosive and Weapon Safety Program

The Manager, NV is responsible for implementing the provisions of this order within his area of responsibility and authority, including assuring that field [sic] office, laboratory, contractor, and subcontractor line managers have been assigned safety program responsibilities. There are no NV Federal employees assigned to nuclear explosive duties at the NTS, and there are currently no nuclear explosive operations or tests being conducted or planned there. Therefore, not all of the nuclear explosive activities or operations for which the Manager, NV has responsibility under the order are applicable.

NV maintains NV orders for local use that supplement the requirements contained in DOE Order 5610.10 and 5610.11 with additional direction for DOE/NV, NV contractors, and test site users. These NV orders also specify the further delegation of responsibilities and authorities called for in the DOE orders, and specifically hold the Directors of responsible laboratories (LANL and LLNL) accountable for complying with all appropriate provisions and requirements of DOE 5610.10 and 5610.11, and NV 5610.10 and 5610.11A, and for establishing procedures and assigning responsibility for ensuring the safety of all nuclear explosive operations conducted under their purview in support of the Underground Testing Program. These NV orders further specify that test site users and DOE/NV contractors are responsible for compliance with nuclear explosive and weapon safety requirements as established by the NV Manager, and in accordance with established procedures.

DOE Order 5610.11. Nuclear Explosive Safety

The nuclear explosive safety activities described below have been assessed by the appraisal team or discussed with the NESD personnel.

Chapter I - Personnel Assurance Program (PAP)

The NESD PAP specialist has been delegated authority to perform the duties of PAP reviewing official as set forth in NV 5610.11A of November 12, 1993, (with changes 1 and 2). These duties include authority to verify that all requirements of DOE 5610.11, Chapter I, and NV 5610.11A, Chapter I, have been met by DOE/NV contractor personnel prior to their certification by the NV PAP certifying official (Assistant Manager for Administration). In addition, the PAP reviewing official is responsible for creating, publishing, and distributing the DOE/NV PAP certification lists, and publishing and distributing PAP certifications from other DOE PAP certifying officials. The resulting documentation consists of a transmittal memorandum with six enclosures: the PAP certification lists of LANL, LLNL, SNL, EG&G, WSI, and REECo. The DOE NV Order 5610.11A, Chapter I, requires the PAP reviewing official to publish the NV PAP certification lists monthly, or as required.

During the appraisal, the team reviewed NV PAP certification lists for calendar year 1995 and noted that between the May 3, 1995, NV memorandum of PAP certified personnel and the next revision to that list, dated June 5, 1995, DOE Oakland Operations Office (OAK) had sent an LLNL PAP certification list dated May 15, 1995, that removed an individual from the PAP and subsequently reinstated him by memorandum dated May 23, 1995. Both the May 3 and June 5, 1995, NV PAP certification lists retained the name of the LLNL employee as being continuously in the PAP program. The PAP reviewing official did not issue an up-to-date PAP certification list to reflect either the removal of that LLNL employee or his subsequent reinstatement.

The DOE Order 5610.11, Chapter I, requires managers of operations offices granting PAP certifications to establish procedures for developing and maintaining a current list of PAP certified DOE and contractor employees. The procedures must provide for both the prompt addition of the names of employees granted certification, and the prompt removal of the names of employees whose certifications have been revoked. The order further states that the purpose of the PAP certification lists is to provide an up-to-date ready reference of DOE and contractor employees who are PAP certified. The discrepancy between the NV and LLNL lists of PAP certified employees led the appraisal team to write an adverse finding--more fully described below as Finding 95-01--for noncompliance with DOE Order 5610.11, Chapter I, paragraph 7.a. and b.

Based on interviews with NV and LLNL test site personnel, the team determined that the process for ensuring that personnel performing nuclear explosive operations at NTS does not appear to be well defined or understood. The process appears to rely ultimately on the personal knowledge on the part of site supervisors of the current PAP status of the personnel in their organizations who are assigned to perform nuclear explosive activities, and not on a document control process that requires the maintenance of PAP certification list currency.

Chapter II - Training and Qualifying of DOE and DOE Contractor Employees for Assignment to Nuclear Explosive Duties

As was mentioned above, no NV Federal employee is assigned to nuclear explosive duties. Therefore, the provisions of this chapter with respect to establishing and maintaining a program to provide the special training required to qualify DOE employees for assignment to nuclear explosive duties do not apply to the operations office. The NV Order 5610.11A, Chapter II, specifies that DOE/NV contractors and test-site users must meet the requirements contained in both the DOE and NV orders, and that NV NESD will ensure compliance with the requirements through the appraisal process. The Headquarters appraisal team reviewed the reports of seven appraisals conducted in 1994 by NESD (EG&G/EM; WSI; REECO; LLNL at NTS and at Livermore, CA; and LANL at NTS and at Los Alamos, NM) and determined that NV had adequately evaluated compliance by NV contractors and test-site users with the requirements of Chapter II.

