



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

February 10, 2016

Docket No. 03038189

License No. 08-00604-06

George Cody, Ph.D.  
Acting Director, Geophysical Laboratory  
The Carnegie Institution of Washington  
5251 Broad Branch Road, NW  
Washington, DC 20015-1305

SUBJECT: NRC INSPECTION REPORT NO. 03038189/2015001, THE CARNEGIE INSTITUTE OF WASHINGTON, WASHINGTON, D.C. SITE AND NOTICE OF VIOLATION

Dear Dr. Cody:

On October 27, 2015, Dennis Lawyer of this office conducted a safety inspection at the above address of activities authorized by the above listed NRC license with continuing in-office review through February 10, 2016. The inspection was an examination of your licensed activities as they relate to radiation safety and to compliance with the Commission's regulations and the license conditions. The inspection consisted of observations by the inspector, interviews with personnel, and a selective examination of representative records. Additional information provided in your correspondence dated December 3 and 23, 2015, and the telephone conversation on December 22, 2015, and February 10, 2016, between Viktor Struzhkin, Ph.D. of your organization and this office were also examined as part of the inspection. The findings of the inspection were discussed with Dr. Struzhkin at the conclusion of the inspection.

Based on the results of this inspection and in accordance with the NRC Enforcement Policy, the NRC has determined that four Severity Level IV violations of NRC requirements occurred. The violations involved: 1) the failure to notify the NRC after 24 months of no principal activities; 2) the failure to perform annual radiation safety and implementation audits; 3) the failure to perform a physical inventory every 6 months; and 4) the failure to leak test a sealed source as required.

The violations are cited in the enclosed Notice of Violation (Notice), because the violations were identified by the NRC.

During our inspection exit meeting on February 10, 2016, you indicated that you would most likely transfer the sources for disposal and terminate the license.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Regulations, Guidance and Communications**. The current Enforcement Policy is included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents**; then **Enforcement Policy (Under 'Related Information')**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

The NRC's Safety Culture Policy Statement became effective in June 2011. While a policy statement and not a regulation, it sets forth the agency's expectations for individuals and organizations to establish and maintain a positive safety culture. You can access the policy statement and supporting material that may benefit your organization on NRC's safety culture Web site at <http://www.nrc.gov/about-nrc/safety-culture.html>. We strongly encourage you to review this material and adapt it to your particular needs in order to develop and maintain a positive safety culture as you engage in NRC-regulated activities.

Please contact Dennis Lawyer at 610-337-5366 if you have any questions regarding this matter.

Sincerely,

**/RA/**

Christopher Cahill, Acting Chief  
Commercial, Industrial, R&D and Academic  
Branch  
Division of Nuclear Materials Safety

Enclosure:  
Notice of Violation

cc w/enclosures:  
Victor Struzhkin, Ph.D., Radiation Safety Officer  
District of Columbia

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Sincerely,

/RA/

Christopher Cahill, Acting Chief  
Commercial, Industrial, R&D and Academic  
Branch  
Division of Nuclear Materials Safety

Enclosure:  
Notice of Violation

cc w/enclosures:  
Victor Struzhkin, Ph.D., Radiation Safety Officer  
District of Columbia

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B. Bickett, RI

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DATE	2/10/2016		2/10/2016				

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## **NOTICE OF VIOLATION**

The Carnegie Institution of Washington  
Washington, DC

Docket No. 03038189  
License No. 08-00604-06

During an NRC inspection conducted on October 27, 2015, four violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. 10 CFR 30.36(d) requires, in part, that licensees provide notification to the NRC in writing within 60 days of any of the following occurrences:

- (1) The license has expired,
- (2) The licensee has decided to permanently cease principal activities at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements,
- (3) No principal activities under the license have been conducted for a period of 24 months, or
- (4) No principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements.

Contrary to the above, as of November 30, 2013, the licensee has not conducted principal activities under the license for a period of 24 months under Byproduct Material License No. 08-00604-06, and the licensee failed to notify the NRC in writing within 60 days of this occurrence.

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

- B. 10 CFR 20.1101(c) requires that the licensee periodically (at least annually) review the radiation safety program content and implementation.

Contrary to the above, between July 11, 2011, and October 27, 2015, a period exceeding annually, the license had not reviewed the radiation protection program content and implementation. Specifically, the last review of the radiation protection program content and implementation was conducted on July 11, 2011, a period greater than annually.

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

- C. Condition 16 of NRC License No. 08-00604-06 requires, in part, that the licensee conduct a physical inventory every six months to account for all sources received and possessed under the license.

Contrary to the above, as of October 27, 2015, the licensee has not conducted a physical inventory to account for all sources received and possessed under the license since December 12, 2014, a period exceeding six months.

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

- D. Condition 15 of NRC License No. 08-00604-06 requires, in part, that the licensee shall test sealed sources for leakage and/or contamination at intervals not to exceed six months. Sealed sources need not be tested if they are in storage and are not being used, however when they are removed from storage for use and have not been tested with the required leak test interval, they shall be tested before use.

Contrary to the above, on November 30, 2011, a 2.5 mCi, Co-57 sealed source was used and had not been tested for leakage and/or contamination since January 25, 2011, a period greater than 6 months.

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

Pursuant to the provisions of 10 CFR 2.201, The Carnegie Institution of Washington is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region I, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). 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, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance 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 to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, any response which contests an enforcement action shall be submitted under oath or affirmation.

Your response will be placed in the NRC Public Document Room (PDR) and on the NRC Web site. To the extent possible, it should, therefore, not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Notice of Violation

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The Carnegie Institution of Washington

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

Dated This \_10\_ day of \_February\_ 2016