



DEPARTMENT OF THE AIR FORCE
AIR FORCE INSPECTION AGENCY

2 December 2019

MEMORANDUM FOR 820 RHS/CC

FROM: AFIA/SG
9700 G Avenue SE
Kirtland AFB NM 87117-5670

SUBJECT: Final Inspection Report and Notice of Violation(s)/Non-Cited Violation(s), USAF Radioactive Materials (RAM) Permit NV-23354-05/01 AFP

On 5 November 2019, MSgt Cesar Valverde completed an Unannounced Routine Permit inspection at your facility on Nellis AFB, NV. The inspection was conducted in accordance with AFI 90-201, *The Air Force Inspection System* and AFI 40-201, *Radioactive Materials (RAM) Management*. This permit was determined to be **NOT FULLY COMPLAINT**, and the attached inspection report presents the details of this inspection.

Questions concerning this report should be directed to the AF RAM Inspector at 505-846-1878 (DSN 246) or via email at cesar.valverde@us.af.mil. Corrective actions and questions concerning approval for closure should be directed to the Radioisotope Committee (RIC) at 703-681-6946 (DSN 761) or via email at usaf.pentagon.saf-aa.mbx.usaf-ric@mail.mil.

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RICHARD L. KICE, Maj, USAF, BSC
AF Radioactive Materials Inspector

Attachments:

1. Compliance Inspection Summary
2. Notice of Violations/Non-Cited Violations

1st Ind, HQ AFIA/SG

I have reviewed and approved the results of the RAM Inspection

KINDT.MICHAEL
L.T.1077464570
MICHAEL T. KINDT, Col, USAF, BSC
Director, Medical Operations
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KINDT.MICHAEL.T.1077464570
Date: 2019.11.27 08:57:51 -07'00'

cc:
USNRC Region IV
AFMSA/SG3PB
ACC/IG
ACC/SGPB
99 MW/IG
99 AMDS/SGPB

Knowledge-Honor-Vigilance

ML19339H563

COMPLIANCE INSPECTION SUMMARY

1. Permittee/Location Inspected Col Peter P. Feng Commander 820 RHS/CC 5179 Malstrom Ave. Nellis AFB NV 89191-6126		2. Inspector/Inspection Office Cesar A. Valverde, MSgt, USAF AF RAM Inspector HQ AFIA/SG 9700 G Avenue SE, Ste 437 Kirtland AFB NM 87117-5670	
3. Docket Number(s) 030-28662	4. Permit Number(s) NV-23354-05/01AFP	5. Date(s) of Inspection 5 November 2019	
6. Inspection Type Routine Permit (Unannounced)	7. Permit Contact TSgt John Lenguiya	8. Telephone DSN 682-2740 / 702-652-1505	
9. Inspection Procedure(s) 83822, 86740, 87124, & 88010	10. Inspection Focus Area(s) 02.01-02.08; 02.01-02.13; 02.01-02.07; 02.01-02.05	11. Inspection Frequency 5	

PERMITTEE:

The inspection was an examination of activities conducted under your permit as they relate to radiation safety and compliance with Nuclear Regulatory Commission (NRC), Department of Defense (DOD), and Air Force (AF) rules and regulations and the conditions of your permit. The inspection consisted of selective examination of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- ☐ 1. Based on the inspection findings, no violations were identified.
- ☐ 2. Previous violation(s) closed.
- ☒ 3. During this inspection, certain of your activities, as described in the attached NOV/NCV Form, were in violation of NRC, DOD, and/or AF requirements and are being cited in accordance with AFI 40-201 and AFI 90-201. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11 and the corresponding AFI requirements.

Notice of Violation(s) were identified and described in the attached NOV/NCV Form.

- ☒ 4. The non-cited violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, corrective action was or is being taken, or discretion was exercised in determining against issuance of a notice of violation.

Non-cited violation(s) were identified and described in the attached NOV/NCV Form.