Chapter III - Two-Person Concept for Nuclear Explosive Operations

This chapter prescribes requirements to establish the two-person concept for operations with nuclear explosives. In addition to other criteria, persons eligible to implement the two-person concept must be in the DOE Personnel Assurance Program and assigned to nuclear explosive duties. Since no NV Federal employees meet either of these criteria, none participate in the implementation of the two-person concept at the test site. However, this chapter requires the Manager, NV, to establish the procedures for implementing the two-person concept at NTS. The Manager, NV, has delegated to LLNL and LANL the authority to evaluate their respective activities with regard to the applicability of the two-person concept and has required those labs, DOE/NV contractors, and other site users to develop written procedures to implement the concept when it is applicable. It is the responsibility of the responsible laboratory to ensure that the two-person concept is adhered to during applicable nuclear explosive activities. The NESD evaluated compliance with this requirement during appraisals of LANL, LLNL, REECO, EG&G/EM, and WSI conducted during 1994.

Chapter IV - NES Standards and General NES Rules

DOE Order 5610.11, Chapter IV, establishes nuclear explosive safety standards and general nuclear explosive safety rules that apply to all DOE nuclear explosive operations. The NV Order 5610.11A, Chapter IV, additionally specifies several supplemental NES rules applicable to nuclear explosive operations at NTS. The parent order also holds the Manager, NV, accountable for fully considering and implementing, as required, supplemental safety rules recommended by nuclear explosive safety studies or surveys to supplement the nuclear explosive safety standards and general nuclear explosive safety rules for specific operations with nuclear explosives; or to address specific characteristics of an individual design of a nuclear explosive, a specific test, or an operation.

By memorandum dated June 14, 1991, the then-Deputy Assistant Secretary for Military Application (DASMA) issued a clarification of the reader worker, and checkoff list procedure as articulated in DOE Order 5610.11, Paragraph 6.v. and Chapter IV, paragraph 3.d. After reviewing NV orders that supplement Headquarters direction with respect to the NES Program, the appraisal team determined that NV had not incorporated the revised reader-worker and checkoff list clarification, nor passed the clarification on to NV contractors or test site users. This deficiency is included as part of a broader adverse finding of noncompliance with DOE 5610.11, paragraph 8.d., described below as Finding 95-02.

Chapter V - Procedure for NES Studies and NES Surveys

Chapter V of DOE Order 5610.11, establishes the responsibilities, processes, procedures, and requirements for nuclear explosive safety studies and surveys. That order has been supplemented by nuclear explosive safety study interim guidance promulgated by DO-20 in a memorandum to Operations Office Managers dated February 22, 1994. NV Order 5610.11A, Chapter V, provides additional direction regarding the conduct of nuclear explosive safety studies and surveys.

The Manager, NV, appoints in writing the Chairman of each Nuclear Explosive Safety Study Group (NESSG) prior to the beginning of any nuclear explosive operation at the test site. The chairman requests the appointment of additional study group members and advisers in accordance with DOE 5610.11, Chapter V, paragraphs 3.a.(2), (3), and (4). Qualification and certification standards for membership on NV-chaired NESSGs is specified in paragraph 3.a.(5), modified by the interim guidance letter, paragraph B.2. and 3.

The appraisal team reviewed Chapter V of NV 5610.11A; discussed the NESSG process with an NESD nuclear explosive safety engineer (an experienced NESSG

chairman); and reviewed the document packages for the LLNL Assembly, Storage, and Transportation Master Study, and the Security Operations at the NTS Master Study.

The team determined that the studies had been properly performed in accordance with the established criteria. The team determined that the interim guidance of February 1994, had not been incorporated into the NV directives (NV 5610.11A), nor fully complied with. This deficiency is included as part of a broader adverse finding of noncompliance with DOE 5610.11, paragraph 8.d., described below as Finding 95-02. The team also determined, however, that failure to strictly comply with the revised guidance on NESSG member qualification and certification criteria did not jeopardize the results of any NV-chaired NESSs conducted since the interim guidance was promulgated, because of the high level of practical and technical experience of the members.

