



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

Region III
2443 Warrenville Road, Suite 210
Lisle IL 60532-4352

June 27, 2013

EA-13-053

Ms. Holly Mulherin, President
Nordlund and Associates
d/b/a West Michigan Testing
815 E. Ludington Ave.
Ludington, MI 49431

**SUBJECT: NOTICE OF VIOLATION – NORDLUND AND ASSOCIATES D/B/A WEST
MICHIGAN TESTING; NRC INSPECTION REPORT
NO. 03037434/2013001(DNMS)**

Dear Ms. Mulherin:

This refers to a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on January 16, 2013, at your facility located in Ludington, Michigan, with continuing in-office review through March 27, 2013. During the inspection, apparent violations of NRC requirements were identified. The significance of the issues and the need for lasting and effective corrective actions were discussed with you during an exit meeting on April 1, 2013. Details regarding the apparent violations were provided in NRC Inspection Report No. 03037434/2013001(DNMS) dated April 26, 2013.

In the letter transmitting the inspection report, we provided you with the opportunity to address the apparent violations identified in the report by providing a written response or requesting a pre-decisional enforcement conference. You provided a written response in a letter dated May 28, 2013.

Based on the information developed during the inspection and the information that you provided in your written response dated May 28, 2013, 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 our inspection report dated April 26, 2013.

The first violation involves your failure to confine your possession and use of byproduct materials to the locations and purposes authorized by your license as required by Title 10 of the Code of Federal Regulations (10 CFR) 30.3(c)(2) and 30.34(c). During the inspection, the NRC identified that you possessed four radium gauges that were not on your NRC license. On August 7, 2009, the NRC assumed jurisdictional authority for naturally occurring and accelerator-produced radioactive material in the State of Michigan. The unauthorized possession and use of radioactive material is a significant regulatory concern as it impacts the ability of the NRC to properly inspect your operations to ensure you are safely using the radioactive material.

The second violation involves your failure to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee

as required by 10 CFR 30.34(i). During the inspection, the NRC identified that the radium gauges while locked within the shed, did not have a second physical barrier to prevent their removal. The failure to secure the radium gauges is a significant regulatory concern because of the potential for theft or diversion of the gauges that could have adversely impacted the health and safety of the general public. The NRC evaluated the applicability of Enforcement Guidance Memorandum 11-004, "Interim Guidance for Dispositioning Violations of Security Requirements for Portable Gauges" to this instance. The NRC determined that the violation demonstrated a programmatic weakness in that you did not understand that you needed to follow NRC regulations for your radium gauges. It also was not isolated in either number or frequency of occurrence in that there were four gauges and the configuration had been on-going since August 2009. Therefore, the NRC concluded that the exercise of enforcement discretion was not applicable.

The third violation involves your failure to conduct operations so that the dose rate in any unrestricted area does not exceed the limits specified in 10 CFR 20.1301(a)(2). During the inspection, the NRC identified that the radium gauges were stored in such a manner that the inspector's survey instrument indicated a radiation field of approximately 0.0045 rem per hour approximately one foot from the corner of the shed where three of the four gauges were stored. The failure to ensure that the radium gauges were stored in a manner that would ensure that the dose rates would remain below limits in 10 CFR Part 20 is of concern to the NRC because of the potential that a member of the public could have received a dose above the regulatory limit of 0.002 rem in any one hour.

The NRC determined that the root cause of all three violations was that you did not fully understand the letter provided by the State of Michigan on December 15, 2008, that informed you that the gauges would no longer be subject to the State's requirements as of August 7, 2009. As a result, you did not recognize that the radium gauges were subject to the same NRC requirements as your Troxler gauge. Therefore, the NRC has categorized the above violations as a Severity Level III problem.

In accordance with the NRC Enforcement Policy, a base civil penalty in the amount of \$3,500 is normally considered for a Severity Level III problem. Because your facility has not been the subject of escalated enforcement actions within the last two years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process described in Section 2.3.4 of the Enforcement Policy. The NRC determined that credit was warranted for your corrective actions. Your immediate corrective actions included moving the radium gauges to the center of the shed, adding a second lock to the shed door, and committing not to use the gauges until they could be added to your license. As long-term corrective actions, you submitted a license amendment request to add the radium gauges to your license; this request was approved on April 3, 2013. Additionally, you trained your technicians as to the proper location for the radium gauges and your RSO inspects the storage area weekly when the gauges are being used. Finally, you stated that you were planning on installing additional insulating material along the walls of the storage area.

Therefore, to encourage prompt and comprehensive correction of violations, and in recognition of the absence of previous escalated enforcement action, I have been authorized, after consultation with the Director, Office of Enforcement, to not propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty. In addition, issuance

of this Severity Level III problem constitutes escalated enforcement action that may subject you to increased inspection effort.

