



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

July 26, 2012

South Dakota State University  
ATTN: Kevin Kephart  
Vice President for Research  
SAD 130 Box 2201  
Brookings, South Dakota 57007

SUBJECT: NRC INSPECTION REPORT 030-13079/2012-001 AND NOTICE OF VIOLATION

Dear Mr. Kephart:

This refers to the inspection conducted on June 5, 2012, at your facilities in Brookings, South Dakota, with continued NRC internal review through June 27, 2012. The 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 license. Within these areas, the inspection consisted of selected examination of procedures and representative records and interviews with personnel. A preliminary exit briefing was conducted with Ms. Laurie Nichols and Gary Yarrow, Ph.D. at the conclusion of the onsite portion of the inspection on June 5, 2012. A final telephonic exit briefing was conducted with you on July 5, 2012.

Based on the results of this inspection, the NRC has determined that two Severity Level IV violations of NRC requirements occurred. The violations involved (1) the failure to perform physical inventories at the required intervals, and (2) the failure to test a sealed source for leakage and/or contamination at the required interval. These violations were evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <http://www.nrc.gov/About-NRC/regulatory/enforcement/enforce-pol.html>. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the Notice. The violations are being cited in the Notice because they were identified by the NRC during the inspection.

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, NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," is enclosed. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

The NRC acknowledges that for some of the time intervals referenced in the Notice, the storage room containing the sealed source that was not inventoried or leak tested due to flooding. The

flooding prevented you from safely being able to enter the room to fulfill leak testing and physical inventory requirements. You may reference these dates and describe these circumstances in your response.

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 or proprietary information so that it can be made available to the public without redaction.

Should you have any questions concerning this inspection, please contact Mr. Jason Razo at 817-200-1589 or the undersigned at 817-200-1130.

Sincerely,

***/RA/ by JEWhitten for***

G. Michael Vasquez, Chief  
Nuclear Materials Safety Branch A

Docket: 030-13079  
License: 40-02194-17

Enclosures:

1. Notice of Violation (Notice)
2. NRC Information Notice 96-28

cc with Enclosure 1:  
South Dakota Radiation Control Program Director

## Internal distribution:

E. Collins, RA  
 A. Howell, DRA  
 A. Vogel, D:DNMS  
 V. Campbell, DD:DNMS  
 R4DNMS\_MSB-A

## Hard copy:

RIV Materials Docket File  
 DNMS Secretarial Area

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ML12209A315

ADAMS	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> SUNSI Review Complete		Reviewer Initials: JMR
<input checked="" type="checkbox"/> Publicly Available		<input type="checkbox"/> Non-publicly Available		<input type="checkbox"/> Sensitive	<input checked="" type="checkbox"/> Non-sensitive
RIV:NMSB-A	C:NMSB-A				
JMRazo;dlf	GMVasquez				
<b>/RA/</b>	<b>JEWhitten for</b>				
7/13/12	7/26/12				

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T=Telephone

E=E-mail

F=Fax

## NOTICE OF VIOLATION

South Dakota State University  
Brookings, South Dakota

Docket: 030-13079  
License: 40-02194-17

During an NRC inspection conducted on June 5, 2012, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. NRC License 40-02194-17, Amendment 21, dated February 23, 2012, License Condition 14.E, stated, in part, that no sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

Contrary to the above, as of June 5, 2012, a sealed source was stored for a period of more than 10 years without being tested for leakage and/or contamination. Specifically, a sealed source containing 0.110 Ci of Co-60 was in storage and had not been tested for leakage and/or contamination since June 1996, a period exceeding 10 years.

This is a Severity Level IV violation (Section 6.7).

- B. NRC License 40-02194-17, Amendment 21, dated February 23, 2012, License Condition 23, stated, in part, that the licensee shall conduct a physical inventory every 6 months to account for all sealed sources and/or devices received and possessed under the license.

Contrary to the above, as of June 5, 2012, the licensee failed to conduct a physical inventory every 6 months to account for all sealed sources and/or devices received and possessed under the license. Specifically, the licensee conducted a physical inventory of a sealed source of Co-60 in October 1999 and not again until 2010 and November 2011, a period exceeding 6 months. The licensee conducted a physical inventory during the inspection on June 5, 2012, to verify the presence of the source.

This is a Severity Level IV violation (Section 6.3).

Pursuant to the provisions of 10 CFR 2.201, South Dakota State University is hereby required to submit a written statement or explanation within 30 days of the date of the letter transmitting this Notice of Violation (Notice) to:

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

with a copy to:

U.S. Nuclear Regulatory Commission  
ATTN: Regional Administrator  
1600 E. Lamar Blvd.  
Arlington, TX 76011-4511

This reply should be clearly marked as a "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, and
4. The date when full compliance was, or will be, achieved.

Your response may reference or include previous 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:

Director, Office of Enforcement  
United States Nuclear Regulatory Commission  
Washington, DC 20555-0001

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 <http://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).

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

Dated this 26th day of July 2012