



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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December 8, 2008

Department of the Air Force
USAF Radioisotope Committee
HQ AFMSA/SG3PB
1400 Key Blvd., Nash Bldg., Suite 400
Rosslyn, Virginia 22209-1554

SUBJECT: NRC INSPECTION REPORT 030-28641/2008-002

Dear Lt. Col. Adams:

This letter refers to the announced U.S. Nuclear Regulatory Commission (NRC) team inspection conducted on October 20-24, 2008. The purpose of the inspection was to review the activities authorized under the Department of the Air Force, USAF Radioisotope Committee (RIC) Master Materials License (MML). At the conclusion of the inspection on October 24, 2008, the NRC findings were discussed with Col. Robert Todaro, USAF RIC Chair; Lt. Col. Craig Adams, RIC Secretariat; Col. Jack Jeter, Chief, Bioenvironmental Engineering Division, and other members of the RIC staff.

The inspection consisted of an examination of activities conducted under the USAF RIC's MML license as the activities relate to safety and compliance with the Commission's rules and regulations and with the conditions of the MML. Areas which were examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities in progress, and interviews with personnel. The NRC determined that, overall, the USAF RIC implemented its MML in accordance with NRC licensing and inspection policies and procedures and in a manner that protects public health and safety and security.

No violations of NRC requirements were identified during the course of this inspection.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this inspection, please contact Ms. Rachel S. Browder at (817) 276-6552 or the undersigned at (817) 860-8197.

Sincerely,

/RA/

Jack E. Whitten, Chief
Nuclear Materials Safety Branch B

Docket: 030-28641

License: 42-23539-01AF

Enclosure: NRC Inspection Report 030-28641/2008-002

Attachment 1: Supplemental Inspection Information

Attachment 2: Permitting Casework Review

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RIV Materials Docket File - 5th floor

SUNSI Review Completed: RSB

ADAMS: Yes Initials: RSB
 Publicly Available Non-Sensitive

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Final R:_DNMS\USAF\USAF Biennial 2008 IR 08-02.doc

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| 12/3/08 | 12/4/08 | 12/4/08 | 12/8/08 | |

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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

INSPECTION REPORT

Docket: 030-28641

License: 42-23539-01AF

Report: 030-28641/2008-002

Licensee: Department of the Air Force
USAF Radioisotope Committee

Location: Rosslyn, Virginia

Inspection Dates: October 20-24, 2008

Inspectors: Rachel S. Browder, Sr. Health Physicist and Project Manager for
Air Force Master Materials License (MML)
Region IV

Jackie D. Cook, Sr. Health Physicist
Region IV

Kenneth J. Lambert, Sr. Health Physicist
Region III

Approved By: Jack E. Whitten, Chief
Nuclear Materials Safety Branch B
Division of Nuclear Materials Safety
Region IV

Attachment 1: Supplemental Inspection Information

Attachment 2: Permitting Casework Review

EXECUTIVE SUMMARY

Department of the Air Force
USAF Radioisotope Committee
NRC Inspection Report 030-28641/2008-002

This announced NRC team inspection was conducted to evaluate the U.S. Air Force (USAF) Radioisotope Committee (RIC) implementation and administration of activities conducted under the provisions of the Master Materials License (MML). The inspection included an assessment of the USAF RIC's quarterly meetings, management oversight of the radiation safety and regulatory compliance program, a sample review of the completed permitting actions, an evaluation of the RIC's allegation response program, an evaluation of the adequacy of the RIC's technical staffing and training, and a review of the Air Force Inspection Agency's (AFIA's) inspections of permitted facilities.

Licensed activities conducted by the USAF RIC during the period of October 2006 through October 20, 2008, were reviewed during this inspection. Through interviews and discussions with RIC staff, an evaluation of the USAF's response to an NRC questionnaire, reviews of documents related to MML activities, and observations of RIC staff in the performance of their duties, the NRC inspection team concluded that, overall, the USAF RIC's permitting and inspection programs were implemented in a manner that protected the health and safety of workers and the general public. The program areas assessed during this team inspection are summarized below:

Management Oversight

The inspection team determined that there was effective management oversight of radioactive materials in the USAF that was sufficient to ensure activities were in place to protect the health and safety of workers and the general public. The RIC staff had implemented a centralized radiation safety program that executed its responsibility as required by the MML license commitments and associated Letter of Understanding and throughout the 2-year inspection period had attempted to consistently improve processes and communications with the permitted facilities.

