



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BLVD  
ARLINGTON, TEXAS 76011-4511

June 29, 2012

EA-12-031  
NMED Number: 110512

SURGEON GENERAL OF THE AIR FORCE  
AIR FORCE MEDICAL SUPPORT AGENCY (AFMSA)  
ATTN: SG3PB (RADIATION HEALTH)  
Lt. Col. David A. Smith, BSC, Ph.D., 4NW340E  
7700 Arlington Blvd, Ste 5151  
Falls Church, Virginia 22042-5151

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -  
\$8,500, NRC INSPECTION REPORT 030-28641/11-006

Dear Lt. Col. David A. Smith:

This letter refers to the inspection conducted on October 27, 2011, at the Wright Patterson Medical Center, Dayton, Ohio, with continued in-office review through March 1, 2012. 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 U.S. Air Force Permit OH-04682-03/10AFP were reviewed, with a focus on selected procedures and representative records, security and control of licensed material, observations of activities, and interviews of personnel. At the conclusion of the onsite portion of the inspection, the preliminary inspection findings were discussed with Col. Steven W. Higgins and members of his staff, including Lt. Col. Scott A. Nemmers, Radiation Safety Officer. A final exit briefing was conducted telephonically with you and Lt. Col. Alden Hilton on March 23, 2012, and the inspection results were documented in NRC Inspection Report 030-28641/11-006 dated April 9, 2012 (ADAMS Accession Number ML12101A057).

In the letter transmitting the inspection report, we provided you the opportunity to address the apparent violations identified in the report by either attending a predecisional enforcement conference or by providing a written response before we made our final enforcement decision. In a letter dated May 23, 2012, you provided a written response to the apparent violations.

Based on the information developed during the inspection and the information that you provided in your written response to the inspection report dated April 9, 2012, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject

inspection report. The violations involved the failure to conduct semiannual physical inventories of an americium-241 sealed source as required by 10 CFR 35.67(g) and the failure to secure the source from unauthorized access or removal as required by 10 CFR 20.1801.

The NRC considers the loss of control of licensed radioactive material a significant regulatory and security concern because of the potential for unauthorized possession or use of licensed radioactive material or the exposure of members of the public to unnecessary radiation. Therefore, these violations have been categorized collectively in accordance with the NRC Enforcement Policy as a Severity Level III problem. The NRC Enforcement Policy may be found on the NRC's Web site at [www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html](http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html).

Because your facility has not been the subject of escalated enforcement actions within the last 2 years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy. Based on your prompt and comprehensive corrective actions, the NRC has determined that *Corrective Action* credit is warranted. Your immediate corrective actions include, but are not limited to: (1) three thorough searches of all source storage locations in the medical treatment facility (MTF) completed by the permit radiation safety officer; (2) reviews of existing source transfer, disposal, and inventory documentation in an attempt to discover the disposition of the source; and (3) interviews with past permit radiation safety officers in an attempt to determine, from a historical perspective, the probable source location. Long-term corrective actions taken to avoid further violations include, but are not limited to: (1) a photographic inventory of all radioactive sources; (2) restructuring your electronic database and permit binder documents; and (3) annual radiation safety training that was provided to the radiation therapy staff on February 10, 2012, and the nuclear medicine staff on March 16 and 19, 2012, with accountability of radioactive material being emphasized.

In accordance with Section 2.3.4 of the Enforcement Policy, the NRC is exercising discretion to propose imposition of a civil penalty of at least the base amount for the problem involving the loss of a sealed source. The base civil penalty amount for the problem discussed above and included in the enclosed Notice is \$8500.

Therefore, to emphasize the importance of maintaining security and control of sealed sources, I have been authorized after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the base amount of \$8500 for this Severity Level III problem. In addition, issuance of this Notice constitutes escalated enforcement action that may subject you to increased inspection effort.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in NRC Inspection Report 030-28641/11-006 (ML12101A57) and your letter dated May 23, 2012 (ML12159A607). Therefore, you are not required to respond to this letter unless the description therein does not

accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. The NRC also includes significant enforcement actions on its Web site at <http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/>.

Should you have any questions regarding this letter or the enclosed Notice, please contact Mr. Jack Whitten, Chief, Nuclear Materials Safety Branch B, at 817-200-1197.

