NRC FORM 591M PART 1
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
MAHLE Industries Incorporated 2020 Sanford Street Muskegon, MI 49443 REPORT NUMBER(S) 2013-~~110~~ 001	Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-04910	21-12192-01	1/18/2013

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 violations(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	Ken Lambert	Ken Lambert	1/18/13
BRANCH CHIEF	Tamara E. Bloomer	Tamara Bloomer	1/28/13

NRC FORM 591M PART 3
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information

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3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-04910	21-12192-01	01/18/2013

6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87126	03.01- 03.07

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
03620	5	Max Mascheweske, RSO	(231) 722-1300

☑ Main Office Inspection Next Inspection Date: 01/18/2018

☐ Field Office Inspection

☐ Temporary Job Site Inspection

PROGRAM SCOPE

The licensee is 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 were posted with "Caution Radioactive Material" signs. After testing, each engine was flushed so that the remaining oil was less than 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 as mixed waste.

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 discussed/demonstrated: (1) ordering and receipt of licensed material; (2) survey instrument checks and package receipt surveys; (2) smear surveys of lab areas: (3) preparation of oil for tests; (4) monitoring of test cells; (5) disposal of used oil; (6) bioassays of personnel; (7) inventory of licensed material; and (8) scintillation counter calibrations. The inspector reviewed results of Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. Because the licensee possessed only H-3, the inspector was unable to perform confirmatory surveys.