INSPECTION SUMMARY:

A compliance and risk based inspection was conducted to validate radiation safety and to ensure management requirements were being accomplished for the storage, transportation, and use of density gauges authorized by this permit. The Permit RSO, 820 RHS Superintendent, and 99 ABW Installation RSO were the primary individuals interviewed during the inspection. Aside from the Permit RSO, there were no "authorized users" interviewed at the time of the inspection, due to availability. The two gauges authorized on the permit were verified and being stored within the authorized storage area in building 10560. However, the 2-tangible barrier requirement for adequate security was not fully met. Additionally, storage and transportation procedures regarding the use of the devices at any locations other than Nellis AFB were not in place. The gauges were not used or transported during the inspection for the purpose of evaluation. A review of management documents and conditions of the permit revealed several areas of concern, as detailed in the attached NOV's & NCV's. It was clear that interviewed personnel have the knowledge and understanding to safely store, transport, and use the gauges. A high deployment tempo for the 820 RHS has created unique challenges in maintaining qualified RSOs and ensuring up-to-date training for all users. Lastly, the Permittee expressed a desire transfer the gauges back to the manufacturer and terminate the permit.

NOTICE OF VIOLATIONS/NON-CITED VIOLATIONS

1. Permittee/Location Inspected

Col Peter P. Feng
Commander

820 RHS/CC
5179 Malstrom Ave.
Nellis AFB NV 89191-8126

2. Inspector/Inspection Office

Cesar A. Valverde, MSgt, USAF
AF RAM Inspector

HQ AFIA/SG
9700 G Avenue SE, Ste 437
Kirtland AFB NM 87117-5670

3. Docket Number(s)

030-28662

4. Permit Number(s)

NV-23354-05/01AFP

5. Date(s) of Inspection

5 November 2019

NOTICE OF VIOLATION

REQUIREMENT: 10 CFR 30.34(e) requires, in part, that the licensee (Permittee) adhere to such additional requirements and conditions with respect to the licensee's (Permittee's) receipt, possession, use and transfer of byproduct material as deemed appropriate by the Commission or the AF Master Materials License (MML). As such, Permit Condition 20A requires the Permittee to perform leakage tests at intervals not to exceed 12 months.

VIOLATION: Contrary to the above, as of 5 November 2019, the Permittee or PRSO did not perform leakage tests within 12 month intervals. Specifically, the PRSO only provided documentation for leakage tests performed on 28 November 2017 and 25 January 2019, a 14 month test interval, exceeding Permit conditions.

This is a Severity Level IV violation (NRC Enforcement Policy 6.7(d)(4) - Health Physics)

Violations, if issued, are answerable findings that require Radioisotope Committee (RIC) approval for closure. When violations are issued, Permittees shall respond to the violations according to the provisions stipulated in AFI 40-201. Non-cited violations are intended to aid the Permittee in strengthening permit compliance and/or mitigating potential safety concerns to personnel.

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1. Permittee/Location Inspected

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820 RHS/CC
5179 Malstrom Ave.
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VIOLATION: Contrary to the above, as of 5 November 2019, the Permittee or PRSO did not fully meet the inventory requirements listed in Permit Condition 19. Specifically, the inventory did not include the "date activity determined" required by Condition 19(d). Additionally, the inventory was based on a visual verification of source casing and shielding only. There was no formal process by which to confirm the presence of the sources within the devices when the inventories were performed.

This is a Severity Level IV violation (NRC Enforcement Policy 6.3(d)(3) - Materials Operations)

Violations, if issued, are answerable findings that require Radioisotope Committee (RIC) approval for closure. When violations are issued, Permittees shall respond to the violations according to the provisions stipulated in AFI 40-201. Non-cited violations are intended to aid the Permittee in strengthening permit compliance and/or mitigating potential safety concerns to personnel.

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NOTICE OF VIOLATION

REQUIREMENT: 10 CFR 20.1101 requires, in part, that each licensee (Permittee) shall develop, document, and implement a radiation protection program and use procedures and engineering controls based upon sound radiation protection principles.

VIOLATION: Contrary to the above, as of 5 November 2019, the Permittee and PRSOs did not develop, document, and implement appropriate Standard Operating Procedures (SOPs). Specifically, SOPs for the density gauges did not include storage, use, and emergency procedures when employed at temporary locations outside of Nellis AFB, NV. At the time of inspection, emergency procedures for density gauges used at temporary locations, directed the notification of the Nellis AFB IRSO instead of the local installation IRSO.

