**U.S. Department of Labor**

Occupational Safety and Health Administration
Washington, D.C. 20210

December 15, 2020

The Honorable Chuck Grassley
Committee on Finance
United States Senate
Washington, D.C. 20510

Dear Chairman Grassley:

The Department of Labor (Department) received your letter regarding whistleblowers at a Lockheed Martin (Lockheed) facility in Marietta, Georgia. The Department forwarded the letter to the Occupational Safety and Health Administration (OSHA) for response.

OSHA shares your concern for the health of workers who may be exposed to dangerous concentrations of chemicals. In August 2016, OSHA received a complaint alleging employee exposure to toluene vapors while applying PR-148 blue adhesion promoter to aircraft fuel tanks at Lockheed's Marietta, Georgia, facility. In response, the agency took immediate action to contact the employer regarding the alleged hazards, and then determined that an on-site inspection was warranted. On September 7, 2016, OSHA initiated an on-site inspection, which included a site walk-around, interviews, and personal sampling. As described below, the findings from that inspection showed that Lockheed was in compliance with OSHA standards.

In response to your request, OSHA conducted a search of the agency's inspection database. Unfortunately, OSHA cannot determine if any other inspection or evaluation of the use of PR-148 occurred at any other facilities. However, the agency has tested for toluene overexposure in at least 214 inspections since October 1, 2013.

OSHA conducted two inspections at the Lockheed facility in the last five years:

> Inspection 1175965 was the unprogrammed inspection noted above, which was initiated on September 7, 2016, in response to a complaint alleging employee exposure to toluene vapors while applying PR-148 blue adhesion promoter.
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> Inspection 1173764 was an unrelated unprogrammed inspection initiated on August 30, 2016, in response to a separate complaint alleging employee exposure to diesel exhaust from fire trucks at the B-69 and B-4 fire stations. The inspection did not include manufacturing areas of the plant.

In your letter, you asked to be provided a copy of a letter referenced by the Air Force Office of Inspector General (AFIG) concerning OSHA's inspection of the Lockheed facility, that you state AFIG said "showed that OSHA had not only completed an inspection specifically related to PR-148's use as an aerosol…but that the chemical did not pose any threat to employee health in the way it was used at the facility."

Pursuant to procedures in OSHA's Field Operations Manual (FOM), OSHA's enforcement file associated with Inspection 1175965 includes three letters: (1) a letter sent to Lockheed Martin with the results of the personal sampling performed to evaluate occupational exposure to two constituents of PR-148, toluene and isopropyl alcohol, finding that employee exposures were beneath OSHA's permissible exposure limits (PELs) for both of these contaminants; (2) an identical letter with sampling results, sent to the International Association of Machinists and Aerospace Workers (IAMAW) Southern Territory trade union Vice President; and (3) a letter that OSHA sent to the complainant once the inspection concluded (enclosed). The letter to the complainant, dated November 30, 2016, explained that, based on the sampling results, interview statements, and OSHA's observations during the inspection, a violation of OSHA's standards could not be substantiated, and also noted that the pressure of the spray gun used to apply PR-148 had been lowered prior to OSHA's inspection of the facility, resulting in reduced employee exposure. None of these three letters provide an assessment, approval, or endorsement of the specific work process, and OSHA is not aware of any other letters regarding this inspection.

You inquired about the data and tests used by OSHA to determine that PR-148 was safe to use as an aerosol. During OSHA's September 2016 inspection of the Lockheed facility, OSHA's industrial hygienist conducted personal air sampling to determine employee exposures to toluene and isopropyl alcohol, two components in PR-148 that have established PELs in OSHA's standards. The industrial hygienist used an air sampling method called OSHA Method 111. Additional information about this air sampling method is available on OSHA's website at https://www.osha.gov/dts/sltc/methods/organic/org111/org111.html.

You asked how OSHA representatives determine what kind of personal protective equipment (PPE) must be used for sufficient protection and if these tests were conducted inside the wing of the aircraft to ensure that the employee that sprayed the chemical used the proper PPE.

OSHA's PPE standards (for general industry workplaces like the Lockheed facility, 29 CFR § 1910 Subpart I) require employers to provide PPE, such as gloves, eye and face protection, and respiratory protection, when engineering, work practice, and administrative controls are not feasible or do not provide sufficient protection and job hazards warrant it. Under 29 CFR § 1910.132(d), the employer must conduct a hazard assessment to determine the need for PPE, and then select proper PPE and ensure its use. Where respirators are necessary to protect workers, OSHA also requires employers to implement a comprehensive respiratory protection program in accordance with the Respiratory Protection standard under 29 CFR § 1910.134.

During the September 2016 Lockheed facility inspection, to determine compliance with OSHA's PPE requirements, OSHA's industrial hygienist reviewed the safety data sheet for the adhesion promoter and, as previously noted, conducted personal sampling of four workers in the area, including one who entered the wing/fuel cell. As discussed, OSHA's sampling showed that the employees tested were not exposed above OSHA's PELs for toluene and isopropyl alcohol. Additionally, during OSHA's inspection, employees wore PPE, including full-face respiratory protection, and the industrial hygienist determined that the employer had a respiratory protection program for employees working in the production area. The location was also equipped with a local exhaust system to immediately evacuate contaminants from the area.

Based on this information, OSHA determined that the employer complied with OSHA PPE requirements.

OSHA does not have a record of the full PPE ensemble worn by OSHA's industrial hygienist while conducting the September 2016 Lockheed inspection, but protocols for compliance officer PPE selection are addressed in OSHA's FOM. Additionally, as noted, the location was equipped with a local exhaust system.

Finally, you asked if OSHA representatives recommended that those employees who were applying the chemical wear a particular kind of PPE. OSHA did not provide recommendations or issue citations as a result of its inspection, as exposures were below regulated levels, and, in addition, the employer already required the use of respiratory protection for employees in the area.

I hope the agency's responses to your questions and the information in the enclosed letters sufficiently address your concerns. For further assistance, please contact the Office of Congressional and Intergovernmental Affairs at (202) 693-4600.

Sincerely,

Loren Sweatt

Loren Sweatt
Principal Deputy Assistant Secretary

Enclosure