Technical Staffing and Training

The RIC staff was qualified to perform the regulatory duties of a master materials licensee. The AFIA inspector was qualified to conduct safety and security inspections and the RIC staff had accompanied the inspector at least once during the rating period. However, the inspectors noted that the RIC did not have a formalized process to conduct and document inspection accompaniments of the AFIA inspector. The RIC staff was developing qualification journals to document both formal and on-the-job training for the action officers and permit inspectors. The inspection team concluded that the RIC had successfully achieved a balance in implementing an effective program as it utilized AFIA for its inspection program and selected high caliber and qualified personnel for the RIC staff positions.

Internal Audits and Self Assessments

The audits of the permitting process were comprehensive and identified deficiencies in the permitting process. The inspectors noted that the RIC staff had implemented appropriate corrective actions to modify the permits in accordance with the audit recommendations.

Status and Technical Quality of Inspections

The NRC inspection team concluded that the licensee's inspection program was conducted in a manner that was compatible with NRC inspection policies, procedures, and guidelines. The team also concluded that the AFIA inspector was properly prepared for inspections and conducted inspections in a manner that was consistent with NRC policies and procedures.

Status and Technical Quality of Materials Permitting Program

The inspection team concluded that the USAF RIC staff processed permitting actions in a manner consistent with NRC licensing policies, procedures, and guidance. In addition, the RIC staff conducted quality technical reviews that were based on sound health physics practices and were well documented.

Status of Allegations Program

The NRC inspection team determined that the licensee's established program for responding to allegations was in compliance with the license conditions of the MML and applicable NRC regulations and was being implemented effectively. The RIC had not received any allegations since the last inspection.

Report Details

1 Program Overview

The Department of the Air Force, U.S. Air Force (USAF) Radioisotope Committee (RIC) is authorized under NRC Master Materials License (MML) 42-23539-01AF to issue byproduct, source, and special nuclear material permits throughout the United States. The USAF RIC oversees approximately 350 permittees. The permits cover a wide range of activities that include: research and development, medical, irradiation, disaster preparedness and readiness, waste disposal and decontamination, and other activities to support the mission of the USAF. The MML license was issued on June 26, 1985, and does not have an expiration date. The USAF RIC, at the request of the NRC, submitted a license refresh amendment in its entirety on May 21, 2008. The NRC established a technical team to review both the license refresh submittal, as well as update NUREG-1556, Volume 10, "Program-Specific Guidance about Master Material Licenses." The project manager for the USAF MML serves as the team lead for the license refresh. Other team members include NRC project managers for each MML license and NRC Headquarter's representatives. The review of the license refresh amendment submittal was ongoing at the time of the inspection.

2 Management Oversight

2.1 Inspection Scope

The NRC inspection team evaluated the licensee's organization and management oversight activities to determine whether the RIC had implemented the MML program in accordance with NRC regulations and policy and procedures and in a manner that protected the public health and safety and the environment. In addition, the inspection team evaluated the USAF RIC's implementation of the enhanced security requirements. The evaluation included observations of the RIC's quarterly meetings, discussions with licensee representatives, and a review of program documentation, including internal and external audit reports.

2.2 Observations and Findings

The Air Force Surgeon General establishes policy and guidance for controlling ionizing and nonionizing radiation hazards. The responsibility for the USAF RIC is maintained under the Assistant Surgeon General, Healthcare Operations, who delegates responsibility for the chair of the RIC to the Directorate, Aerospace Operations, under the Air Force Medical Support Agency (AFMSA). The Directorate of Aerospace Operations is responsible for four primary program areas that include: public health, flight medicine, bioenvironmental engineering, and aerospace physiology. The USAF reorganized and centralized its radiation program under the Bioenvironmental Engineering Division in January 2008. This division develops policy for operational and medical radiation safety that addresses ionizing and nonionizing radiation, develops processes for support and response for all aspects of radiological and nuclear threats, and performs other tasks as assigned by the Department of Defense and Air Force committees. Once the division develops the policy and guidance documents, the documents are provided to the major commands for implementation. In addition, the division supports the day-to-day activities of the USAF RIC. The RIC Secretariat is

