Billing Code: 4910-60-W

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA-2017-0102; Notice No. 2017-12]

Hazardous Materials: Notice of the Department of Transportation's Decision on ECP

**Braking** 

**AGENCY:** Pipeline and Hazardous Materials Safety Administration (PHMSA); DOT.

**ACTION:** Notice.

**SUMMARY:** In this notice, the Department of Transportation is announcing that after careful review, and as mandated by Section 7311 of the Fixing America's Surface Transportation (FAST) Act, the Department of Transportation has reviewed the final updated Regulatory Impact Analysis (RIA) and determined that the HM-251 Final Rule's electronically controlled pneumatic (ECP) brake requirements are not economically justified. As the expected benefits do not exceed the expected costs, PHMSA and the Federal Railroad Administration (FRA) will initiate a rulemaking to rescind the necessary regulatory provisions.

FOR FURTHER INFORMATION CONTACT: For public affairs related questions, please contact Patricia Klinger, Deputy Director within PHMSA's Office of Governmental, International, and Public Affairs, by email at phmsa.publicaffairs@dot.gov, or by telephone at 202-366-4831. For economic (RIA) related questions, please contact Mark Johnson, Senior Economist, PHMSA, by telephone at 202-366-4495 or by email at mark.johnson@dot.gov. For rulemaking related questions, please contact Matthew Nickels, Senior Regulations Officer, PHMSA, by telephone at 202-366-8553 or by email at matthew.nickels@dot.gov.

1

#### **SUPPLEMENTARY INFORMATION:**

## **HM-251 Final Rule**

On May 8, 2015, PHMSA, in coordination with FRA, published a Final Rule adopting requirements intended to reduce the consequences and, in some instances, reduce the probability of accidents involving trains transporting large quantities of flammable liquids. See 80 FR 26643. The Final Rule defined certain trains transporting large volumes of flammable liquids as high-hazard flammable trains (HHFT)<sup>2</sup> and others as high-hazard flammable unit trains (HHFUT). The Final Rule required HHFUTs transporting at least one flammable liquid classified as a packing group I material be operated with an ECP braking system by January 1, 2021, and all other HHFUTs be operated with an ECP braking system by May 1, 2023. See 49 CFR 174.310(a)(3).

# Fixing America's Surface Transportation (FAST) Act

In December 2015, Congress passed the FAST Act.<sup>4</sup> Pub. L. 114-94, 129 Stat. 1686 (Dec. 4, 2015). Section 7311 of the FAST Act (Section 7311) established a process, including independent study and testing, for DOT to use in developing an updated RIA related to the Final Rule's ECP brake provision. The Secretary was also required to solicit public comment on the updated RIA, and issue a final updated RIA, responding to comments and incorporating any useful information provided. Finally, Section 7311 required the Secretary of Transportation to

<sup>&</sup>lt;sup>1</sup> https://www.gpo.gov/fdsys/pkg/FR-2015-05-08/pdf/2015-10670.pdf

<sup>&</sup>lt;sup>2</sup> The Final Rule defined an HHFT as "a single train transporting 20 or more loaded tank cars of a Class 3 flammable liquid in a continuous block or a single train carrying 35 or more loaded tank cars of a Class 3 flammable liquid throughout the train consist." See 49 CFR 171.8.

<sup>&</sup>lt;sup>3</sup> The Final Rule defined an HHFUT as "a single train transporting 70 or more loaded tank cars containing Class 3 flammable liquid."

<sup>4</sup> https://www.gpo.gov/fdsys/pkg/PLAW-114publ94/html/PLAW-114publ94.htm

review the final updated RIA and determine if the final rule's ECP brake requirements are justified, based on whether the final updated RIA demonstrated that the benefits exceed the costs. The FAST Act required this process to be completed no later than December 4, 2017.

Section 7311 required DOT to enter into an agreement with National Academy of Sciences (NAS) to test ECP brakes and reevaluate the economic analysis supporting the ECP brake requirement of the Final Rule.<sup>5</sup> Section 7311 required the testing to "objectively, accurately, and reliably measure[s] the performance of ECP brake systems relative to other braking technologies or systems, such as distributed power and 2-way end-of-train devices." The FAST Act also provided for U.S. General Accountability Office (GAO) review of the potential costs and benefits of ECP brakes. In response, GAO completed an evaluation of the business benefits, safety benefits, and costs that DOT estimated in the RIA for the final rule.<sup>6</sup> Additionally, GAO recently completed a second evaluation comparing the forecasted values of certain data points that were used to support DOT's ECP brake analysis.<sup>7</sup> Both audits are discussed in the final updated RIA.

