

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 30-28641/86-01

License: 42-23539-01AF

Docket: 30-28641

Category: B - 1

Licensee: Department of the Air Force
USAF Radioisotope Committee
Brooks Air Force Base, Texas 78235-5000

Inspection At: Brooks Air Force Base, Texas

Inspection Conducted: August 19-20, 1986

Inspector:

C. L. Cain
C. L. Cain, Radiation Specialist

9/3/86
Date

Approved:

R. J. Everett, Chief
R. J. Everett, Chief
Nuclear Materials Safety Section

9/3/86
Date

Inspection Summary

Inspection Conducted August 19-20, 1986 (Report 30-28641)

Areas Inspected: Routine, announced inspection of activities associated with the Air Force broad license including summarization of NRC inspections conducted within the past year, review of licensee's internal inspection program, review of the licensee's system of issuing permits to users, and summarization of licensee event reports.

Results: Within the four areas inspected, no violations or deviations were identified. (Several violations have been reported to the licensee after NRC inspections at various Air Force bases during the preceding 12 months. These have been reported to the licensee by correspondence issued subsequent to each inspection.)

DETAILS

1. Persons Contacted

U.S. Air Force

Colonel Harold W. Grinstaff
Lieutenant Colonel John G. Burr
Major James H. Dunlap
Captain Lawrence Donovan

NRC Attendees

V. L. Miller, Chief, Materials Licensing Branch, NMSS
R. J. Everett, Chief, Nuclear Materials Safety Section, Region IV
F. A. St. Mary, Materials Licensing Branch, NMSS

All of those identified above were present at the exit briefing.

2. Purpose and Scope of Inspection

The inspection was conducted in order to review the activities associated with the Air Force Broad license since its issuance on June 26, 1985, and to summarize the results of NRC inspections conducted within the past year.

3. Findings in Regard to NRC Inspections of Air Force Permittees

NRC conducted inspections of ten licensee permittees during the interval since the broad license was issued in June 1985. These are listed in the Appendix of this report. Only the higher inspection priority permittees were selected for inspection. One inspection resulted in the issuance of a Notice of Violation with three violations. The findings of two other inspections were reported to Brooks Air Force Base (AFB) by means of NRC Form 591 listing violations. No violations were identified in regard to the remaining seven inspections.

Licensee response to the Notice of Violation issued on July 18, 1986, as a result of an NRC inspection performed at Holloman AFB on June 3, 1986, was still pending at the time of this inspection. The licensee stated that followup Air Force inspections are planned in conjunction with possible permit amendments to correct the conditions reported by NRC.

4. Air Force Internal Inspections

During the past year, the Air Force Inspector General (IG) headquartered at Norton AFB, California, has conducted approximately 33 inspections of domestic permittees using licensed material at 17 bases. Most of these inspections have been of low inspection priority permittees such as those using calibration sources, nuclear gauges, and laboratory instrumentation.

The NRC inspector identified seven inspections that had been conducted of permittees that would have been categorized as Priority 3 or higher (as defined in I&E Manual Chapter 2800).

The NRC inspector reviewed examples of IG inspection reports on file at Brooks AFB focusing especially upon those relating to the higher priority permittees. The reports were summarized on copies of Air Force Form AFISC 283. One typical report of the inspection of a radiography permittee was noted to be little more than one page in length; thus, the Radioisotope Committee at Brooks AFB has not received detailed reports or checklists in regard to the inspections. The licensee agreed that improved communication of inspection results from the IG to the Committee should be affected. This issue will be tracked as an open item (30-28641/86-01/01).

The licensee stated that their goal was to inspect all permittees every 24 to 30 months; however, the NRC inspector noted that unless the rate of permittee inspections is increased, inspection of all of the approximately 200 domestic permittees using NRC licensed material will not be possible in the time planned. This issue will also be tracked as an open item (30-28641/86-01/02).

