



At a Glance

Evaluation of EPA Policies, Procedures, and Processes for ASPECT Flight Missions

Why We Did This Evaluation

To accomplish this objective:

The U.S. Environmental Protection Agency Office of Inspector General conducted this evaluation to determine whether the EPA and its contractors followed Airborne Spectral Photometric Environmental Collection Technology flight equipment deployment procedures during the East Palestine, Ohio train derailment emergency. This evaluation is in response to a complaint submitted to the OIG Hotline.

On February 3, 2023, a freight train carrying hazardous materials derailed in East Palestine, Ohio, spilling chemicals into a ditch, igniting a fire, and leading to a controlled burn of vinyl chloride-containing railcars. EPA on-scene coordinators and other staff responded to the emergency. The hotline complainant alleged that the aircraft flown in support of the emergency response did not follow normal Agency practice and that there was a several-day delay in activating the Airborne Spectral Photometric Environmental Collection Technology after the derailment, leading to an unnecessary controlled burn.

To support this EPA mission-related effort:

- *Operating efficiently and effectively.*

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What We Found

During its response to the East Palestine, Ohio train derailment, the EPA and its contractors followed existing practices for deploying the Airborne Spectral Photometric Environmental Collection Technology, or ASPECT, aircraft. The EPA does not immediately deploy ASPECT in response to all releases of hazardous materials. Instead, the Agency deploys ASPECT at the request of the EPA on-scene coordinator.

When the EPA's lead on-scene coordinator arrived at the train derailment site in East Palestine, the coordinator assessed the ground-level air monitoring that was in place. The coordinator believed that this monitoring captured better data than ASPECT could and believed that the ground-based temperature gauges used to monitor the temperature of the vinyl chloride-containing railcars were sufficient to inform the decision about a controlled burn. Later, the coordinator consulted with the ASPECT program branch chief. During that consultation, the coordinator requested that the EPA deploy the ASPECT aircraft to monitor the controlled burn of the affected vinyl chloride-containing railcars the following day.

The ASPECT aircraft took off 28 minutes after the program branch chief issued the mission order, consistent with the contractual agreement that the aircraft take off within 90 minutes of a mission order during nonbusiness hours. However, according to the EPA, the aircraft did not fly over the derailment as planned on the day of the controlled burn because of the pilots' safety concerns regarding low-hanging clouds and icing conditions. The ASPECT aircraft conducted two flight missions the day after the controlled burn. According to the EPA, data collected from the aircraft indicated a successful controlled burn of the railcars.

The emails and documents we reviewed and the interviews we conducted did not support the allegations that the ASPECT aircraft did not follow normal Agency practice or the allegations that there was a several-day delay in activating ASPECT after the derailment. Although the EPA followed existing practices for deploying ASPECT, the documented procedures that were in place remain largely unknown to all involved stakeholders and lack the clarity needed to avoid negatively affecting decision-making related to an emergency response.

Relying on procedures that are unknown to all involved stakeholders could negatively affect emergency response decision-making.

Recommendations and Planned Agency Corrective Actions

We make four recommendations to the assistant administrator for Land and Emergency Management. Specifically, we recommend that the assistant administrator develop a formal, written ASPECT deployment procedure; regularly train the EPA on-scene coordinators on the deployment procedure; develop and implement a contact system to ensure the timely receipt of and response to ASPECT deployment requests; and update the ASPECT fact sheet to list the full range of capabilities and share the fact sheet with the on-scene coordinators. The Agency agreed with our recommendations and developed corrective actions that meet the intent of the recommendations. All recommendations are resolved with corrective actions completed or pending.