## October 16, 2017 – Federal Register Notice and Request for Comments

On October 16, 2017, PHMSA published a Federal Register Notice that provided the public with an opportunity to comment on the updated RIA. See 82 FR 48006.8 All documents

<sup>&</sup>lt;sup>5</sup> In a March 17, 2016, letter, NAS declined to perform the testing, citing preliminary cost estimates to perform the testing in excess of \$100 million and expressing concern about meeting the statutory deadline. As an alternative, to meet the intent of the FAST Act, DOT conducted the testing itself and contracted with NAS to review and monitor the test plan.

<sup>&</sup>lt;sup>6</sup> DOT's Rulemaking on Electronically Controlled Pneumatic Brakes Could Benefit from Additional Data and Transparency, GAO-17-122, Oct 12, 2016.

<sup>&</sup>lt;sup>7</sup> 2015 Electronically Controlled Pneumatic Brake Rule: Comparison of DOT Forecasts for Selected Data Points for 2015 and 2016 to Preliminary Data for Those Years, GAO-17-567R, May 31, 2017

<sup>8</sup> https://www.gpo.gov/fdsys/pkg/FR-2017-10-16/pdf/2017-22281.pdf

and comments related to this matter, including the updated RIA, are still available for review at <a href="http://www.regulations.gov">http://www.regulations.gov</a> in Docket Number PHMSA-2017-0102.

# **Final Determination**

The final updated RIA shows that the ECP brake requirements are not expected to be cost beneficial under any scenario assessed. These include a range of crude oil volume by rail forecasts – one that shows volumes shipped by rail rebounding over a period of time to close to the levels predicted at the rulemaking stage, one that shows levels flattening at those seen over the past few years, and a third showing declining volumes of crude oil shipped by rail. The estimated costs and benefits for the 20-year analysis are presented in the following Table #1 (figures are in millions of dollars):

Table #1 (Millions of Dollars)									
	Total			7 Percent			3 Percent		
	Low	High	Sensitivity	Low	High	Sensitivity	Low	High	Sensitivity
Tank Cars	\$274.48	\$364.48	\$191.69	\$237.76	\$318.49	\$165.00	\$256.18	\$341.52	\$178.39
Locomotives	\$115.67	\$153.25	\$85.86	\$105.03	\$140.42	\$77.13	\$110.79	\$147.39	\$81.84
Asset Management	\$0.52	\$0.52	\$0.52	\$0.52	\$0.52	\$0.52	\$0.52	\$0.52	\$0.52
Training	\$36.58	\$36.58	\$36.58	\$32.29	\$32.29	\$32.29	\$34.62	\$34.62	\$34.62
Total Costs	\$427.25	\$554.83	\$314.65	\$375.60	\$491.72	\$274.95	\$402.11	\$524.05	\$295.37
Damage Mitigation	\$89.52	\$146.16	\$70.07	\$48.16	\$78.19	\$37.36	\$67.19	\$109.44	\$52.41
Set Out Reliefs	\$11.04	\$14.18	\$6.62	\$5.87	\$7.46	\$3.56	\$8.24	\$10.55	\$4.97
Class IA Brake Test	\$67.90	\$87.58	\$40.29	\$27.54	\$46.04	\$21.68	\$45.07	\$65.12	\$30.24
Wheel Savings	\$46.39	\$71.15	\$33.22	\$26.77	\$37.40	\$17.87	\$36.08	\$52.90	\$24.93
Fuel Savings	\$42.70	\$54.88	\$25.63	\$22.70	\$28.85	\$13.79	\$31.90	\$40.81	\$19.23
Total Benefits	\$257.54	\$373.95	\$175.82	\$131.03	\$197.95	\$94.27	\$188.49	\$278.81	\$131.78
Net Benefits	-\$169.71	-\$180.88	-\$138.83	-\$244.57	-\$293.78	-\$180.68	-\$213.63	-\$245.24	-\$163.59

As mandated by Section 7311, the Department of Transportation has reviewed the final updated RIA and determined that the HM-251 final rule's ECP brake requirements are not

economically justified as the final updated RIA demonstrates that the expected benefits do not exceed the expected costs. As such, PHMSA and FRA will initiate a rulemaking to rescind the necessary regulatory provisions.

Issued in Washington, D.C. on December 5, 2017, under authority delegated in 49 CFR

Part 1.97.

Drue Pearce.

Deputy Administrator, Pipeline and Hazardous Materials Safety Administration.