



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

March 9, 2017

Mr. Rip S. Shively, Center Director  
United States Department of the Interior  
U.S. Geological Survey  
Columbia Environmental Research Center  
4200 E. New Haven Road  
Columbia, MO 65201

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03005146/2016001(DNMS) AND  
NOTICE OF VIOLATION – UNITED STATES DEPARTMENT OF THE INTERIOR,  
U.S. GEOLOGICAL SURVEY, COLUMBIA ENVIRONMENTAL RESEARCH  
CENTER

Dear Mr. Shively:

On October 18 and 19, 2016, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at your facility in Columbia, Missouri, with continued in-office review through February 23, 2017. The purpose of the inspection was to review activities performed under your NRC license to ensure that activities were being performed in accordance with NRC requirements. The in-office review included a review of the information submitted to the NRC by your radiation safety officer (RSO), Mr. Frank Proa, regarding low activity radioactive sources recently identified as in your possession. The information provided included the results of Mr. Proa's investigation and analysis that were needed in order to determine whether these sources were licensable materials or materials exempt from the regulations. Mr. Dennis O'Dowd of my staff conducted a final exit meeting by telephone with Mr. Proa and Mr. Carl Orazio of your staff on February 23, 2017, to discuss the inspection findings.

During this inspection, the NRC staff examined activities conducted under your license related to public health and safety. Additionally, the staff examined your compliance with the Commission's rules and regulations as well as the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, independent measurements, and interviews with personnel.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's website at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violation concerned the licensee's failure to limit its possession of byproduct material to that authorized under a specific or general license, as required by Title 10 of the *Code of Federal Regulations* (CFR) Section 30.3. The NRC is citing the violation in the enclosed Notice because the inspector identified that a violation had occurred.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The guidance in NRC Information

Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be useful in preparing your response. You can find the Information Notice on the NRC website at: <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1996/in96028.html>. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, will be made available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's 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 publicly available without redaction.

Please feel free to contact Mr. O'Dowd if you have any questions regarding this inspection. Mr. O'Dowd can be reached at 630-829-9573.

Sincerely,

*/RA/*

Aaron T. McCraw, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Docket No. 030-05146  
License No. 24-12728-01

Enclosure:  
Notice of Violation

cc w/encl: State of Missouri  
Frank C. Proa

R. Shively

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Letter to Mr. Rip S. Shively from Aaron T. McCraw, dated March 9, 2017

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**ADAMS Accession Number: ML17068A431**

OFFICE	RIII-DNMS	RIII-DNMS					
NAME	DO'Dowd:cl	AMcCraw					
DATE	3/8/2017	3/9/2017					

**OFFICIAL RECORD COPY**

## NOTICE OF VIOLATION

United States Department of the Interior  
U.S. Geological Survey  
Columbia Environmental Research Center  
Columbia, Missouri

License No. 24-32774-01  
Docket No. 030-05146

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on October 18 and 19, 2016, with continued in-office review through February 23, 2017, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

- A. Title 10 of the *Code of Federal Regulations* Section 30.3 states, in part, that except for persons exempted, no person shall manufacture, produce, transfer, receive, acquire, own, possess, or use byproduct material except as authorized in a specific or general license issued in accordance with the regulations in this chapter.

Items 6, 7, and 8 of NRC Materials License 24-32774-01 lists the radioactive material authorized in the license by radionuclide, chemical and/or physical form, and amount that may be possessed at any one time under the license.

Contrary to the above, on October 19, 2016, and for an indeterminate period of several years prior to those dates, the licensee possessed approximately 17 microcuries of cesium-137 (Cs-137), a radionuclide not authorized by a specific or general license.

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

Pursuant to the provisions of 10 CFR 2.201, the United States Department of the Interior, U.S. Geological Survey, Columbia Environmental Research Center (USGS/CERC) is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region III, 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: (1) the reason for the violation, or, if contested, the basis for disputing the violation or its 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 will be achieved. Your response may reference or include previously 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.

Your response will be made available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Enclosure

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

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

Dated this 9<sup>th</sup> day of March 2017.