

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

MAHLE Engine Components USA, Inc.
2020 Sanford Street
Muskegon, MI 49444

REPORT NUMBER(S) 2018001

2. NRC/REGIONAL OFFICE

Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-04910

4. LICENSE NUMBER(S)

21-12192-01

5. DATE(S) OF INSPECTION

January 30, 2018

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:

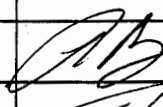
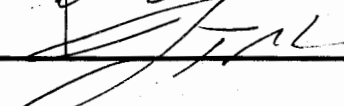
- ☒ 1. Based on the inspection findings, no violations were identified.
- ☐ 2. Previous violation(s) closed.
- ☐ 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was 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	Luis Nieves Folch		1/30/18
BRANCH CHIEF	Aaron T. McCraw		2/7/18

Docket File Information

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6. INSPECTION PROCEDURES USED

87124

7. INSPECTION FOCUS AREAS

03.01-03.08

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)

03620

2. PRIORITY

5

3. LICENSEE CONTACT

Max Mascheweske, RSO

4. TELEPHONE NUMBER

(231) 724-1875

☒ Main Office Inspection

Next Inspection Date: January 30, 2023

☐ Field Office Inspection

☐ Temporary Job Site Inspection

PROGRAM SCOPE

This was an unannounced, routine inspection of an engine parts manufacturer who is authorized to used millicurie quantities of tritium (H-3) for research and development at its facility in Muskegon, Michigan. The licensee has approximately 9 employees who worked with radioactive materials. The licensee uses H-3 as a tracer in engine oil to test for oil consumption and emission analyses in internal combustion engines. The engines with H-3 in the oil were operated in monitored test cells. Each test cell with H-3 oil in the engine was posted with "Caution Radioactive Material" signs. After testing, each engine was flushed so that the remaining oil was below release criteria for the engine. The test cell was cleaned and monitored for tritium. Engines were disassembled and disposed as scrap and the licensee submitted annual reports describing the disposal of engines containing H-3 in accordance with its license condition. Used engine oil was disposed of as mixed waste. The licensee performed monthly in vitro bioassays for their radiation workers.

Performance Observations

At the time of the inspection, no engine testing was being performed. However a test engine with tritium in the oil was in a test cell, and the cell was properly posted. Licensee staff demonstrated lab surveys and package receipt surveys, preparation of oil for tests, monitoring of test cells, disposal of used oil, bioassays of personnel, inventory of licensed material, and security of the material. The inspector reviewed a selection of records, including internal audits, inventories, bioassays, and surveys records.

No violations of NRC requirements were identified during this inspection.