Explosives accounted for 4 million of the total 2.6 billion tons of hazardous materials transported in the U.S. in 2012. DOT’s PHMSA is responsible for regulating the transport of explosives, which includes classifying new explosives prior to transportation. The classification denotes the risk level and requirements, such as which transportation modes can be used to transport the explosive. To be classified, an explosive must be examined by a PHMSA-approved third-party test lab. PHMSA must then approve the test lab’s classification recommendation.

The Fixing America’s Surface Transportation Act includes a provision for GAO to review DOT’s oversight of this process. This report addresses: (1) PHMSA’s oversight of the classification of new explosives and related stakeholder views and (2) PHMSA’s efforts to improve the oversight process and any associated challenges. GAO collected PHMSA data on applications processed (2006-2015) and explosives incidents (2005-2015) and interviewed officials from PHMSA, all six approved test labs, carrier and explosive manufacturer associations, and five explosives manufacturers selected in part to represent a range of industries.

What GAO Recommends

To improve oversight of the classification of new explosives, PHMSA should (1) develop and implement a systematic approach for improving PHMSA’s guidance for test labs; and (2) develop a written plan describing information requirements for its new data system. DOT concurred with the recommendations.

View GAO-16-715. For more information, contact Susan A. Fleming at (202) 512-2834 or flemings@gao.gov.

Better Guidance and Planning Could Enhance DOT's Explosives Classification Oversight

The Department of Transportation’s (DOT) Pipeline and Hazardous Materials Safety Administration’s (PHMSA) oversight of the labs that issue classification recommendations for new explosives is limited by a lack of guidance, and stakeholders have mixed views on PHMSA’s oversight. To receive a classification for a new explosive, manufacturers must have an approved test lab examine the explosive and submit an application to PHMSA with the test lab’s recommended classification. PHMSA’s oversight includes: (1) approving and monitoring the test labs and (2) reviewing applications and classification recommendations. Although PHMSA has several activities to oversee test labs, its efforts to promote test lab consistency—one objective of its oversight—are hindered by the lack of a systematic approach to developing guidance. GAO has reported that agencies benefit from procedures to improve guidance to respond to regulated entities’ concerns. PHMSA officials stated that they grant test labs flexibility on how to apply standards and regulations. However, four of the six test labs said guidance could explain “unwritten rules” such as common testing modifications. Without a systematic approach to determining what guidance is needed, PHMSA’s ability to achieve consistency is limited.

Stakeholder views on PHMSA’s oversight processes, in particular its process for approving classification recommendations, are mixed. PHMSA officials view their role as final approver of classifications as critical. However, some manufacturers stated that PHMSA’s review process is time consuming and opaque and questioned whether it adds value. In contrast, other stakeholders such as carrier associations were supportive of PHMSA’s oversight role. In 2015, PHMSA began taking steps to improve the transparency of its process by, for example, posting information online on average application processing times.

PHMSA has begun oversight improvement efforts that align with its strategic goals to increase outreach, streamline its classification application review process, and enhance risk management, but it faces staffing and data challenges. For example, PHMSA has eliminated one of two technical reviews for certain explosive classification applications. According to PHMSA officials, such streamlining could help PHMSA better manage its limited staff resources—7 PHMSA officials process an average of 1,700 new explosives annually, along with other duties—a workload that creates challenges for application turnaround. However, PHMSA’s data challenges reduce its ability to strategically improve its process, and PHMSA lacks a plan for data system improvements under way. Internal control standards state that management should design the entity’s information system to achieve objectives and respond to risks. Currently, PHMSA’s data system does not allow the agency to aggregate or analyze most information across applications, limiting PHMSA’s ability to analyze its processes or outcomes in order to achieve objectives or respond to risks. PHMSA officials stated that fiscal year 2016 funds have been designated to upgrade its system, but PHMSA does not have a plan documenting what fields or information needs are required for the system in order to reach agency goals. Without a plan to guide the development of the new data system, PHMSA may miss opportunities to use it to better manage staff resources, identify future and evaluate past reforms, and meet agency goals.