Chapter VI - Permanent Marking Instructions and Nuclear Explosive-Like Assembly Requirements

The Manager, Albuquerque Operations Office (AL), is responsible for establishing the technical criteria for permanent marking instructions for nuclear explosives and nonnuclear configurations and for establishing the technical criteria for nuclear explosive-like assembly (NELA) requirements. Those criteria are specified in AL Supplemental Directive 5610.11, Chapter VI, and invoked by NV 5610.11A for all operations at the test site involving NELAs.

Currently there are no NELAs at the NTS, nor have there been since the last Headquarters appraisal of NV. During annual appraisals, NESD ascertains the existence and evaluates the effectiveness of procedures and processes developed by NV contractors and test-site users to comply with established NELA requirements. The appraisal team verified that NESD had evaluated NV contractors and test-site users for compliance with Chapter VI requirements during annual appraisals performed during calendar year 1994.

Chapter VII - Control of Electrical Testers/Equipment

The Manager, NV is responsible for establishing requirements for the control of electrical testers and electrical equipment used in nuclear explosive areas. He has done so through the development of NV Directive 349, of November 1992, Electrical Tester Criteria, which has been subsequently incorporated into NV 5610.11A as Attachment 1. Any electrical device that can inject energy into a nuclear explosive must be controlled in accordance with the established criteria.

Although NV publishes lists of personnel who have been granted authority to introduce electrical energy sources into a nuclear explosive area, in accordance with the requirements contained in DOE 5610.11, Chapter VII, para. 2.b., the appraisal team noted that NV has not established and maintained a DOE record of approved electrical testers, as called for in DOE 5610.11, Chapter VII, para. 2.a.(6), notwithstanding that only one type of electrical tester is used at NTS during nuclear explosive operations, and that any tester to be used in a nuclear explosive operation is listed and described in detail in the applicable event NESS Report. This discrepancy was brought to the attention of the Director, NESD.

Chapter VIII - On-Site and Off-site Transportation of Nuclear Explosives

Off-site transportation of nuclear explosives is the responsibility of AL. A shipment is considered to be "off-site" until it reaches the NTS assembly area (currently Area 27, eventually to be replaced by the Device Assembly Facility) inbound in the Safe Secure Trailer (SST) or when it leaves the assembly area outbound. On-site transportation--that is, the movement of the device from the assembly area to the ground zero (GZ) location, or the removal of the device from the GZ location to the assembly area--is the responsibility of NV, as is the packaging of the device for transportation off the NTS. On-site transportation issues are reviewed and evaluated during the LANL and LLNL Assembly, Storage, and Transportation Master Studies (current study dated 10/1/93), and reviewed during each specific event study.

Chapter IX - Risk Assessment

DOE Order 5610.11, Chapter IX, requires that quantitative risk assessments be performed for all onsite operations, including transportation, and offsite transportation for credible accidents that could disperse plutonium from a nuclear explosive. The purpose of these risk assessments is to identify the probabilities of such occurrences and levels of consequences. The results of these risk assessments are to be documented in a report and submitted to the NESSG for evaluation.

By memorandum dated February 16, 1993, the then-DASMA promulgated a preliminary plan for full implementation of the Nuclear Explosive Risk Assessment (NERA) as required by Chapter IX of DOE 5610.11. That implementation plan called for the completion of three NTS Master Studies: Arming and Firing/Timing and Control (scheduled completion: 8/93); Assembly, Disassembly, Staging, and Onsite Transportation (3/94); and Insertion, Installation, and Emplacement (12/94). By memorandum of February 22, 1994, Nuclear Explosive Safety Study Interim Guidance, DASMSS deferred full compliance with the requirements of DOE 5610.11, Chapter IX, until January 1, 1996. Until then, formal, systematic qualitative safety analyses

containing a full characterization of the proposed operation or system and evaluation of the response to that operation or system to abnormal environments is required for input to the NESSG.

During discussion of the implementation of NERA at NV, the NESD Nuclear Explosive Safety Engineer stated that NV was performing risk assessments to comply with the interim guidance (which permits a qualitative assessment, rather than the more stringent quantitative assessments required by Chapter IX), but that they had also performed an LLNL Arming and Firing/Timing and Control Risk Assessment in accordance with Chapter IX of the order, using DOE-STD-3009-94 methodologies. They plan to perform an Interim Guidance Risk Assessment of the Device Assembly Facility (DAF), but could perform a full Chapter IX risk assessment of the DAF if required to do so.

Chapter X - Requirements for Nuclear Explosive Occurrence Reporting

Department of Energy Order 5610.11 establishes a reporting requirement for nuclear explosive occurrences. The Chapter on nuclear explosive occurrence reports (NEOR) was rewritten to explain roles and responsibilities unique to the Nuclear Explosive and Weapon Safety Program, and issued to Managers of Operations Offices as Interim Policy for Nuclear Explosive Occurrence Reports by memorandum on August 21, 1992, from DASMA for immediate implementation.

