



Department of Energy

Washington, DC 20585

June 16, 2023

Mr. Garrett Harencak
President
Mission Support and Test Services, LLC
2621 Losee Road
North Las Vegas, Nevada 89030

WEL-2023-02

Dear Mr. Harencak:

The Office of Enterprise Assessments, Office of Enforcement has completed an evaluation into a safety incident that occurred on November 21, 2022, when a vehicle caught fire while hoisted on a lift in the Motor Pool Maintenance Facility at the Nevada National Security Site (NNSS), as reported by Mission Support and Test Services, LLC (MSTS) into the Department of Energy's (DOE) Noncompliance Tracking System under NTS-NA-NFO-MSTS-BOS-2022-0010542, dated December 13, 2022. An employee received first degree burns to their face and arm; however, the event had the potential to cause more serious injury. Activation of the facility's fire suppression system contained the fire to the area of origin. Still, significant damage to electrical and communication wiring required repairs, resulting in the closure of the Motor Pool Maintenance Facility for nearly three months.

The vehicle involved was the last of nine vehicles to be decommissioned, specifically to have all petroleum, oils, and lubricants drained, prior to use as a training prop at the Fire Training Center. Prior to the incident, MSTS employees executed the extremely risky procedure of using a cordless, battery-operated drill to make a drainage hole into each of eight vehicle fuel tanks, which contained highly flammable petroleum. Due to time constraints, the ninth vehicle was scheduled for decommissioning on the following Monday. At approximately 1500 hours, a MSTS employee proceeded to remove the remaining fuel from the vehicle's fuel tank by means of the same high-risk procedure, when the fuel ignited due to the use of a spark-producing tool during the drilling process. The employee received flash burns and was transported to NNSS Occupational Medicine for further evaluation.

Based on this evaluation, the Office of Enforcement identified concerns with MSTS's implementation of 10 C.F.R. Part 851 (Part 851), *Worker Safety and Health Program* requirements in the areas of management responsibilities, hazard identification and assessment, and hazard prevention and abatement. The specific concerns from this event that warrant management attention are as follows:



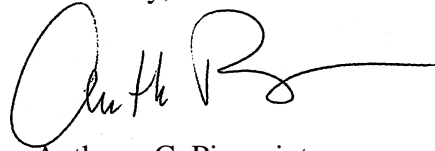
- MSTS did not consider safer alternatives, such as removing the fuel tank, siphoning the fuel, or draining the fuel via the fuel pump/lines, when developing the activity level work document for vehicle decommissioning.
- MSTS did not perform an adequate job hazard analysis (JHA). The JHA did not reference the vehicle decommissioning work task nor did it reflect working with flammable liquids/vapors and the use of non-spark producing tools during such evolutions.
- MSTS did not ensure all employees performing the task understood the scope of the work, nor did MSTS provide adequate supervision throughout the process.
- MSTS did not confirm that the employee assigned to work on the ninth vehicle possessed the necessary skills required to accomplish the work safely. MSTS assigned a tireman to complete the vehicle decommissioning independently without the guidance of a qualified mechanic, as was used the previous workday.

The Office of Enforcement acknowledges that MSTS made timely notifications to DOE's National Nuclear Security Administration (DOE/NNSA) Nevada Field Office line management, promptly investigated the event, and prepared a cause analysis and corrective action plan for the event. However, the Office of Enforcement has concerns with MSTS's work planning and control process and the method selected for the fuel draining operation, in consideration of the risk associated with drilling into a fuel tank with a spark producing tool.

The Office of Enforcement has elected to issue this Enforcement Letter to convey concerns with the vehicle fire in the Motor Pool Maintenance Facility at NNSS. Issuance of this Enforcement Letter reflects DOE's decision to not pursue further enforcement activity against MSTS at this time. In coordination with DOE/NNSA, the Office of Enforcement will continue to monitor MSTS's efforts to maintain a safe workplace.

This letter imposes no requirements on MSTS, and no response is required. If you have any questions, please contact me at (301) 903-4033, or your staff may contact Ms. Shannon Holman, Director, Office of Worker Safety and Health Enforcement, at (301) 903-0100.

Sincerely,

A handwritten signature in black ink, appearing to read 'Anthony C. Pierpoint', with a long horizontal flourish extending to the right.

Anthony C. Pierpoint
Director
Office of Enforcement
Office of Enterprise Assessments

cc: David Bowman, NA-NV
Charles Thom, Mission Support and Test Services, LLC