Federal regulatory agencies continue to grapple with issues relating to transportation of crude oil and hazardous materials by rail. The subject of transportation of hazardous commodities has always attracted interest from members of Congress, states, and the public, but this interest has increased in recent years. This article summarizes recent regulatory and legislative developments relating to the transportation of crude oil or hazardous commodities by rail.

The regulatory developments include three rulemaking proceedings. The Pipeline and Hazardous Materials Safety Administration (PHMSA), in coordination with the Federal Railroad Administration (FRA), published final rules involving the transportation of crude oil by rail, including design standards for tank cars. PHMSA also requested comments on its proposal to incorporate certain special permits into the Hazardous Materials Regulations. FRA proposed rules relating to the securement of unattended equipment. This article also summarizes FRA’s railworthiness directive involving tank cars equipped with certain valves sold by an affiliate of a tank car company.

The recent legislative developments include several bills pend-
ing before U.S. House and Senate committees and subcommittees relating to the transportation of hazardous materials. The House Subcommittee on Railroads, Pipelines, and Hazardous Materials also recently held a hearing on “Oversight of Ongoing Rail, Pipeline, and Hazmat Rulemakings.”

**Regulatory Proposals**

**Tank Car Design Standards**

One high-profile regulatory development relating to the transportation of crude oil by rail involves a notice of proposed rulemaking by PHMSA, in coordination with FRA, issued in the summer of 2014. PHMSA requested comments on several proposals relating to the transportation of crude oil by rail, including proposals concerning design standards for new tank cars, retrofitting existing tank cars, and braking systems. In addition, PHMSA requested comments on its proposal to define a “high-hazard flammable train” as a “single train containing 20 or more tank carloads of Class 3 (flammable liquid) material.” PHMSA further proposed timelines for discontinuing the use of Department of Transportation (DOT) Specification 111 (DOT-111) tank cars in “high hazard flammable trains” to transport Class 3 flammable liquids, depending upon the packing group classification. PHMSA also sought comments regarding its proposed speed restrictions for “high-hazard flammable trains.” PHMSA additionally proposed to amend its rules to require a railroad operating “high-hazard flammable trains” to perform rail routing analyses. PHMSA advanced several proposed rules related to classification, packaging, and testing of mined gases and liquids, including crude oil. PHMSA also proposed to require a railroad to notify state emergency response commissions if it transports a train with 1 million gallons or more (i.e., approximately 35 tank cars) of crude oil from the Bakken shale formation in the Williston Basin, which is located in North Dakota, South Dakota, and Montana, and Saskatchewan and Manitoba, Canada.

PHMSA released its final rules on May 1, 2015. In its final rules, PHMSA defined a “high-hazard flammable train” as a train with “20 or more loaded tank cars of a Class 3 flammable liquid in a continuous block or 35 or more loaded tank cars of a Class 3 flammable liquid across the entire train.” For tank cars constructed after October 1, 2015 used in a “high-hazard flammable train”, PHMSA required such new tank cars to conform to “Option 2” in the 2014 NPRM, which was the “AAR 2014 Tank Car,” subject to the “enhanced braking requirements.” For existing tank cars used in a “high-hazard flammable train,” PHMSA required such existing tank cars to be retrofitted “to specifications equivalent to Option 3” in the 2014 NPRM, which was the “enhanced CPC 1232 tank car.” The retrofit schedule depends upon the tank car type and the packing group. With respect to braking systems, PHMSA required a “high-hazard flammable train” operating in excess of 30 miles per hour to be equipped with “either a two-way end-of-train [ ] device … or a distributed power system.” The final rules required electronically controlled pneumatic braking systems be equipped on locomotives and tank cars used on a “high-hazard flammable unit train,” which is defined in the final rules as a “single train transporting 70 or more loaded tank cars containing Class 3 flammable liquid,” when such trains are operated in excess of 30 miles per hour by 2021 if the “high-hazard flammable unit train” is “comprised of at least one tank car loaded with a Packing Group I material” and by 2023 for all other “high-hazard flammable unit trains.” With respect to speed restrictions, the final rules adopted a maximum speed of 50 miles per hour for all “high-hazard flammable trains,” as well as a maximum speed of 40 miles per hour when “high-hazard flammable trains” travel in “high threat urban areas,” which are defined in federal regulations, unless “all tank cars containing a Class 3 flammable liquid meet or exceed” the design standards for new tank cars or retrofitting existing tank cars discussed above. With respect to rail routing analyses, the final rules require a railroad operating “high-hazard flammable trains” to perform an annual rail routing analysis. PHMSA did not adopt its proposed notification requirement. The agency “instead us[ed] as a substitute the contact information language requirement that is already part of the additional planning requirements for rail transportation … that now applies to ["high-hazard flammable trains"].”