assigned to the division and is appointed by the RIC to manage and control all activities involving the MML. These activities include, but are not limited to, issuing permits, issuing enforcement actions, investigating incidents and allegations, and ensuring the conditions of the MML and Letter of Understanding are implemented. During the review period, the RIC staff completed a significant number of permit actions, submitted a complete refresh amendment of the MML license to the NRC, implemented enhanced security orders, modified the process for enforcement and issuance of violations, and revised Air Force Policy Directive 40-2, "Radioactive Materials," Air Force Instruction AFI 40-201, "Managing Radioactive Materials in the US Air Force," and internal operating procedures. In addition to a change in staff as discussed below, the RIC received support from management to complete day-to-day activities and implement the projects that were assigned by the RIC or requested by the NRC during the review period. In August 2008, the Bioenvironmental Engineering Division moved from Bolling AFB to offices located in Rosslyn, Virginia.

The RIC members represent USAF offices and organizations that oversee or directly utilize radioactive materials in the Air Force. The voting representatives and alternate representatives are appointed to the RIC as specified in Air Force Instruction AFI 40-201, "Managing Radioactive Materials in the US Air Force," revised April 13, 2007. The RIC convened on a quarterly basis during the review period and always met and exceeded the minimum number of participants required for a quorum. The RIC meetings followed a thorough agenda that addressed such items as inspection results, permit actions, enforcement, personnel exposure results, decommissioning activities, and training. The RIC members were actively involved with the meeting discussions and on several occasions the RIC chair recommended that the staff initiate evaluations to determine the extent of potential circumstances, such as training issues, before any significant health or safety matter emerged. The NRC USAF MML Project Manager observed the quarterly RIC meetings and determined that the committee members were actively engaged with the MML program.

The USAF RIC effectively communicated with its permittees through the Radiation Program webpage, e-mail correspondence from the RIC action officers, and RIC meeting minutes. Some examples of information provided to permittees include Information Notices, Regulatory Issue Summaries, and use of the new NRC Form 313a, "Training and Experience of Authorized Users, Medical Physicists or Radiation Safety Officers."

The USAF RIC continued to populate the electronic files management system during the review period. The terminated and retired permits through April 2008 had been scanned and entered into the electronic files management system. The USAF RIC stated that the contractor was in the process of scanning the historical files. While it is considered ambitious, the transition from physical files to electronic files should improve the accessibility of historical records and control the security of the permit documents.

2.3 Conclusion

The inspection team determined that there was effective management oversight of radioactive materials in the USAF that was sufficient to ensure activities were in place to protect the health and safety of workers and the general public. The RIC staff had implemented a centralized radiation safety program that executed its responsibility as required by the MML license commitments and associated Letter of Understanding and

throughout the 2-year inspection period had attempted to consistently improve processes and communications with the permitted facilities.

3 Technical Staffing and Training

3.1 Inspection Scope

The NRC inspection team reviewed the licensee's radioactive materials program staffing level and turnover, as well as the technical qualifications and training history of the RIC staff. In evaluating these elements, the team interviewed program management staff and reviewed the RIC's training program and casework related to licensing, compliance, and inspection.

3.2 Observations and Findings

Air Force Instruction AFI 40-201, Section 1.7.2, revised April 13, 2007, states that the Air Force maintains a staff qualified health physicist trained by the NRC to conduct permit inspections. The radioactive materials inspector is assigned to the Air Force Inspection Agency (AFIA) and is selected for the position of inspector by the RIC. The RIC staff indicated that, when selecting an inspector, the staff looks for an individual with more than 10 years of health physics experience and an advanced degree in a related field of study. Since the inspector is assigned to the AFIA, the RIC does not have a formal training program for the individual. However, before the inspector is allowed to conduct independent inspections, the inspector is required to attend the NRC's Inspection Procedures course and would accompany the predecessor inspector on several inspections. The AFIA trains the inspector on its internal operating procedures.

In August 2008, the current inspector was selected for the position of the RIC Secretariat. A new radioactive materials inspector was also selected in August 2008 to replace the inspector selected as the RIC Secretariat. The new inspector's credentials include greater than 10 years of practical experience with 3 years working under an Air Force broadscope permit. The selected individual is a Certified Health Physicist and holds a Masters degree in Health Physics and a Doctorate in Radiochemistry. The new inspector attended the NRC Inspection Procedures course in September 2008. The new inspector accompanied his predecessor during four inspections, including a nuclear medicine permittee.

