



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

January 10, 2008

Lt. Col. Scott Nichelson
Department of the Air Force
USAF Radioisotope Committee
HQ AFMOA/SG3PR
110 Luke Ave., Suite 405
Bolling AFB, DC 20032-7050

SUBJECT: NRC INSPECTION REPORT NO.: 30-28641/2007004 AND NOTICE OF VIOLATION

Dear Lt. Col. Nichelson:

This letter refers to a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on September 25, 2007, at the Tonopah Test and Training Range, Tonopah, Nevada. This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your NRC license. Within these areas, activities authorized under the U.S. Air Force (USAF) Permit Number NV-00516-01/00AFP were reviewed, with a focus on selected procedures and representative records, security and control of license material, observations of activities and interviews of personnel. The preliminary inspection findings were discussed with Lt. Col. Brian Kieffer, Commander, 98th Northern Range Support Squadron, at the conclusion of the onsite portion of the inspection. The inspection results were discussed with you during a final telephonic exit briefing conducted on December 11, 2007.

Based on the results of this inspection, the NRC has determined that two Severity Level IV violations of NRC requirements occurred. These violations were evaluated in accordance with the NRC Enforcement Policy included on the NRC Web site at www.nrc.gov; select **Public Meeting and Involvement, Enforcement**, then **Enforcement Policy**. These violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in the subject inspection report. The violations are being cited in the enclosed Notice because they were identified by the NRC during the inspection, rather than being self-identified by the licensee.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. For your consideration and convenience, an excerpt from NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," is enclosed. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

/RA/

Jack E. Whitten, Chief
Nuclear Materials Safety Branch B

Docket No.: 030-28641
License No.: 42-23539-01AF

Enclosures:

- 1) Notice of Violation
- 2) Inspection Report No. 030-28641/2007004
w/Attachment

bcc w/Enclosure 1 (via ADAMS distrib):
LDWert
CLCain
JEWhitten
VHCampbell
JEWhitten
RSBrowder
JFKatanic
RKStruckmeyer, FSME/DMSSA/SAISB (rks@nrc.gov)
RITS Coordinator
NMSB-B
ACES

SUNSI Review Completed: ADAMS: X Yes Initials: RSB
 X Publicly Available X Non-Sensitive

Doc. Name: S:\DNMS\USAF\2007 insp\USAF Tonapah NOV -07004.doc

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RSBrowder	JFKatanic	JEWhitten	
/RA/	/RA via e-mail dtd/	/RA/	
12/20/07	12/21/07	01/09/08	

OFFICIAL RECORD COPY

NOTICE OF VIOLATION

Department of the Air Force
USAF Radioisotope Committee

Docket No. 030-28641
License No. 42-23539-01AF

During an NRC inspection conducted on September 25, 2007, at the Tonopah Test and Training Range, Nellis Air Force Base (AFB), Nevada, USAF Permit No. NV-00516-01/00AFP, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below.

- A. 10 CFR 71.5(a) requires that a licensee who transports licensed material outside of the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 107, 171-180, and 390-397.

49 CFR 172.200 requires, in part, that each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by 49 CFR Part 172, Subpart C.

49 CFR 172.201(d) requires that a shipping paper contain an emergency response telephone number, as prescribed in subpart G of 49 CFR Part 172.

49 CFR 172.202(a) requires, in part, that the shipping description of a hazardous material on the shipping paper include: (1) the proper shipping name prescribed for the material in column 2 of the table in 49 CFR 172.101 and (2) the identification number prescribed for the material as shown in column 4 of the table in 49 CFR 172.101.

49 CFR 172.203(d)(3) requires that the description for a shipment of Class 7 (radioactive) material must include the activity contained in each package of the shipment in terms of the appropriate SI units (e.g. Becquerels (Bq), etc.). The activity may also be stated in the appropriate customary units (e.g. Curies (Ci), etc.) in parenthesis following the SI units.

49 CFR 172.203(d)(5) requires that the description for a shipment of Class 7 (radioactive) material must include the transport index as assigned to each package in the shipment bearing RADIOACTIVE YELLOW-II or RADIOACTIVE YELLOW-III labels. Pursuant to 49 CFR 173.403, transport index (TI) means the dimensionless number (rounded up to the next tenth) placed on the label of a package, to designate the degree of control to be exercised by the carrier during transportation.

49 CFR 172.204(a) requires, in part, that each person who offers a hazardous material for transportation shall certify that the material is offered for transportation in accordance with 49 CFR Subpart C by printing (manually or mechanically) on the shipping paper containing the required shipping description the certification contained in 49 CFR 172.204(a)(1) or the certification containing the language in 49 CFR 172.204(a)(2).