**Special Permits**

PHMSA began a notice of proposed rulemaking (NPRM) seeking comments on the agency’s identification of special permits that it “deemed suitable for adoption” into the Hazardous Materials Regulations (HMR), 49 C.F.R. parts 171-180. Special permits allow variances from the current Hazardous Materials Regulations. PHMSA stated that a provision in the Moving Ahead for Progress in the 21st Century Act (MAP-21) legislation “required PHMSA to review and analyze [special permits] that have been in continuous effect for a 10-year period to determine which ones may be converted into the [Hazardous Materials Regulations].” PHMSA conducted a review of its special permits and identified a subset of special permits as appropriate for “incorporation into the [Hazardous Materials Regulations]” because they “have broad applicability, fit into the scope of the HMR, will increase flexibility in transportation, and provide an equivalent level of safety to the current regulations.” Some of the special permits deemed suitable for adoption relate to rail transportation. Comments were submitted in March.

**Securement of Unattended Equipment**

The FRA initiated a rulemaking involving the securement of “unattended equipment,” which is defined in federal regulations as “equipment left standing and unmanned in such a manner that the brake system of the equipment cannot be readily controlled by a qualified person.” FRA explained in part that its proposals would “ensure that each locomotive left unattended outside of a yard be equipped with an operative exterior locking mechanism and that such locks be applied on the controlling locomotive cab door when a train is transporting tank cars loaded with certain hazardous materials.”

FRA stated that its proposals would “codify many of the requirements already included in Emergency Order 28, “Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside of a Yard or Terminal,” published in August 2013. Emergency Order 28 “requir[ed] railroads to implement additional procedures to ensure the proper securement of equipment containing certain types and amounts of hazardous materials when left unattended.” FRA’s proposals would “amend existing regulations to include additional securement requirements for unattended equipment, primarily for trains transporting poisonous by inhalation hazardous materials or large volumes of Division 2.1 (flammable gases), Class 3 (flammable or combustible liquids, including crude oil and ethanol), and Class 1.1 or 1.2 (explosives) hazardous materials.” FRA also proposed “additional communication requirements relating to job briefings and securement verification.” Comments were submitted in November 2014.
The FRA has issued a railworthiness directive relating to tank cars equipped with certain valves sold by McKenzie Valve and Machining, an affiliate of Union Tank Car Company (UTLC). During an investigation, FRA found that “certain closure plugs installed on the [McKenzie] 3-inch valves cause mechanical damage to the valves, which leads to the destruction of the valves’ seal integrity and that the 3-inch valves, as well as similarly-designed 1-inch and 2-inch valves provided by this manufacturer, are not approved for use on tank cars.” Federal regulations provide that “all valves applied to tank cars must be of an approved design.” FRA stated that the “continued use of railroad tank cars equipped with the unapproved McKenzie [ ] threaded ball valves (including the 1-inch, 2-inch, and 3-inch [ ] valves) to transport hazardous materials by rail in the United States presents an unsafe operating condition … [and] violates the requirements of the [Hazardous Materials Regulations]” because the valves are not “currently approved for use on railroad tank cars.”

FRA thus issued the directive “to tank car owners of tank cars equipped with McKenzie valves.” The directive contained different provisions depending upon whether the valve was 3 inches or smaller. With respect to tank cars equipped with 3-inch McKenzie valves, tank car owners should remove a car with a valve “configured with a 3-inch standalone plug … until that valve is replaced with an approved valve …” In addition, “any tank car equipped with an unapproved 3-inch McKenzie valve is prohibited from being offered into transportation (whether loaded or residue) after May 12, 2015.” With respect to tank cars equipped with 1- and 2-inch McKenzie valves, the directive states that tank car owners should remove a car if the valve “shows evidence of mechanical damage … until that valve is replaced with an approved valve.” In addition, the directive provides that “[e]ven if a valve is not damaged, a tank car equipped with an unapproved 1-inch or 2-inch McKenzie valve is prohibited from being offered into transportation (whether loaded or residue) after June 11, 2015.” The directive further states that after the McKenzie valves have been replaced, “tank car owners may load the cars with hazardous materials and offer those cars for transportation.” The directive contains an alternative for tank cars equipped with 1- or 2-inch McKenzie valves if McKenzie obtains approval for using those valves on DOT-111 tank cars.

### Legislative Proposals

Aside from recent regulatory developments involving the rail transportation of crude oil and hazardous materials, several legislative proposals are also under consideration. Most of these proposals are in committee.

#### Proposals Relating to Emergency Responders

Some proposals involve training and resources for emergency responders. For example, the Senate budget resolution passed in March would establish a “deficit-neutral reserve fund” for “training and resources for emergency responders responding to hazardous materials incidents on railroads.”