Members of the RIC staff accompanied the AFIA inspector on three inspections between October 1, 2006, and October 20, 2008. These staff accompaniments were performed to review the AFIA inspector's activities and to serve as a means of familiarization with permit activities. The inspector accompaniments by members of the RIC were not documented, since there was no requirement for documentation. In addition, there was not a mechanism in place for the RIC Secretariat to perform a formal appraisal of the AFIA's activities. The lack of a formal appraisal of the inspector was primarily due to the separate chain of command between the two organizations. The AFIA reported to the Secretary of the Air Force Inspector General (IG), whereas the RIC reported to the Office of the Surgeon General (OSG). There was an established rapport and good working relationship between the RIC staff and the AFIA inspector. The inspector accompaniments by RIC personnel provided continuity in the inspection program when a change occurred in the inspection staff and provided onsite inspection experience for RIC staff members.

During the review period, the RIC staff experienced several staff changes which are expected to occur during a typical Air Force career. At different times during the inspection period, the RIC staff was comprised of two to four action officers, different database managers, and three different RIC Secretariats. The minimum staffing level occurred during the summer of 2008, prior to the staff's move to Rosslyn, Virginia.

The USAF RIC draft Standard Operating Procedure RIC-SE-8, "RIC Action Officer Training," documented the expected training and experience for the RIC staff. The current USAF RIC staff was hand selected based on education, specialized training, performance, and professional development. The contractor personnel used by the USAF were selected based on education and experience in managing radiation safety programs. All of the action officers had attended the required NRC Licensing Practices and Procedures course and several staff had attended other courses which included the NRC Inspection Procedures course, Increased Controls course, MARSSIM and RESRAD courses, and program courses that reflected the types of activities permitted. The action officers were trained in the day-to-day activities of the RIC through on-the-job training and secondary review on all permit actions. Each action officer was developing a qualification journal to reflect and document the training received. The inspection team determined that the RIC staff was well qualified and knowledgeable of the MML requirements and NRC regulations.

The RIC staff changed the responsibility for managing the permit actions from a geographically-based assignment to either template- and nontemplate-based assignment. Template permits include chemical agent detectors or monitors, laser targeting pods, and astro-inertial navigation systems. Nontemplate permits include portable moisture density gauges, decommissioning activities, and research and development activities. Therefore, one action officer was responsible for all of the template permits and a second action officer was assigned responsibility for all nontemplate permits, while the medical physicist action officer continued to maintain the medical permits. This change also allowed a fourth action officer to focus on security-related issues and decommissioning activities. These changes should provide consistency and ownership of the permit actions. In addition, the RIC indicated a desire to place staff into permanent positions prior to the transfer of personnel to ensure sufficient on-the-job training is performed for continuity of operations. The inspection team agrees that this is a good plan, especially for a staff that supports the radiation program as well as the day-to-day operations of the MML.

3.3 Conclusion

The RIC staff was qualified to perform the regulatory duties of a master materials licensee. The AFIA inspector was qualified to conduct safety and security inspections and the RIC staff had accompanied the inspector at least once during the rating period. However, the inspectors noted that the RIC did not have a formalized process to conduct and document inspection accompaniments of the AFIA inspector. The RIC staff was developing qualification journals to document both formal and on-the-job training for the action officers and permit inspectors. The inspection team concluded that the RIC had successfully achieved a balance in implementing an effective program as it utilized AFIA for its inspection program and selected high caliber and qualified personnel for the RIC staff positions.

4 Internal Audits and Self-Assessments

4.1 Inspection Scope

The NRC inspection team reviewed audits and self-assessments conducted during the review period and interviewed selected staff regarding the audits and corrective actions to findings or recommendations.

4.2 Observations and Findings

The NRC inspection team noted that two separate audits were performed during the review period. The first audit, performed in February 2008, focused on the quality of permits for medical and nontemplate permittees. The auditors reviewed approximately 40 nontemplate and 11 medical permits for consistency, completeness, and accuracy. The audit was comprehensive and provided a list of recommendations on revising standard permit conditions based on NRC license conditions. The RIC staff has been modifying the permits as recommended in the audit. Once all the permits have been modified, the RIC staff plans to provide a response to the audit through a memo to the file discussing the changes to the permits.

