

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

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| 1. LICENSEE/LOCATION INSPECTED: Roush Industries, Inc. 12445 Levan Road Livonia, MI 48150 REPORT NUMBER(S) 2020001 | 2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352 |
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| 3. DOCKET NUMBER(S) 030-39192 | 4. LICENSE NUMBER(S) 21-35539-01 | 5. DATE(S) OF INSPECTION February 26, 2020; Exit April 3, 2020 |
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LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:



- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

_____ Non-cited violation(s) were discussed involving the following requirement(s):

- 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

Statement of Corrective Actions

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

| TITLE | PRINTED NAME | SIGNATURE | DATE |
|---------------------------|------------------|---|------------|
| LICENSEE'S REPRESENTATIVE | | | |
| NRC INSPECTOR | Edward F. Harvey | Edward Harvey  | 04/03/2020 |
| BRANCH CHIEF | Robert Ruiz |  Digitally signed by Robert Ruiz Date: 2020.04.12 22:20:57 -05'00' | |

Docket File Information

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| 6. INSPECTION PROCEDURES USED 87126 | 7. INSPECTION FOCUS AREAS All |
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SUPPLEMENTAL INSPECTION INFORMATION

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|---------------------------------|----------------------|---|---|
| 1. PROGRAM CODE(S) 03620 | 2. PRIORITY 5 | 3. LICENSEE CONTACT Don Thering, RSO | 4. TELEPHONE NUMBER (734) 779-7692 |
|---------------------------------|----------------------|---|---|

Main Office Inspection Next Inspection Date: February 26, 2025

Field Office Inspection _____

Temporary Job Site Inspection _____

PROGRAM SCOPE

This was an announced, initial inspection of an engineering services company authorized to use licensed material for research and development specific to radiotracers in oil within internal combustion engines. The in-office review included an evaluation of release calculations. At the time of the inspection, the licensee was using germanium-69 (Ge-69) diluted in engine oil to test the efficacy of oil gaskets within their client's test engine. This was accomplished by measuring the amount of Ge-69 that was present in three 99.9% efficient filters placed in the engine's exhaust system to determine how much engine oil leaked or combusted during each test. The licensee staffed four authorized users who were trained to handle licensed material and an additional two staff members who completed RSO training. The RSO stated that they intend to train additional personnel as needed. The Ge-69 was received by the licensee as 20 mL oil samples that the licensee further diluted into approximately five quarts of oil that is poured into the engine. Each shipment is sent with approximately 2.7 mCi of Ge-69 that is split between two 20 mL vials, allowing the licensee to stagger their addition to the engine oil in an effort to maintain a consistent quantity of tracer within the engine. All testing occurred within a dedicated test cell. The location at 12445 Levan Road was intended to be the building at which the licensed material was received. However, the RSO coordinated with the shipper to have material delivered directly to the test building. As such, the licensee does not use the Levan Road location and may consider removing it from the license.

At the time of the inspection, the licensee was running a test with the radiotracer in the engine. All personnel remained outside the test cell at the control panel. The inspector performed surveys of the surrounding area and found no readings that would indicate exposures above regulatory limits. Interviews with the personnel indicated adequate knowledge of the use of personal protective equipment, surveying procedures, waste handling, and use of dosimetry.

The inspector reviewed pertinent licensee documents, including safety procedures, dosimetry records, training records, package receipt records, preliminary air effluent calculations using data from their supplier, and COMPLY air effluent release calculations.

No violations of NRC requirements were identified during this inspection.

Harvey, Edward

From: Harvey, Edward
Sent: Monday, April 13, 2020 6:42 AM
To: Donald L. Thering
Cc: Henry Ochieng
Subject: NRC Inspection Report
Attachments: Final Report.pdf

Mr. Thering,

I have attached the inspection report for the NRC inspection performed at your facility in Livonia, Michigan on February 26, 2020. If you could please confirm receipt of the attachment, I would greatly appreciate it. You are not required to respond to the report as there were no violations identified during the inspection. Please let me know if you have any questions.

In accordance with Title 10 of the Code of Federal Regulations 2.390 of the NRC's "Rules of Practice," a copy of this report will be 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>.

Thank you,

Edward Harvey
Health Physicist
US NRC Region III
Division of Nuclear Materials Safety
(630) 829-9819