5. Review of System of Permits

The NRC inspector reviewed permits issued by the Air Force, copies of which have been sent to the Region IV office throughout the year. The permits were noted to be technically sound and equivalent in style to NRC licenses. The Radioisotope Committee had notified all permittees of the change in the method of administering licensed material at the advent of the issuance of the NRC broad license. Also, permittees were notified that their NRC licenses were being terminated but would continue to serve as temporary permits until replacement Air Force permit documents were issued.

The licensee was noted to have issued a large number of replacement permit documents during the past year and was well in sight of the goal of completing this effort as permits are renewed over the next 2 years. The licensee stated that some of the permits would be consolidated if they controlled material at the same base.

A review of the licensee files revealed that records were well organized and that various form letters were in use, such as notices of expiration and timely renewal letters. Generic permits (termed "glossaries") had been created and were available for use.

Permits have been issued not only to Air Force users, but also to private firms performing work on bases under reciprocity with their Agreement State licenses. The licensee stated, however, that this system had become cumbersome and likely would not be continued, since in many instances the authorized work has been completed within several days. The proposed changes to the program will still require verification of submittal of Form NRC 241 to the applicable NRC regional office.

The licensee also stated that pre-permitting visits had been performed on six occasions. The NRC inspector reviewed one of the reports in detail.

6. Licensee Event Reports

a. Leaking Sources

The licensee reported a number of leaking sources during the past year most of which were ion chamber sources installed in toxic gas analyzers in Titan missile silos. The exposure of the sources to corrosive gases for 10 to 15 years has been the cause of the leakage. The licensee stated that since use of the Titans is being phased out, the sources are gradually being removed from service and sent to Amersham for disposal. Only one Titan base remains to be closed. The few analyzers still in service will continue to be leak tested at 6-month intervals.

b. Teletherapy Program Overseen by Unqualified Individual

The licensee had previously reported that before the broad license was issued, an unqualified individual had been found to be serving as the "qualified expert," as defined in 10 CFR 35.24, for the teletherapy program at Malcolm Grow Medical Center at Andrews AFB, Maryland.

The licensee stated that the subject permit had been amended on May 22, 1986, to authorize storage only and was now under the control of the Radiation Safety Officer for the nuclear medicine permit at the same location. The unqualified individual has been reassigned to a different function.

c. Diagnostic Misadministrations

The NRC inspector reviewed two reports of diagnostic misadministrations associated with nuclear medicine permittees at the Air Force Academy, Colorado, and at Wright-Patterson AFB, Ohio. Both were submitted in accordance with 10 CFR 35.43.

7. Exit Briefing

The NRC inspector met with the individuals identified in Section 1 on August 20, 1986, and summarized the findings of the inspection. No violations or deviations were identified.

APPENDIX

LISTING OF AIR FORCE INSPECTIONS FOR FY 1986

Region I None

Region II

Tyndall AFB, Florida Permit 09-15149-1AFP
Inspection conducted April 22, 1986
No violations identified

Keesler AFB, Mississippi Permit 23-01002-2AFP
Inspection conducted July 23, 1986
No violations identified

Region III

Newark AFS, Ohio Permits 34-09220-1AFP and SNM-1184AFP
Inspection conducted June 30 & July 11, 1986
No violations identified; one item of concern

Region IV

Kirtland AFB, New Mexico Permit 30-03110-3AFP
Special inspection conducted August 12, 1985
No violations identified

Holloman AFB, New Mexico Permit 30-19133-1AFP
Inspection conducted June 3, 1986
Notice of Violation issued with 3 violations

Kelly AFB, Texas Permit SNM-1927AFP
Inspection conducted July 29, 1986
No violations identified

Region V

Nellis AFB, Nevada Permit 27-23354-1AFP
Inspection conducted January 16, 1986
No violations identified

Travis AFB, California Permit 04-07840-1AFP
Inspection conducted April 15-16, 1986
NRC Form 591 issued with 2 violations

Elmendorf AFB, Alaska Permit 50-01810-3AFP
Inspection conducted June 19-20, 1986
NRC Form 591 issued with 3 violations