The second audit, performed in August 2008, focused on the template permits. The auditor reviewed approximately 300 permits for consistency, completeness, and accuracy. The audit was comprehensive and provided a list of general recommendations and comments on specific permits which were identified as deficient. Since this audit was completed in August and due to the large number of permits reviewed, the RIC staff was currently reviewing the audit recommendations and developing a corrective action plan. The RIC staff also indicated that the corrective actions will be documented in a memo to the file.

In addition, as part of the review process in 2008, the RIC staff was performing a complete verification between the electronic data and hardcopy data for the standard template permits. When complete, this verification should sufficiently document the reliability of the electronic data system.

The RIC staff also informed the inspection team that it had an agreement with the Navy to conduct external audits of each others programs. The Navy was originally scheduled to conduct the audit of the Air Force in August 2008, but due to the RIC staff relocation and changes in personnel, the Air Force requested that the audit begin in 2009. This initiative was considered a good practice by the inspection team since utilizing an outside peer is a valuable tool for evaluating a cross-sampling of the program.

4.3 Conclusion

The audits of the permitting process were comprehensive and identified deficiencies in the permitting process. The inspectors noted that the RIC staff had implemented appropriate corrective actions to modify the permits in accordance with the audit recommendations.

5 Status and Technical Quality of Inspections

5.1 Inspection Scope

The NRC inspection team reviewed inspection reports, enforcement documents, and correspondence associated with inspections conducted by the AFIA inspector and RIC staff during the review period to determine if inspections were consistent and in conformity with the NRC inspection procedures. In addition, the team interviewed the AFIA inspector and selected RIC staff to evaluate how they prepared for and conducted inspections. This included a review of the permit, licensing-related documents, and regulatory requirements. During the review period, NRC staff also accompanied the AFIA inspector in order to evaluate the technical quality of inspections being conducted by the inspector.

5.2 Observations and Findings

The AFIA inspector conducted 92 inspections in 2007 and 48 inspections between January and June 2008. In 2007, the Air Force began telephonic inspections of chemical agent monitors, laser targeting pods and astro-inertial navigation systems. These types of program codes are acceptable telephonic contact under NRC Manual Chapter 2800, "Materials Inspection Program." Approximately half of the inspections conducted were telephonic contacts. However, the inspection team was informed that an onsite inspection would be conducted for these respective permits if the inspector was visiting one of these facilities to conduct another type of regulated-activity inspection. The remainder of the inspections conducted during 2007 and 2008 were performed onsite at the permittees' facilities and included medical broad scope, medical institutions, and research and development broad scope permits. The AFIA inspector also incorporated into the routine inspection program a review of measures that permittees have taken to secure radioactive material. The RIC staff indicated that there were no overdue inspections during this review period.

The inspections included a review of measures that certain permittees implemented in response to the NRC Order Imposing Increased Controls (IC Order) issued by the NRC on November 14, 2005. During this review period, the AFIA inspector completed all four inspections of permittees, who were required to implement the IC Order. The AFIA inspector followed the guidance in NRC Temporary Instruction 2800/038 when conducting the security inspections. The AFIA inspector identified several violations associated with the IC Orders, which were described sufficiently in the inspection report. The RIC staff appropriately dispositioned the violations in accordance with NRC Enforcement Guidance Memorandum 06-003. The NRC inspection team noted that the inspection results were adequately described in the report, including corrective actions implemented by the permittee. The inspection team also noted that the correspondence was properly marked as security-related information. The RIC staff planned to revise the procedure for conducting IC inspections to include the recently issued fingerprinting requirements.

In April 2007, the Air Force revised its process for issuing violations to permittees. Under the revised process, the RIC staff issued final violations to the permittees rather than through the AFIA inspector. The AFIA inspector would identify the potential violation during an inspection and document the potential violation in a report to the permittee, with a copy to the RIC staff. The RIC staff would subsequently review the

potential violation and determine the validity and appropriate severity level for the violation. Once the RIC staff made its determination, a letter was issued to the permittee describing the violation. The NRC inspection team reviewed several violations that were issued under the new process and noted that the violations were appropriately dispositioned. However, the NRC inspection team identified several instances where a potential violation was issued by the AFIA inspector; however, the RIC staff did not clearly disposition the potential violation in the final action. It was unclear whether the violations were inadvertently not discussed or whether the RIC staff had determined it was not appropriate to cite the violation. The inspection team discussed the specific circumstances further with the RIC staff and determined the reasoning and assessment used by the RIC to support each final action.