This is a Severity Level IV violation (NRC Enforcement Policy 6.3(d)(3) - Materials Operations)

Violations, if issued, are answerable findings that require Radioisotope Committee (RIC) approval for closure. When violations are issued, Permittees shall respond to the violations according to the provisions stipulated in AFI 40-201. Non-cited violations are intended to aid the Permittee in strengthening permit compliance and/or mitigating potential safety concerns to personnel.

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NOTICE OF VIOLATION

REQUIREMENT: 10 CFR 20.1501 require, in part; that the licensee (Permittee) make, or cause to be made, surveys that may be necessary for the licensee (Permittee) to comply with the regulations in Part 20, and that are reasonable under the circumstances to evaluate the extent of radiation levels, concentrations or quantities of radioactive materials, and the potential radiological hazards that could be present.

10 CFR 20.1003, i.e., surveys means an evaluation of the radiological conditions and potential hazards incident to the production, use, transfer, release, disposal, or presence of radioactive material or other sources of radiation. When appropriate, such an evaluation includes a physical survey of the location of radioactive material and measurements or calculations of levels of radiation, or concentrations or quantities of radioactive material present.

VIOLATION: Contrary to the above, as of 5 November 2019, the Permittee or PRSO did not ensure accurate or repeatable surveys were performed by the 99th Bioenvironmental Engineering Flight, on behalf of the Permittee, to document compliance with 10 CFR 20. Specifically, surveys failed to meet several criteria:

- Surveys did not evaluate all the requirements dictated by 10 CFR 20.1501 (e.g. extent of radiation levels, concentrations of RAM, quantities of RAM, etc.);
- The single documented survey was outdated and did not reflect the current configuration of the facilities and storage of the gauges;
- As written, the surveys were not repeatable which called into question the accuracy of results;
- There were no records for occupational/public dose determination surveys required by 10 CFR 20.2103 and 20.2107.

This is a Severity Level IV violation (NRC Enforcement Policy 6.3(d)(3)- Materials Operations)

Violations, if issued, are answerable findings that require Radioisotope Committee (RIC) approval for closure. When violations are issued, Permittees shall respond to the violations according to the provisions stipulated in AFI 40-201. Non-cited violations are intended to aid the Permittee in strengthening permit compliance and/or mitigating potential safety concerns to personnel.

NOTICE OF VIOLATIONS/NON-CITED VIOLATIONS

1. Permittee/Location Inspected

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Commander

820 RHS/CC
5179 Malstrom Ave.
Nellis AFB NV 89191-6126

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Cesar A. Valverde, MSgt, USAF
AF RAM Inspector

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NOTICE OF VIOLATION

10 CFR 30.9(a) requires, in part, that information provided to the Commission by a licensee (Permittee) be complete and accurate in all material aspects.

Contrary to the above, as of 5 November 2019, the Permittee did not provide the RIC, and subsequently the Commission, information that was complete and accurate in all material aspects. Specifically, Permit Item 15 identified the storage location of the density gauges as building 10560; however, the gauges are only stored in a concrete room in the southwest corner within building 10560. The gauges are not stored, nor can they be stored because of a lack of barriers, within any other part of building 10560.

This is a Severity Level IV violation (NRC Enforcement Policy 6.9 - Inaccurate & Incomplete Information or Failure to Make a Required Report)

Violations, if issued, are answerable findings that require Radioisotope Committee (RIC) approval for closure. When violations are issued, Permittees shall respond to the violations according to the provisions stipulated in AFI 40-201. Non-cited violations are intended to aid the Permittee in strengthening permit compliance and/or mitigating potential safety concerns to personnel.