Sincerely,

/RA/

Elmo E. Collins  
Regional Administrator

Docket: 030-28641

License: 42-23539-01AF

Enclosures:

1. Notice of Violation and Proposed  
    Imposition of Civil Penalty
2. NUREG/BR-0254 Payment Methods  
    (licensee only)

**DISTRIBUTION:****OEMail Resource;**

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[Marisa.Herrera@nrc.gov](#);  
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[Michele.Burgess@nrc.gov](#);  
[Denise.Freeman@nrc.gov](#);  
[Silas.Kennedy@nrc.gov](#)

S:\RAS\ACES\ENFORCEMENT\\_EA CASES - OPEN\USAF\_Wright Pat\_12-031\Final Action\NOVCP\_EA-12-031\_AFMML WPAFB\_final.docx

ADAMS	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> SUNSI Review Complete	Reviewer Initials: JDC	
<input checked="" type="checkbox"/> Publicly Available		<input type="checkbox"/> Non-publicly Available	<input type="checkbox"/> Sensitive	<input checked="" type="checkbox"/> Non-sensitive	
C:NMSB-B	ACES		RIII:DNMS	D:ACES	RC
JEWhitten	MCMaier		KJLambert	HJGepford	KSFuller
<b>JDCook for</b>	<b>HJGepford for</b>		/RA/ email	/RA/	/RA/
6/11/12	6/13/12		6/18/12	6/13/12	6/13/12
D:DNMS	DRA	FSME	OGC	OE	RA
AVegel	ATHowell	MLBurgess	CMSafford	NColeman	ECCollins
/RA/	/RA/	/RA/email	/RA/ email	/RA/ email	/RA/
6/14/12	6/15/12	6/18 /12	6/20/12	6/20/12	6/ 27/12

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E=E-mail

F=Fax

**NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY**

Department of the Air Force  
USAF Radioisotope Committee  
Falls Church, Virginia

Docket: 030-28641  
License: 42-23539-01AF  
EA-12-031

During an NRC inspection conducted on October 27, 2011, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- A. 10 CFR 35.67(g) requires, in part, that a licensee in possession of sealed sources or brachytherapy sources conduct a semiannual physical inventory of all such sources in its possession.

Contrary to the above, between November 2, 2004, and September 30, 2011, the licensee in possession of sealed sources or brachytherapy sources did not conduct a semiannual physical inventory of all such sources in its possession. Specifically, the licensee did not include an americium-241 sealed source, which was in storage, in its semiannual physical inventory.

- B. 10 CFR 20.1801 requires that the licensee secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas.

Contrary to the above, between November 2, 2004, and September 30, 2011, the licensee did not secure from unauthorized removal or access licensed materials that were stored in controlled or unrestricted areas. Specifically, the licensee failed to secure an americium-241 sealed source, which was part of an anatomical marker. The licensee believed the source was located in the low-level radioactive waste storage room, which is a controlled area. However, sometime between November 2, 2004, when the last physical inventory occurred, and September 2011, the americium-241 source was lost.

This is a Severity Level III problem (Section 6.7).  
Civil Penalty - \$ 8,500. (EA-12-031)

The NRC has concluded that information regarding the reasons for the violations, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in NRC Inspection Report 030-28641/11-006 and your letter dated May 23, 2012. However, if the description therein does not accurately reflect your position or your corrective actions, you are required to submit a written statement or explanation under 10 CFR 2.201. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation; EA-12-031" and send it to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 1600 E. Lamar Blvd., Arlington, TX 76011-4511.

The licensee may pay the civil penalty proposed above in accordance with NUREG/BR-0254 and by submitting to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, a statement indicating when and by what method payment was made, or may protest imposition of the civil penalty, in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the licensee fail to answer within 30 days of the date of this Notice, the NRC will issue an order imposing the civil penalty. Should the licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty, in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the response should address the factors addressed in Section 2.3.4 of the Enforcement Policy. Any written answer addressing these factors pursuant to 10 CFR 2.205, should be set forth separately from the statement or explanation provided pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty, which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205 to be due, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The responses noted above, i.e., Reply to Notice of Violation (if one is provided), and statement as to payment of civil penalty should be addressed to: Roy Zimmerman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 1600 E. Lamar Blvd., Arlington, TX 76011-4511.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access Management System (ADAMS). To the extent possible, it should not include any personal privacy or propriety information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. 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 that such material is withheld from public disclosure, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim (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).

In accordance with 10 CFR 19.11, you may be required to post this Notice within 2 working days of receipt.

Dated this 29th day of June 2012