The NRC inspection team determined that AFIA inspection reports appropriately documented those areas reviewed by the inspector and the inspection findings were based on health and safety matters and were well founded and properly documented. In addition, the IC Order inspection findings were dispositioned in accordance with Enforcement Guidance Memoranda EGM 06-003. The NRC inspection team noted that inspection reports were complete, inspection findings were reviewed by the RIC staff, and inspection reports were completed in a timely manner.

The NRC staff performed two accompaniments of the AFIA inspector and one accompaniment of the RIC staff during the review period. Based on the accompaniments, the NRC determined that the AFIA inspector was objective and conducted a performance-based inspection that focused on health and safety. During an accompaniment of a security inspection, it was observed that the inspection covered the elements of the IC order and the inspector had a questioning attitude which helped to identify potential violations of the IC order. The potential violations were well cited and appropriate and would serve to help the permittee have a more effective program.

5.3 Conclusion

The NRC inspection team concluded that the licensee's inspection program was conducted in a manner that was compatible with NRC inspection policies, procedures, and guidelines. The team also concluded that the AFIA inspector was properly prepared for inspections and conducted inspections in a manner that was consistent with NRC policies and procedures.

6 Status and Technical Quality of Materials Permitting Program

6.1 Inspection Scope

The NRC inspection team assessed the status and technical quality of the permitting process by reviewing 21 permitting actions completed by the USAF RIC Action Officers. The permitting actions were evaluated to ensure that applicable regulations and guidance documents were reviewed. This evaluation included permit conditions and tie-down conditions, adherence to sealed source and device registrations, appropriate training and experience authorizations, adequacy of facilities and equipment, use of operating and emergency procedures for the radionuclides and quantities used, and consideration of enforcement history for license renewals. Casework was also

evaluated for completeness, consistency, timeliness, and adherence to good health physics practices. The permit files were also reviewed for retention of documents required to support the permitting action.

6.2 Observations and Findings

The RIC maintained oversight for approximately 350 permits, which consisted of approximately 70 nontemplate permits and 280 template permits, located in the United States and overseas. The permitting casework reviewed by the inspection team was selected to provide a representative sample of all permitting actions that were processed by the USAF RIC. The RIC staff processed over 460 permit actions during the review period. Several of the authorizations were considered major permitting actions and included authorization for a cobalt-60 sealed source for the first nonintrusive screening device for vehicles and cargo containers, a separate screening device that used a neutron generator and tritium source for surveillance of potential contraband materials in commercial delivery vehicles entering a base, and authorization for a high dose-rate afterloader at a medical facility. The inspection team selected 21 completed permit actions that covered a variety of casework for review. The inspection team determined that the permit actions were thorough, complete, of good quality, and properly addressed health and safety issues. The files generally contained appropriate documentation to support the permitting action. The permit actions followed the NRC NUREG-1556 series guidance documents, regulations, regulatory issue summaries, and regulatory guides.

The RIC adequately implemented the NRC criteria for marking and handling sensitive unclassified nonsafeguards information (SUNSI) as required by NRC guidance. The USAF RIC implemented the required IC Orders for four permit holders. The affected permits were amended to reference the IC order in the permit conditions, which was subsequently updated to include the fingerprinting order. All four permit holders achieved full implementation. In addition, the RIC sent a memo to all permittees notifying them to mark IC documents appropriately.

The USAF indicated they would not ship any sources exceeding International Atomic Energy Agency (IAEA) Category 1 thresholds under their MML. Therefore, the Air Force was not subject to implementing the NRC Radioactive Material Quantities of Concern Order.

6.3 Conclusion

The inspection team concluded that the USAF RIC staff processed permitting actions in a manner consistent with NRC licensing policies, procedures, and guidance. In addition, the RIC staff conducted quality technical reviews that were based on sound health physics practices and were well documented.

