



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

January 17, 2019

EA-18-132
EN 53507
NMED No. 180340 (closed)

Mr. Paul Galdes, P.E.
Vice President
Fleis & VandenBrink Engineering, Inc.
2960 Lucerne Drive SE
Grand Rapids, MI 49546

**SUBJECT: FLEIS & VANDENBRINK ENGINEERING, INC. – NOTICE OF VIOLATION;
NRC REACTIVE INSPECTION REPORT NO. 03033539/2018001(DNMS)**

Dear Mr. Galdes:

This letter refers to the reactive inspection conducted on July 19 and 20, 2018, at your Grand Rapids, Michigan, facility and at a temporary jobsite in Big Rapids, Michigan, with continued in-office review through September 24, 2018. The purpose of the inspection was to review the circumstances, root and contributing causes, and corrective actions for an event involving a damaged portable moisture density gauge, reported to the NRC on July 16, 2018, and to review activities performed under your NRC license to ensure that activities were being performed in accordance with NRC requirements. During the inspection, two apparent violations of NRC requirements were identified. The circumstances surrounding these apparent violations, the significance of the issues, and the need for lasting and effective corrective actions were discussed with Mr. Richard Thorne of your staff during an exit meeting on September 24, 2018. Details regarding the apparent violations were provided in NRC Inspection Report No. 03033539/2018001(DNMS), dated October 24, 2018. The inspection report can be found in the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession Number ML18296A714. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

In the letter transmitting the inspection report, we provided you with the opportunity to address the apparent violations identified in the report by either attending a predecisional enforcement conference or by providing a written response before we made our final enforcement decision. In a letter dated November 20, 2018, (ML18341A126) and e-mail dated December 14, 2018 (ML19009A205) you provided responses to the apparent violations.

Based on the information developed during the inspection and the information that you provided in your responses to the inspection report, the NRC has determined that two violations of NRC requirements occurred. These violations involved: (1) the unauthorized detachment of a cesium-137 sealed source from the source rod of a damaged portable gauge, contrary to Condition 14 of your NRC license; and (2) the handling of the unshielded cesium-137 source, contrary to Condition 20 of your NRC license and your operating and emergency procedures.

The failure to follow your operating and emergency procedures resulting in a detached source and unintended exposure to a worker is of significant safety concern to the NRC. Therefore, this violation has been categorized in accordance with the NRC Enforcement Policy at Severity Level III. In accordance with the Enforcement Policy, a base civil penalty in the amount of \$7,250 is considered for a Severity Level III violation.

Because your facility has not been the subject of an escalated enforcement action within the last two inspections, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy. The NRC determined *Corrective Action* credit was warranted due to your corrective actions. Short-term corrective actions pertaining to the violation of Condition 14 of NRC License No. 21-26580-01 included placing temporary fencing and restricting access to the area surrounding the damaged gauge and contacting the gauge manufacturer. Long-term corrective actions for both violations included: (1) gaining access to lead-lined transport vessels located at a maintenance company location that is relatively near where the gauges are used; (2) enhancing your annual nuclear gauge refresher training to include review of operational procedures and situational awareness with emphasis on safety tips, including maintaining control of the gauge at all times; (3) reinforcing this incident as a case study to highlight that no one touch, grasp, handle, or hold the source rod or source tip, or perform any type of non-routine maintenance on a gauge at any time; and (4) ensuring emergency contact phone numbers on the emergency response sheets in all the gauge cases have been made more prominent and also include reminders not to touch the source rod or source.

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, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty. In addition, issuance of these Severity Level III violations constitutes escalated enforcement action that may subject you to increased inspection effort. The NRC also includes significant enforcement actions on its Web site at <http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/>.

The NRC has concluded that information regarding: (1) the reason for the violations; (2) the corrective actions that have been taken and the results achieved; and (3) the date when full compliance was achieved is already adequately addressed on the docket in Inspection Report No. 03033539/2018001(DNMS), your letter dated November 20, 2018, and your email dated December 14, 2018. 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.

We also reviewed your response regarding the SLIV violations. We do not have any additional questions regarding your response at this time. We will follow up to these corrective actions during a future NRC inspection.

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 any, will be made available electronically for public inspection in the NRC Public Document Room and in ADAMS. 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. 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).

Sincerely,

/RA J. Giessner for/

Darrell J. Roberts
Regional Administrator

Docket No. 030-33539
License No. 21-26580-01

Enclosure:
Notice of Violation

cc w/encl:
Mr. Richard Thorne
State of Michigan

Letter to Paul Galdes from Darrell J. Roberts dated January 17, 2019.

SUBJECT: NOTICE OF VIOLATION; NRC REACTIVE INSPECTION REPORT NO. 03033539/2018001(DNMS) – FLEIS & VANDENBRINK ENGINEERING, INC.

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OFC	RIII-EICS	RIII-DNMS	RIII-DNMS	OE	RIII-ORA	RIII-ORA
NAME	SBakhsh	AMcCraw	MShuaibi	JPeralta /SHoliday for/	JCameron	DRoberts JGiessner for
DATE	1/8/19	1/9/19	1/10/19	1/15/19	1/17/19	1/17/19

NOTICE OF VIOLATION

Fleis & VandenBrink Engineering, Inc.
Grand Rapids, Michigan

Docket No. 030-33539
License No. 21-26580-01
EA-18-132

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted July 19 and 20, 2018, at your Grand Rapids, Michigan, facility and at a temporary jobsite in Big Rapids, Michigan, with continued in-office review through September 24, 2018, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. Condition 14 of NRC License No. 21-26580-01, Amendment No. 11 requires that sealed sources or source rods containing licensed material shall not be opened or sources removed from source holders or detached from source rods by the licensee, except as specifically authorized.

Contrary to the above, on July 16, 2018, the licensee detached a sealed source from a source rod, without being specifically authorized to do so. Specifically, the licensee's office technician detached a sealed source containing 8 millicuries of cesium-137 from the source rod of a Troxler 3400 series portable gauge that had been damaged at a temporary job site in Big Rapids, Michigan.

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

- B. Condition 20.A of NRC Materials License No. 21-26580-01, Amendment No. 11 requires, in part, that the license shall conduct its program in accordance with the statements, representations, and procedures contained in the letter, dated April 1, 2014, and its enclosures, and that the U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

In an enclosure to the April 1, 2014 letter, the licensee committed to implement and maintain the operating and emergency procedures in Appendix H of NUREG-1556, Vol. 1, Rev. 1, dated November 2001.

The Operating and Emergency Procedures contained in Appendix H of NUREG-1556 Vol. 1, Rev. 1 requires, in part, that personnel not touch the unshielded source rod with fingers, hands, or any part of the body.

Contrary to the above, on July 16, 2018, licensee personnel touched an unshielded source rod with their bare hands. Specifically, the licensee's gauge user touched the unshielded source rod of a Troxler 3400 series portable gauge with their bare hands.

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

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved, is already adequately addressed on the docket in Inspection

Enclosure

Report No. 03033539/2018001(DNMS), your letter dated November 20, 2018, and your e-mail dated December 14, 2018. 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-18-132)," 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.

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 in 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, the response 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 two working days of receipt.

Dated this 17th day of January 2019