Contrary to the above, on July 13, 2007, Tonopah Test and Training Range Technology transported licensed material outside the site of usage (as specified on the permit) and where transport was on public highways, and the shipping paper that accompanied the shipment did not meet the regulatory requirements as described in 49 CFR Part 172, Subpart C, as discussed below.

- a. The shipping paper did not contain an emergency response telephone number as required by 49 CFR 172.201(d).
- b. The shipping paper indicated that the proper shipping name and identification number was "Radioactive Material, Special Form, 7, N.O.S., UN2974." However, as required by 49 CFR 172.202(a), the proper shipping name and identification number should have been "Radioactive material, Type A package, special form, UN3332."
- c. The shipping paper did not include the activity contained in each package of the shipment in terms of the appropriate SI units (e.g., Becquerels), or in terms of appropriate SI units followed by customary units (e.g., millicuries), as required by 49 CFR 172.203(d)(3).
- d. The shipping paper did not include the correct transport index for each package in the shipment, as required by 49 CFR 172.203(d)(5). Specifically, the licensee shipped two packages of Class 7 (radioactive) material bearing RADIOACTIVE YELLOW-II labels, in which one package indicated a transport index of 108 microR/hour and the second package indicated a transport index of 97 microR/hour. However, the correct transport index for each package should have been 0.4 (dimensionless).
- e. The shipper's certification that was used stated "This package conforms to the conditions and limitations as specified in 49 CFR 173.421 for radioactive material, excepted package-limited quantity of material, UN2974." This shipper's certification was not appropriate for the shipment and is inconsistent with the certification language contained in 49 CFR 172.204(a)(1) or §172.204(a)(2).

This is a Severity Level IV violation (Supplement V)

- B. 10 CFR 71.5(a) requires that a licensee who transports licensed material outside of the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 107, 171-180, and 390-397.

49 CFR 172.702(a) requires, in part, that a HAZMAT employer shall ensure that each of its HAZMAT employees is trained in accordance with the requirements prescribed in 49 CFR Subpart H.

49 CFR 172.704(c)(2) requires, in part, that a HAZMAT employee shall receive the training required by 49 CFR Subpart H at least once every three years.

Pursuant to 49 CFR 171.8, HAZMAT employee is defined, as a person who is employed on a full-time, part-time, or temporary basis by a HAZMAT employer and who in the course of such employment directly affects hazardous materials transportation.

Contrary to the above, at least one of the licensee's HAZMAT employees did not receive the training required by 49 CFR Subpart H at least once every three years. Specifically, on July 13, 2007, a HAZMAT employee of the licensee transported licensed material outside the site of usage (as specified in the permit), and where transport was on public highways. This individual had not received the training required by 49 CFR Subpart H at least once during the three years prior to July 13, 2007. Though the individual had participated in training regarding transportation, this training did not meet the requirements of 49 CFR Subpart H.

This is a Severity Level IV violation (Supplement V)

Pursuant to the provisions of 10 CFR 2.201, the Department of the Air Force, Radioisotope Committee is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region IV.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at www.nrc.gov/reading-rm/pdr.html www.nrc.gov/reading-rm/adams.html to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the

information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated this 10th day of January 2008.

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 030-28641
License No.: 42-23539-01AF
Report No.: 030-28641/2007004
Licensee: Department of the Air Force
USAF Radioisotope Committee
Permit Holder: 98th Mission Support Group
Permit No.: NV-00516-01/00AFP
Location: Tonapah Test and Training Range
Nellis Air Force Base
Dates: September 25, 2007
Inspector: Janine F. Katanic, Ph.D., Health Physicist
Region IV
Approved By: Jack E. Whitten, Chief
Nuclear Materials Safety Branch B
Attachment: Supplemental Inspection Information

EXECUTIVE SUMMARY

Department of the Air Force
NRC Inspection Report 030-28641/2007003

A routine announced inspection was conducted at Tonapah Test and Training Range, Nellis Air Force Base (AFB), Permit Number NV-00516-01/00AFP, as authorized by the USAF Master Materials License No. 42-23539-01AF. The inspection was performed using Inspection Procedure IP 87124, "Fixed and Portable Gauge Programs" and focused on security and control of radioactive materials, transportation of radioactive materials, radiation instrumentation and surveys, and management oversight.

Report Details

Summary of Facility

The permit authorized the use of CPN Model MC Series portable moisture density gauges and the permittee possessed two portable density gauges. There was one non-commissioned officer and two civilians who were routine gauge users. The portable density gauges were used on the Tonapah Test and Training Range, which includes Tolicha Peak and the Northern Ranges of Nellis AFB, Nevada. These areas covered over 1 million acres of land.