The nuclear explosive occurrence reporting system is intended to ensure identification, categorization, notification, and reporting to DOE and contractor management of all reportable occurrences; to ensure that reportable occurrences are analyzed for the purpose of taking corrective actions to prevent the repetition of similar events that could degrade nuclear explosive safety; to identify any trends in occurrences; and to assure standardization of reporting. Occurrence report format and followup reporting is to be in accordance with requirements specified in DOE 5000.3A (now .3B); OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION.

Although NV has a written procedure for generating Nuclear Explosive Occurrence Reports (NEOR) in NV 5000.3B, the procedure fails to include or reference the unique notification requirements contained in the DASMA Interim Policy of 1992. This omission precludes, among other things, the required verbal notification to be made to DASMA (now DASMSS) and the subsequent involvement by DASMSS staff.

This lack of compliance with DASMSS policy was also found to exist in the notification procedure used in the Nevada Occurrence Reporting System Operations Center (NORSOC). Discussion by the appraisal team with a Program Analyst in the Emergency Management Division (EMD) at NV, and review of a memorandum dated March 4, 1994, from the then-Director of NESD (since retired)

to the Director, NV/EMD, entitled REVISION OF NV ORDER 5000.3B, ATTACHMENT I, "NUCLEAR EXPLOSIVE OCCURRENCE REPORTING," disclosed that the guidance provided by NESD to EMD did not appear to acknowledge that the interim guidance had superseded DOE 5610.11, Chapter X in its entirety, nor did the suggested enclosure to NV 5000.3B, Attachment 1 fully implement the interim policy.

The team determined that the Interim Policy of August 1992, had not been incorporated into NV guidance and, therefore, not complied with. This deficiency is included as part of a broader adverse finding of noncompliance with DOE 5610.11, paragraph 8.d., described below as Finding 95-02.

Chapter XI - Requirements for NES Program Appraisals

The Manager, NV, is responsible for conducting appraisals of activities under ng corrective actions are taken as required. The delegated authority to perform NES Program appraisals test site users in accordance with requirements 10.11, Chapter XI, supplemented by the additional 5610.11A.

plosive safety appraisals of LANL, LLNL, EG&G/EM, WSI, and NERD NES program implementation at the NTS during calendar year 1994. In addition, NESD performed special appraisals at Los Alamos, NM, and Livermore, CA, of the laboratories' compliance with DOE 5610.1 PACKAGING AND TRANSPORTATION OF NUCLEAR EXPLOSIVES, NUCLEAR COMPONENTS, AND SPECIAL ASSEMBLIES. (This Order has subsequently been canceled and superseded by DOE Order 5610.12, PACKAGING AND OFFSITE TRANSPORTATION OF NUCLEAR COMPONENTS, AND SPECIAL NUCLEAR ASSEMBLIES ASSOCIATED WITH THE NUCLEAR EXPLOSIVE AND WEAPON SAFETY PROGRAM, which requires full implementation by July 1995.) In discussions with the Director, NESD, he indicated that no appraisals had been performed in 1995 and none were scheduled.

The Headquarters appraisal team reviewed records of the seven appraisals conducted by NESD during 1994 and identified three areas of concern:

- 1) The special appraisal of LLNL conducted August 2-4, 1994, identified a noncompliance with the provisions of NV 5610.1 to provide a documented training program covering DOE and NV Orders 5610.1. However, the noncompliance was not identified in the report as requiring any action by LLNL management, nor was any corrective action requested or provided. During the special appraisal of LANL, conducted May 3-4, 1994, a similar noncompliance was identified, a finding written, and corrective action initiated:

- 2) Some appraisal reports were not issued promptly following completion of the appraisals. In the case of the LANL Special Appraisal conducted in May 1994, the report was not issued until December 1994. (This is the third

Headquarters appraisal finding addressing the timely issuance of appraisal reports.) In addition, corrective actions were to have been completed by LANL in March, April, and May 1995. There is no evidence that these milestone dates have been met, nor is there evidence that NV has taken any action to establish new dates for the completion of the agreed-upon corrective action; and 3) It could not be determined from the appraisal records that all requirements of DOE Order 5610.11 applicable to contractor activities had been implemented. As an example, the reports from REECO and WSI did not indicate that the requirement that PAP personnel be given an annual random drug test had been evaluated by the NESD appraisal team. During the annual appraisal of EG&G, the report indicated that drug testing had been verified.

