

GAO Highlights

Highlights of [GAO-13-721](#), a report to congressional committees

Why GAO Did This Study

Cargo tank trucks deliver gasoline and other flammable liquids daily for consumer use. Trucks are loaded and unloaded through external bottom lines that, after loading, may contain up to 50 gallons of liquid and are known as “wetlines.” Concerns have been raised about the safety of wetlines, since a collision may rupture them, releasing flammable liquid and possibly causing fatalities and property damage. PHMSA is responsible for regulating the safe transportation of hazardous materials and has proposed rules prohibiting the transport of flammable liquids in wetlines.

In 2012, The Moving Ahead for Progress in the 21st Century Act required GAO to examine this issue. This report discusses (1) the extent that PHMSA’s data reliably identify wetline safety risks, (2) options for addressing wetline safety risks, and (3) how well PHMSA has assessed the costs and benefits of addressing these risks through regulation. GAO analyzed PHMSA’s wetline incident data for 1999 to 2011, reviewed PHMSA’s regulatory cost-benefit analyses, and interviewed agency officials and industry and safety stakeholders.

What GAO Recommends

DOT should improve its wetline incident data by requiring carriers to specifically report wetline incidents and by improving its information on incident consequences. DOT should also address uncertainty in the assumptions and data underlying its regulatory cost-benefit analysis. DOT did not agree or disagree with the recommendations, but provided technical comments.

View [GAO-13-721](#). For more information, contact Susan A. Fleming at (202) 512-2834 or flemings@gao.gov.

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CARGO TANK TRUCKS

Improved Incident Data and Regulatory Analysis Would Better Inform Decisions about Safety Risks

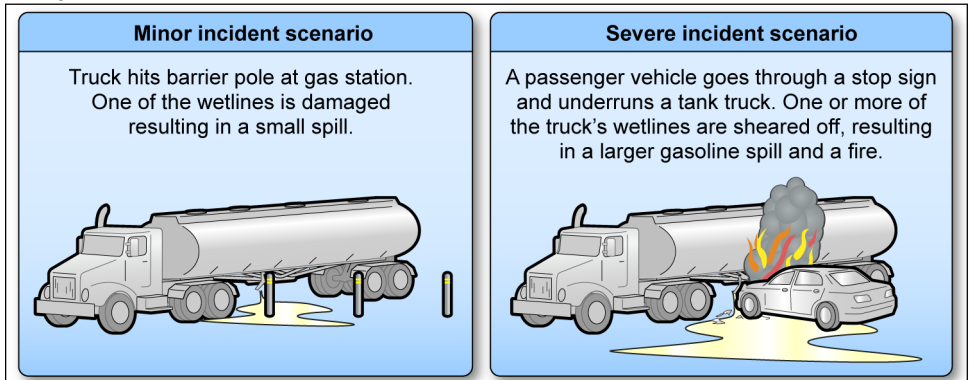
What GAO Found

The Department of Transportation’s (DOT) Pipeline and Hazardous Materials Safety Administration’s (PHMSA) incident data cannot be used to reliably identify risks from incidents involving collisions with and spills from tank trucks’ bottom lines (“wetlines”) because the incidents are not specifically identified in PHMSA’s database and the data contain inaccuracies. PHMSA requires carriers to report hazardous material incidents, but the reporting form does not specifically capture wetline incidents. PHMSA officials identify wetline incidents through a resource-intensive process of reviewing carrier-reported incident narratives and other information. However, GAO found that the narratives do not always clearly indicate whether an incident is wetline related and that information about the consequences of incidents, including fatalities, is not always accurate. PHMSA has made efforts to improve its data, such as adding quality checks, but this has not affected how wetline incidents are reported, and inaccuracies remain.

One technology to purge liquid from wetlines exists, but use of this system is limited, and industry and safety stakeholders expressed concerns about it, such as concerns about the safety of retrofitting existing trucks with the device and its cost. Although other options have been proposed to address wetline risks, none has been pursued, and there are concerns about their safety and feasibility as well. For example, wetlines could be drained at loading terminals, but this creates issues over storing the drained fuel and whether it could be resold.

PHMSA analyzed the costs and benefits of its proposed 2011 rule to prohibit transportation of flammable liquids in unprotected wetlines, but did not account for uncertainties in its analytical assumptions and limitations in the underlying incident data. For example, PHMSA’s analysis overstated the number of fatalities the proposed rule would prevent when considering actual past incidents. Furthermore, PHMSA based its cost analysis on the assumption that carriers would install a certain type of wetline purging system, but its limited adoption makes that cost uncertain. Federal guidance recommends that agencies account for uncertainty in regulatory analysis, such as limitations in PHMSA’s data and uncertainty in its assumptions. Without having done so, PHMSA’s analysis may not accurately represent the costs and benefits of its proposed rule.

Examples of Wetline Incidents



Source: GAO.