1. Portable Gauge Program (87124)

1.1 Inspection Scope

The physical security and control of radioactive materials, transportation, radiation instrumentation and surveys, and management oversight were reviewed to verify that licensed activities were being conducted in a manner protective of health and safety of the workers and the general public. Additionally, the permitted program, was inspected to verify compliance with the NRC regulations, conditions of the USAF permit, and provisions of the USAF License No. 42-23539-01AF. The NRC assessment was performed based on observation of ongoing activities, interviews with personnel, and review of associated records.

1.2 Observations and Findings

The inspector observed that the portable density gauges were stored in a locked storage room at the permitted facility. The physical security of the gauges adequately met the requirements in 10 CFR 30.34(i) for two independent physical controls. The permittee demonstrated how the gauge was secured on the pickup truck and the inspector observed how the gauges were transported on the ranges. The inspector discussed with the permittee how the demonstration did not adequately meet the requirements in 10 CFR 30.34(i) for two independent physical controls. However, since the actual transport of gauges was not observed by the inspector, the potential violation of 10 CFR 30.34(i) was not cited in this inspection report. The permittee is encouraged to utilize the guidance provided in the Appendix H Errata for NUREG 1556, Volume 1, Revision 1, "Program Specific Guidance about Portable Gauge Licenses" to ensure the transportation of gauges satisfactorily meets the requirements of the regulations.

Once or twice a year, the gauge users transported the gauges by public roads and highways to a warehouse in the vicinity of Las Vegas, Nevada. The gauges were subsequently shipped from the warehouse to a service provider licensee for calibration. The inspector reviewed the documentation for the most recent transportation shipment, which was conducted on July 13, 2007. The inspector's review of the shipping papers identified violations involving U.S. Department of Transportation regulations in 49 CFR 172.200. This regulations requires, in part, that each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by 49 CFR Part 172, Subpart C. This was identified as a violation of NRC requirements **Violation (VIO) 03028641/2007003-01**. Five examples of this violation were identified and are described in the subject Notice of Violation (Notice). Additionally, the same shipment was offered for transport by an individual who did not meet the HAZMAT training requirements as required by 49 CFR 172.704(c)(2), which is a violation of NRC requirements **Violation (VIO) 03028641/2007003-02**. These violations are documented in the enclosed Notice.

The permittee possessed an ADM-300 geiger-mueller survey instrument; however, the instrument was being calibrated at the time of the inspection and was not available. A back-up survey instrument was provided from Nellis AFB. However, the inspector observed there were no batteries available for the back-up survey instrument. Since the Tonapah Test and Training Range is in a remote location and covers well over a million acres, the inspector suggested to the permittee that they should maintain back up batteries for the available instrumentation prior to deploying the portable density gauge to the field. Therefore, an operable survey instrument would be available in the event the permittee had to respond to an emergency event.

The inspector reviewed the permittee's operating, emergency, and physical security procedures. The procedures were found to provide adequate information; however the procedures did not address relevant changes to the regulatory requirements and did not reflect current contact numbers for emergency response. The inspector discussed the areas of the procedures that required updates with the permittee's staff.

1.3 Conclusions

Two violations were identified during the inspection. These violations related to the U.S. Department of Transportation regulations in which the description of the hazardous material on the shipping papers did not meet the regulatory requirements in 49 CFR Part 172, Subpart C, and the HAZMAT training requirements were not implemented as required by 49 CFR 172.704(c)(2).

2. Exit Meeting Summary

On September 25, 2007, the inspector presented the preliminary inspection results to Lt. Col. Brian Kieffer and other members of the Northern Range Support Squadron. A final exit briefing was held telephonically with the USAF RIC on December 11, 2007, to discuss the findings of this inspection.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Lt. Col. Brian Kieffer, Commander, 98th Northern Range Support Squadron
Maj Craig Refosco, Commander, Bioenvironmental Engineering Flight
MSgt Jeremy Pease, Authorized User and proposed permit Radiation Safety Officer

INSPECTION PROCEDURE USED

IP 87124, Fixed and Portable Gauge Programs

ITEMS OPENED, CLOSED OR DISCUSSED

Opened

03028641/2007004-01	SLIV	Failure to describe the hazardous materials on the shipping papers
03028641/2007004-02	SLIV	Failure to implement HAZMAT refresher training Requirements

Closed

None

Discussed

None

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
Notice	Notice of Violation
RIC	Radioisotope Committee
VIO	Violation