7 Status of Allegations Program

7.1 Inspection Scope

The NRC inspection team reviewed the Air Force's program for handling allegations. This included the effectiveness of the RIC staff in handling allegations and the status of any open allegations. The inspection team reviewed applicable records and interviewed representatives from the RIC staff.

7.2 Observations and Findings

The RIC staff informed the inspection team that they had not received any allegations since the last inspection. The RIC staff indicated that individuals have other means to raise concerns, primarily bringing items of concern up through the appropriate levels of the Air Force Command. The AFIA inspector indicated that he discusses the allegation program with the staff of permittees and ensures that the NRC Form 3, "Notice to Employees," is prominently posted.

The NRC inspection team reviewed the RIC procedure on allegations, which was recently drafted and was not in effect at the time of the inspection. The procedure discusses documenting the initial receipt of the allegation and includes a form that can be used. The draft procedure required the concerns to be reviewed to determine whether they would fall under the purview of the RIC. If the concern was determined to not be under the purview of the RIC, then it would be forwarded to the responsible Air Force agency. The procedure required the RIC to be informed of any allegations, which would be accomplished by briefing the RIC Chair of the concern once it is received and then informing the RIC during quarterly meetings regarding the status of responding to the concern. In addition, the procedure discussed protecting the identity of the algeber. The procedure included a process to determine if any violations occurred and discussed dispostioning the violations in accordance with the inspection procedure. The inspectors noted that the draft allegation procedure did not contain a time frame for completing a review of and closing the concern. The inspection team discussed the allegation tracking mechanism used by the NRC and the respective milestones used by the NRC staff.

7.3 Conclusion

The NRC inspection team determined that the licensee's established program for responding to allegations was in compliance with the license conditions of the MML and applicable NRC regulations and was being implemented effectively. The RIC had not received any allegations since the last inspection.

8 Exit Meeting Summary

An exit meeting was held with USAF RIC representatives on October 24, 2008. The overall scope and findings of the inspection were discussed. The RIC participants did not identify any information provided to, or reviewed by, the inspection team as being proprietary in nature.

SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Col. Robert Todaro, Directorate, Aerospace Operations and USAF RIC Chair
Col. Jack Jeter, Chief, Bioenvironmental Engineering Division
Lt. Col Craig Adams, Chief, Radiation Programs, USAF RIC Secretariat
Major Robert Rodgers, Chief, Radiation Program Operations

INSPECTION PROCEDURES USED

IP 87129, "Master Materials Program"

ITEMS OPENED, CLOSED, OR DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

| | |
|----------|---|
| AFB | Air Force Base |
| AFIA | Air Force Inspection Agency |
| CFR | <i>Code of Federal Regulations</i> |
| IC Order | Increased Controls Order |
| NRC | Nuclear Regulatory Commission |
| MML | Master Materials License(e) |
| RIC | Radioisotope Committee |
| SUNSI | Sensitive Unclassified Non-Safeguards Information |
| USAF | United States Air Force |

Permitting Casework Review

NOTE: CASEWORK WITHOUT COMMENTS ARE INCLUDED FOR COMPLETENESS ONLY.

File No.: 1

Permittee: Wright-Patterson AFB, Ohio

Type of Action: Amendment

Permit Type: Neutron Generator for Security Surveillance

Permit No.: OH-00216-00/01AFB

Amendment: 01

Permit Reviewer: CA

File No.: 2

Permittee: Brooks City Base, Texas

Type of Action: Renewal

Permit Type: Type B R&D Broadscope; SNM-Pu SS Device

Permit No.: TX-30168-03/OOAFB

Amendment: NA

Permit Reviewer: RR

File No.: 3

Permittee: Hill AFB, Utah

Type of Action: Amendment

Permit Type: Irradiators – Self Shielded <10,000 Ci

Permit No.: UT-00696-00/02AFP

Amendment: 02

Permit Reviewer: RB

File No.: 4

Permittee: Kirkland AFB, New Mexico

Type of Action: Amendment

Permit Type: Self-Shielded Irradiator

Permit No.: NM-30470-02/03AFB

Amendment: 03

Permit Reviewer: RB

Comment:

a) Reconsider program code; not truly self-shielded irradiator, but maybe Part 36 irradiator.