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations, and the date when full compliance was achieved, was adequately addressed on the docket in NRC Inspection Report No. 03037434/2013001(DNMS) dated April 26, 2013, and in your written response dated May 28, 2013. 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>. Therefore, 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. If personal privacy or proprietary information is necessary to provide an acceptable response, 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 information, 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). The NRC also includes significant enforcement actions on its Web site at http://www.nrc.gov/reading_rm/doc_collections/enforcement/actions/.

Sincerely,

/RA by C. Pederson for/

Charles A. Casto
Regional Administrator

Docket No. 030-37434
License No. 21-26281-02

Enclosure:
Notice of Violation

cc w/encl: James Dillingham,
Radiation Safety Officer
State of Michigan

NOTICE OF VIOLATION

Nordlund and Associates
d/b/a West Michigan Testing
Ludington, Michigan

Docket No. 030-37434
License No. 21-26281-02
EA-13-053

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on January 16, 2013, at the Ludington, Michigan facility, with continuing in-office review through March 27, 2013, 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 (10 CFR) 30.3(c)(2) requires, in part, that that licensees who possess and use accelerator-produced radioactive material or discrete sources of radium-226 for which a license amendment is required to authorize the activities in 10 CFR 30.3(a) may continue to use these materials for uses permitted under that part until the date of the NRC's final licensing determination provided the person submits an amendment application within 6 months from the waiver expiration date of August 7, 2009, or within 6 months from the date of an earlier termination of the waiver as noticed by the NRC, whichever date is earlier.

On February 2, 2009, (74 FR 5797), the NRC published its final Notice of Waiver Termination for licensees in various states, including the State of Michigan. The Federal Register Notice stated, in part, that the NRC was terminating the time-limited waivers for all remaining non-Agreement States and Canadian licenses that are under NRC jurisdiction including Michigan.

10 CFR 30.34(c) requires, in part, that each licensee confine his possession and use of byproduct materials to the locations and purposes authorized by the license.

Condition 6 of License No. 21-26281-02, Amendment 0, dated April 19, 2007, limited the possession of licensed materials to Cesium-137 and Americium-241.

Contrary to the above, from August 7, 2009, to April 3, 2013, the licensee possessed four backscatter gauges each containing radium-226, a radioactive material not authorized by their license, and had used one of these gauges for density measurements at a temporary job site on July 3 and 5, 2012. The licensee did not submit a license amendment until February 19, 2013, which is more than 6 months from the waiver expiration date.

- B. 10 CFR 30.34(i) requires that each portable gauge licensee use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee.

Contrary to the above, from August 7, 2009, to January 16, 2013, the licensee failed to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee. Specifically, the licensee secured its four portable radium gauges at its main office with only one independent physical control.

- C. 10 CFR 20.1301(a)(2) requires that the licensee conduct operations so that the dose in any unrestricted area from external sources does not exceed 2 millirem in any one hour.

Contrary to the above, as of January 16, 2013, the licensee failed to conduct operations so that the dose in any unrestricted area from external sources did not exceed 2 millirem in any one hour. Specifically the licensee stored its radium gauges in an outdoor shed in an unrestricted area in a manner that resulted in a dose of approximately 4.5 millirem per hour external to the shed.

These violations represent a Severity Level III problem (Sections 6.3 and 6.7).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to be taken to correct the violation, and the date when full compliance was achieved, is already adequately addressed on the docket in NRC Inspection Report No. 03037434/2013001(DNMS) dated April 26, 2013, and in your response dated May 28, 2013. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, EA-13-053," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

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, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

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 and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, 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.

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

Dated this 27th day of June, 2013

of this Severity Level III problem constitutes escalated enforcement action that may subject you to increased inspection effort.

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Sincerely,

/RA by C. Pederson for/

Charles A. Casto
Regional Administrator

Docket No. 030-37434
License No. 21-26281-02

Enclosure:
Notice of Violation

cc w/encl: James Dillingham,
Radiation Safety Officer
State of Michigan

SEE PREVIOUS CONCURRENCE

FILE NAME: G:\ORAI\IICS\ENFORCEMENT\Cases\Enforcement Cases 2013\EA-13-053 West Michigan Testing\EA-13-053 West Michigan Testing final action - FINAL.docx

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DATE	06/12/13	06/13/13	06/13/13	06/21/13	06/27/13	06/27/13

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1 OE concurrence received via email from K. Day on June 21, 2013.

Letter to Holly Mulherin from Charles A. Casto dated June 27, 2013

SUBJECT: NOTICE OF VIOLATION – NORDLUND AND ASSOCIATES D/B/A WEST
MICHIGAN TESTING; NRC INSPECTION REPORT
NO. 03037434/2013001(DNMS)

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