



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

February 23, 2018

Mr. David Greene, Laboratory Manager
Kansas City Water Services Department
Laboratory Services Division
2 N.E. 32nd Avenue
Kansas City, MO 64116

SUBJECT: NRC SPECIAL INSPECTION REPORT NO. 99990003/2018001(DNMS)
AND NOTICE OF VIOLATION – KANSAS CITY WATER SERVICES
DEPARTMENT – LABORATORY SERVICES DIVISION

Dear Mr. Greene:

On January 22, 2018, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a special inspection at your facility in Kansas City, Missouri, with continued in-office review through February 14, 2018. The purpose of the inspection was to review the use of radioactive material at your facility to ensure activities were being performed in accordance with NRC requirements. The in-office review included an evaluation of the installation of four generally licensed Electron Capture Detectors (ECDs) currently in use. Mr. Ryan Craffey of my staff conducted a final exit meeting by telephone with you on February 14, 2018, to discuss the inspection findings. This letter presents the results of the inspection.

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

Based on the results of this inspection, the NRC has determined that two Severity Level IV violations of NRC requirements occurred. The violations were 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 violations concerned: (1) the failure to assure that ECDs were tested for leakage of radioactive material at no longer than six-month intervals, as required by Title 10 of the *Code of Federal Regulations* (CFR) 31.5(c)(2); and (2) holding ECDs that were not in use for longer than two years, as prohibited by 10 CFR 31.5(c)(15). The violations are cited in the enclosed Notice of Violation (Notice). The NRC is citing the violations in the enclosed Notice because the inspector identified them.

The inspector determined that the root cause of the first violation was an oversight, and the root cause of the second was a lack of understanding of regulatory requirements. As corrective actions to restore compliance and to prevent recurrence, you committed to collect and submit for analysis leak tests for all ECDs in your possession, to revise the point of contact with the leak test service provider, and to add electronic tracking mechanisms to ensure that future leak tests are performed at the required frequencies. You also committed to dispose of all disused ECDs following receipt of leak test results for each.

The inspector also identified a violation of 10 CFR 31.5(c)(3) regarding the failure to properly install ECDs in accordance with the manufacturer's instructions. As a violation of minor significance, it is not subject to enforcement action in accordance with Section 2 of the Enforcement Policy. However, the issue must still be corrected.

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's 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. Craffey if you have any questions regarding this inspection. Mr. Craffey can be reached at 630-829-9655.

Sincerely,

/RA/

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

Docket No. 999-90003
General License under 10 CFR 31.5(a)

Enclosure: Notice of Violation

cc w/encl: Lori Scott, Senior Chemist
State of Missouri

Letter to Mr. David Greene from Aaron T. McCraw dated February 23, 2018

SUBJECT: NRC SPECIAL INSPECTION REPORT NO. 99990003/2018001(DNMS)
AND NOTICE OF VIOLATION – KANSAS CITY WATER SERVICES
DEPARTMENT – LABORATORY SERVICES DIVISION

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DATE	02/21/2018		02/23/2018					

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NOTICE OF VIOLATION

Kansas City Water Services Department
Laboratory Services Division
Kansas City, Missouri

General License under 10 CFR 31.5(a)
Docket No. 999-90003

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on January 22, 2018, with continued in-office review through February 14, 2018, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. Title 10 of the *Code of Federal Regulations* (CFR) 31.5(c)(2) requires, with the exception of the devices listed in subparagraphs (i) and (ii), that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to a general license shall assure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals.

Contrary to the above, Kansas City Water Services Department – Laboratory Services Division (the licensee) did not test four in-use Agilent Electron Capture Detectors (ECDs), each containing 15 millicuries (mCi) of nickel-63, which are not subject to the exemptions specified in subparagraphs (i) and (ii), for leakage between March 30, 2017, and January 22, 2018, an interval greater than six months.

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

- B. Title 10 CFR 31.5(c)(15) requires that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to a general license may not hold devices that are not in use and are not kept in standby for future use for longer than two years.

Contrary to the above, as of January 22, 2018, the licensee held four PerkinElmer ECDs, each containing 15 mCi of nickel-63, for longer than two years. Specifically, these devices had not been used since 2010, and were not being kept in standby for future use.

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

Pursuant to the provisions of 10 CFR 2.201, Kansas City Water Services Department – Laboratory Services Division 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 violations, or, if contested, the basis for disputing the violations or their 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.

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.

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.

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

Dated this 23rd day of February 2018.