



Materials Inspection Record

1. Licensee Name: Federal Mogul Powertrain, LLC		2. Docket Number(s): 030-39257		3. License Number(s) 21-35622-01	
4. Report Number(s): 2022-001			5. Date(s) of Inspection: March 28, 2022 with in-office review through April 5		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 03620	8. Priority: 5	9. Inspection Guidance Used: IP 87126	
10. Licensee Contact Name(s): Karly St. Aubin - RSO		11. Licensee E-mail Address: Karly.StAubin@tenneco.com		12. Licensee Telephone Number(s): 734-928-0424	
13. Inspection Type: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Routine <input checked="" type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input type="checkbox"/> Unannounced		14. Locations Inspected: <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 03/28/2027 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

Federal Mogul Powertrain designs and manufactures original equipment engine, transmission and driveline components for automotive and other industries. The company was issued an NRC materials license on April 5, 2021, to use tritium for research and development purposes at a facility in Plymouth, Michigan. Beginning March 2022, the licensee performed oil consumption studies on customer engines using oil with covalently bonded tritium incorporated by a supplier. Studies were performed in a designated engine test bay, with an adjacent laboratory used exclusively for collection of test samples and storage of licensed materials. The licensee's RSO, an EHS analyst, was based at the Plymouth facility.

The inspector toured the facility in Plymouth. All areas were adequately posted, and all licensed material was adequately secured. The inspector observed the conduct of licensed activities, including engine test cycles, test sample collection, conduct and analysis of contamination surveys, and waste handling. All staff were knowledgeable of radiation protection principles and licensee procedures, and utilized extensive contamination control measures and personal protective equipment throughout. During the conduct of contamination surveys, the inspector requested the licensee collect additional wipes of areas selected by the inspector; none returned any evidence of contamination when analyzed by LSC.

The inspector reviewed the licensee's program and procedures with staff and management, including those for receiving material, preparing and performing oil consumption studies, handling radioactive waste, staff bioassay, area surveys, and emergency response. The inspector also reviewed the licensee's methods for material accountability, including documentation of the first receipt of material on November 2, 2021, and subsequent inventory checks. The inspector also reviewed the licensee's first program audit, performed on March 22, 2022, as well as records of the content, conduct and tracking of radiation safety training, including general awareness for all staff, supplemental training ancillary users, and hazmat training for authorized users.

No violations of significance were identified as a result of this inspection.