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NON-CITED VIOLATION

10 CFR 30.34(i) requires, in part, that each licensee (Permittee) use a minimum of two independent physical controls that form tangible barriers to secure portable gauges, whenever portable gauges are not under the control and constant surveillance of the licensee. At the time of the inspection, the Permittee did not meet the criteria for a second tangible barrier to secure portable gauges from unauthorized removal. Specifically, the wall secured chain used as the second physical control was not attached to the two portable gauges in a manner to prevent the removal of the gauges from the storage cases. Subsequent to the inspection, the PRSO took actions to adjust how the chains were secured to the cases and wall to meet criteria stipulated in 10 CFR 30.34 and NUREG 1556 Volume 1. A post inspection verification by the local health physicist and a Bioenvironmental Engineering Flight member confirmed compliance; however, it was further recommended that the PRSO formalize procedures to ensure the method for establishing the second barrier is reproducible each time the gauges are placed back into storage. As a result of the steps taken to ensure the second physical control was in place a non-cited violation is being issued.

Violations, if issued, are answerable findings that require Radioisotope Committee (RIC) approval for closure. When violations are issued, Permittees shall respond to the violations according to the provisions stipulated in AFI 40-201. Non-cited violations are intended to aid the Permittee in strengthening permit compliance and/or mitigating potential safety concerns to personnel.

Poston-Brown, Martha

From: VALVERDE, CESAR A MSgt USAF AFIA AFIA/SG <cesar.valverde@us.af.mil>
Sent: Monday, December 02, 2019 2:34 PM
To: FENG, PETER P Col USAF ACC 820 RHS/CC
Cc: TOWNE, JOSEPH D JR SMSgt USAF ACC 820 RHS/CE; LENGUIYA, JOHN M TSgt USAF ACC 820 RHS/CE; HILL, RYAN A Capt USAF ACC 820 RHS/CE; Nemmers, Scott A Lt Col USAF AFMSA (USA); HALE, ALAN C Lt Col USAF AFMSA AFMSA/SG3PB; MURREN, BRUCE A CTR USAF AFMSA AFMSA/AF-SG; MCCOMB, BENJAMIN A Capt USAF AFMSA AFMSA/SG3PB; DANLEY, RYAN C Lt Col USAF AFMC 711 HPW/RHDR; USAF Pentagon SAF-AA Mailbox USAF RIC; Poston-Brown, Martha; KINDT, MICHAEL T Col USAF AFIA AFIA/SG; CARAVELLO, JOSEPH C CTR USAF AFMC AFLCMC/EBJ; CONDON, WILLIAM J CMSgt US Air Force ACC 633 AMDS/633 AMDS/CCC; KICE, RICHARD L Maj USAF ACC NTTR/SE; JONES, ROBERT L CIV USAF ACC 99 ABW/IG; RICE, CRAIG H Col USAF AFIA AFIA/SG
Subject: [External_Sender] FOUO\\820 RHS/CC RAM Inspection Report
Attachments: 20191203 NV-23354 AFIA Final Insp Rpt (NFC).pdf

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Col Feng

I want to start by saying thank you to you, TSgt Lenguiya, and the rest of your team for making this Radioactive Materials Inspection so straight forward. I would like to express my gratitude for how quickly and easily your team facilitated access to the material in support of this federally driven "No Notice" Inspection. I was impressed how quickly they corrected an issue identified which changed a potential violation to a non-cited violation. During the inspection it was noted that you and your team are very motivated to terminate this permit by changing your requirement to have permitted density gauges. Also it was noted that the HAZMAT training certificates provided by the Permit Radiation Safety Officer for all authorized users for the density gauges had expired expect for that of TSgt Lenguiya. TSgt Lenguiyas training is with-in a year of expiring but is still current. However there is no evidence of anyone with expired training transporting the density gauges. If you do plan on keeping these gauges we encourage you to ensure more than TSgt Lenguiya have current HAZMAT training. I earnestly believe your program is in good hands.

Please see the attached Document, this is your final inspection report. I would encourage, trying to capture the items in this inspection as part of your CCIP/SAPM process, to show continual evaluation of your program. Please note, you are required to provide initial corrective actions to the RIC within 5 duty days of receiving this report. The RIC is also the closure authority for the violations. If there are any questions aside from closure, concerning the report, please feel free to contact me.

Thank you for your time.

CESAR A. VALVERDE, MSgt, USAF
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Air Force Inspection Agency
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