File No.: 5

Permittee: Travis AFB, California

Type of Action: Amendment

Permit Type: Medical Institution

Permit No.: CA-07840-02/06AFP

Amendment: 06

Permit Reviewer: RR

Comment:

a) Deemed timely filed status

File No.: 6

Permittee: Lackland AFB, Texas

Type of Action: Amendment

Permit Type: Type A Broad Medical Institution

Permit No.: TX-02682-03/03AFP

Amendment: 03

Permit Reviewer: RR

File No.: 7

Permittee: Elmendorf AFB, Alaska

Type of Action: Amendment

Permit Type: Medical Institution – WD Required

Permit No.: AK-01810-02/05AFP

Amendment: 05

Permit Reviewer: RR

File No.: 8

Permittee: USAF Academy, Colorado

Type of Action: Amendment

Permit Type: Academic Type A Broad; In-house calibration
Processor and/or Repackaging)

Permit No.: CO-12629-02/04AFP

Amendment: 04

Permit Reviewer: RR

File No.: 9

Permittee: Brooks City Base, Texas

Type of Action: Amendment

Permit Type: Decommission (Waste Disposal Serv.
Processor and/or Repackaging)

Permit No.: TX-00446-01/07AFP

Amendment: 07

Permit Reviewer: RR

File No. 10
Permittee: Andersen AFB, Guam
Type of Action: New
Permit Type: Decommissioning of Byproduct Material Facilities
Permit No.: GU-00313-00/00AFP
Amendment: N/A
Permit Reviewer: RB

File No. 11
Permittee: Hill AFB, Utah
Type of Action: Renewal
Permit Type: Source Material DU >150kg
Permit No.: UT-30046-02/00AFP
Amendment: N/A
Permit Reviewer: RB

Comment:
a) Although the cover letter appears to be a template action, this renewal is actually a non-template action and the reviewer will correct the cover letter no later than October 23, 2008.

File No.: 12
Permittee: Tyndall AFB, Florida
Type of Action: Amendment
Permit Type: SAIC Model VACIS System (Fixed Gauge)
Permit No.: FL-00709-00/04AFP
Amendment: 04
Permit Reviewer: ED

File No.: 13
Permittee: MacDill AFB, Florida
Type of Action: New
Permit Type: SAIC Model VACIS System (Fixed Gauge)
Permit No.: FL-00290-00/00AFP
Amendment: N/A
Permit Reviewer: CA

File No.: 14
Permittee: Andersen AFB, Guam
Type of Action: Amendment
Permit Type: Portable Gauge
Permit No.: GU-00300-00/01AFP
Amendment: 01
Permit Reviewer: RB

File No.: 15
Permittee: Sandston AFB, Virginia
Type of Action: New
Permit Type: ICAM (template license)
Permit No.: VA-00235-00/00AFB
Amendment: N/A
Permit Reviewer: CA

File No.: 16
Permittee: Wright Patterson AFB, Ohio
Type of Action: Amendment
Permit Type: Waste Disposal Service Processing and/or Repackaging
Permit No.: OH-00472-02/05AFP
Amendment: 05
Permit Reviewer: RR

File No.: 17
Permittee: Vandenberg AFB, California
Type of Action: Termination
Permit Type: R&D Other (firing unit)
Permit No.: CA-00345-01/03AFP
Amendment: 03
Permit Reviewer: RB

File No. 18
Permittee: Randolph AFB, Texas
Type of Action: Termination
Permit Type: X-Ray Fluorescent Analyzer (template)
Permit No.: TX-30511-02/02AFP
Amendment: 02
Permit Reviewer: RR

File No.: 19
Permittee: MacDill AFB, Florida
Type of Action: Termination
Permit Type: Disaster Preparedness (CAD, CAM, ICAM) (template)
Permit No.: FL-00386-01/02AFP
Amendment: 02
Permit Reviewer: CA

File No.: 20
Permittee: Wright Patterson AFB, Ohio
Type of Action: Termination
Permit Type: Source Material – X-Ray Spectrometer System

Permit No.: OH-00658-00/02AFP
Amendment: 02
Permit Reviewer: CA

File No.: 21
Permittee: Wright Patterson AFB, Ohio
Type of Action: Amendment
Permit Type: Medical Institution – WD Required

Permit No.: OH-04682-02/11AFP
Amendment: 11
Permit Reviewer: RR