#### Senate Committee’s Proposed Crude-By-Rail Safety Act

The U.S. Senate Committee on Commerce, Science and Transportation is currently considering S. 859, which is the “Crude-By-Rail Safety Act.” Among other provisions, S. 859 would require the Secretary of Transportation to “immediately prohibit” the use of legacy DOT-111 tank cars and unjacketed CPC-1232 tank cars to transport oil by rail. The definition of “oil” in S. 859 includes “oil of any kind or in any form, including crude, petroleum, fuel oil, shale, oil refuse, oil mixed with wastes other than dredged spoil, any bitumen or bituminous mixture, oil derived from a bitumen or bituminous mixture, any oil derived from kerogen-bearing sources, developing oils, and emerging oils.”

S. 859 would provide that DOT-111 tank cars and unjacketed CPC-1232 tank cars could be used to transport crude oil and ethanol after being retrofitted as proposed in the 2014 NPRM as Option 3 of Table 2, which PHMSA described as the “enhanced CPC-1232 tank car.” S. 859 would also require DOT to establish standards to retrofit jacketed CPC-1232 cars that transport crude oil or ethanol, as well as a timeline for implementation.

S. 859 would also mandate that DOT promulgate a new rule requiring that “all new tank cars designed to transport a Class 3 flammable liquid that are constructed after October 1, 2015, meet or exceed the design standards set forth under option 1 of table 2 in [the 2014 NPRM],” which was described as the “PHMSA and FRA Designed Tank Car.” S. 859 would also require that a “high-hazard flammable train,” which is defined as “a single train transporting 20 or more tank cars ...” use “electronically controlled pneumatic brakes” by a deadline to be set by DOT.

S. 859 contains other provisions relating to the transportation of crude oil by rail, including provisions relating to the development of standards for volatility in crude oil shipped by rail, oil spill response plans, and disclosure of information to state and local emergency response commissions along proposed routes.

#### House Subcommittee’s Proposed Bills

The U.S. House Subcommittee on Railroads, Pipelines, and Hazardous Materials is considering two bills relating to the transporta-
tion of hazardous materials by rail. H.R. 1290 would provide for a study by the Transportation Research Board of the National Academy of Sciences on the costs and impact of rerouting trains transporting hazardous materials to avoid urban areas designated by the Bureau of the Census as having a population greater than 30,000.34

H.R. 505 would require DOT to establish a Hazardous Materials Information Advisory Committee to recommend best practices for modernizing and standardizing “electronic shipping papers,” as well as for ensuring access to the papers by emergency responders.35 An electronic shipping paper is defined as “an electronic version of the physical shipping paper.”36

House Subcommittee Hearing on Pending Agency Rulemakings

Finally, the House Subcommittee on Railroads, Pipelines, and Hazardous Materials recently held a hearing on “Oversight of Ongoing Rail, Pipeline, and Hazmat Rulemakings.”37 The subcommittee heard testimony from the acting administrator of FRA, the acting administrator of PHMSA, and the chairman of the National Transportation Safety Board regarding the status of their regulatory efforts relating to the transportation of hazardous materials.

Conclusion

As discussed above, PHMSA and FRA are currently grappling with numerous issues relating to the transportation of crude oil and hazardous commodities by rail. Several legislative proposals relating to the rail transportation of crude oil and hazardous commodities are under consideration, but most of these proposals are in committee or in subcommittee.38

Kathryn J. Gainey is counsel in the Steptoe & Johnson’s Washington, D.C., office, where she is a member of the firm’s transportation practice. She can be reached at (202) 429-6253 or kgainey@steptoe.com. She concentrates her practice on transportation regulatory and litigation matters. She is a member of the board of directors of the Federal Bar Association’s Transportation and Transportation Security Law Section, as well as the Association of Transportation Law Professionals. Nivra S. Thanawala is an associate in Steptoe & Johnson’s Washington, D.C., office, where she is a member of the firm’s litigation department. She can be reached at (202) 429-6490 or nthanawala@steptoe.com. © 2015 Kathryn J. Gainey. All rights reserved.

Endnotes


3Notice of Proposed Rulemaking, Hazardous Materials: Adoption of Special Permits (MAP-21) (RRR), Docket No. PHMSA-2013-0042, 80 Fed. Reg. 5,340, 5,348 (Jan. 30, 2015). Table 8 identifies the special permits that PHMSA deemed “suitable for proposed adoption.” Id. Table 9 identifies the special permits that PHMSA deemed “not suitable for proposed adoption.” Id. at 5,353.

4Id. at 5,341.

5Id.


7Id. at 53,357.


9FRA NPRM at 53,357.

10Id. at 53,356.


12Id. at 14,028.

13Id. at 14,029.

14Id. at 14,028-14,029.

15Id. at 14,029.

16Id.

17Id.

18Id.

19Id.


25§ 4(a)(1)-(2).

26§ 2(2).

27§ 4(a)(4); 2014 NPRM at 45,019.


29§ 2(1).

30§ 2(1), 3(e).

31§ 3, 8, 9.

32To provide for a study by the Transportation Research Board of the National Academies on the impact of diverting certain freight rail traffic to avoid urban areas, and for other purposes, H.R. 1290, 114th Cong. (2015).


34§ 3.