Based on the foregoing, the Headquarters appraisal team concluded that NV had not fully implemented an effective program to identify and correct nuclear explosive safety problems. This deficiency is noted below as Finding 95-03.

DOE Order 5610.12 - Packaging and Offsite Transportation of Nuclear Components, and Special Assemblies Associated with the Nuclear Explosive and Weapon Safety Program

The DOE Order establishes policy, requirements, objectives, authorities, procedures, and responsibilities for the safe packaging and offsite transportation of nuclear components, and special assemblies associated with the nuclear weapons program requiring the use of the Transportation Safeguards System. As was mentioned above under the discussion of Chapter VIII, NV is responsible only for on-site transportation of nuclear explosives--that is, between the assembly area and the GZ location--and packaging of nuclear explosives for off-site transportation. The NV has delegated to NV contractors and test site users the authority to comply with the applicable requirements specified in DOE Order 5610.12, and has supplemented those requirements with additional direction contained in NV 5610.12 of 5-4-95. The Operations Office oversees compliance with the requirements through the appraisal process. (Compliance by LANL and LLNL with requirements contained in the previous DOE order on transportation and packaging, DOE 5610.1, was verified by NESD during two special appraisals performed in 1994. That DOE order has been superseded by DOE 5610.12, which has been supplemented by NV Order 5610.12.) There were no nuclear components or special assemblies requiring packaging for off-site transportation during the period covered by this appraisal.

CONCLUSION:

The DASMSS NES appraisal of the NV resulted in three findings:

Finding 95-01: NV has not fully and effectively implemented all of the provisions of DOE Order 5610.11, Chapter I, Personnel Assurance Program. The NV PAP does not ensure the prompt addition of the names of employees granted certification (as required by paragraph 7.a.(1)), or the prompt removal of the names of employees whose certifications have been revoked (as required by paragraph 7.a.(2)); therefore, the NV PAP certification lists do not provide an up-to-date ready reference of DOE and contractor employees (as required by paragraph 7.b.).

Finding 95-02: NV has not fully complied with DOE Order 5610.11, paragraph 8.d. (which holds managers of field (now operations) offices responsible to DASMSS for implementing the provisions of that order and related safety orders in their respective areas of authority and responsibility) by failing to incorporate and implement several memorandums, promulgated by DASMSS and his predecessors, into NV policy, guidance, and requirements documents. Specifically, these DASMSS memorandums include Clarification of the Reader-Worker and Checkoff List Procedure, dated June 14, 1991; Interim Policy for Nuclear Explosive Occurrence Reports, dated August 21, 1992; and Nuclear Explosive Safety Study Interim Guidance, dated February 22, 1994.

Finding 95-03: NV has not fully and effectively implemented a program to identify and correct nuclear explosive safety problems, as specified in DOE Order 5610.11, paragraph 8.d.(9).

APPENDIX A

APPRAISAL TEAM:

T. E. Dunn	DP-21, Team Leader
J. H. Yeager	DP-21, Team Member
M. B. McLean	DP-21, Team Member
S. M. Schreiber	DP-21, Team Member
N. A. Patel	DP-22, Team Member

ATTENDANCE LIST: ENTRANCE MEETING:

J. Fiore	NV, Acting Deputy Manager
G. Allen	NV, Acting Assistant Manager for Operations
T. Hunsaker	NV, Director, Nuclear Explosive Safety Division
P. Luetze	NV, NESD
H. Dutton	NV, NESD
J. Owens	NV, NESD
H. Robinson	NV, NESD
T. E. Dunn	DP-21, Team Leader
J. H. Yeager	DP-21, Team Member
M. B. McLean	DP-21, Team Member
S. M. Schreiber	DP-21, Team Member
N. A. Patel	DP-22, Team Member

ATTENDANCE LIST: EXIT MEETING:

J. Fiore	NV, Acting Deputy Manager
G. Allen	NV, Acting AMO
T. Hunsaker	NV, Director, NESD
P. Luetze	NV, NESD
J. Owens	NV, NESD
E. Hanson	Raytheon Services Nevada
D. L. McConagha	DP-21, Director, Office of Weapons Surety
T. E. Dunn	DP-21, Team Leader
J. H. Yeager	DP-21, Team Member
M. B. McLean	DP-21, Team Member
S. M. Schreiber	DP-21, Team Member
N. A. Patel	DP-22, Team Member

ADDITIONAL PERSONNEL INTERVIEWED DURING THE APPRAISAL:

D. Binder	NV, Emergency Management Division
J. Jacobs	PAI, Emergency Operations Manager
L. Loquist	LLNL, Mercury, NV
L. Rountree	LLNL, Livermore, CA