TO: BOARD OF SUPERVISORS

FROM: William B. Walker, M.D., Health Services Director





SUBJECT: Letter to Support Hazardous Materials: Enhanced Tank Car

Standards and Operational Controls for High-Hazard Flammable

Trains DOT Proposed Regulations

SPECIFIC REQUEST(S) OR RECOMMENDATION(S) & BACKGROUND AND JUSTIFICATION

RECOMMENDATION:

Authorize the Chair to sign letters to the Federal Office of Management and Budget (OMB) and to the Department of Transportation to support the proposed regulations titled "Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains".

There has been an increase in the number of train car derailments in the United States

FISCAL IMPACT:

No Cost

BACKGROUND:

and Canada carrying petroleum crude. Shipping hazardous materials is inherently dangerous. Transporting petroleum crude oil can be problematic if the crude oil is	
CONTINUED ON ATTACHMENT: YES	SIGNATURE:
RECOMMENDATION OF COUNTY ADMINISTRATOR APPROVE	RECOMMENDATION OF BOARD COMMITTEE OTHER
SIGNATURE(S):	
ACTION OF BOARD ON	APPROVE AS RECOMMENDED OTHER
VOTE OF SUPERVISORS UNANIMOUS (ABSENT AYES: NOES: ABSENT: ABSTAIN:	AND ENTERED ON THE MINUTES OF THE BOARD
ADMINISTRATOR Contact Person: R. Sawyer, 6-2286 CC:	ATTESTED — David Twa, CLERK OF THE BOARD OF SUPERVISORS AND COUNTY

BY:_

DEPUTY

Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains

released into the environment because of its flammability and the impact on the environment. This risk of ignition is compounded in the context of rail transportation because petroleum crude oil is commonly shipped in unit trains¹ that may consist of over 100 loaded tank cars. With the rising demand for rail carriage of petroleum crude oil throughout the United States, the risk of rail incidents increases along with the increase in the volume of crude oil shipped.

Attachment 1 is a white paper on the hazards of shipping crude oil by rail written by the Hazardous Materials Programs staff and following is a link to a report from the Governor's Working Group titled "Oil by Rail Safety in California".

On July 23, 2014, PHMSA issued a Notice for Proposed Rule Making that addressed the following issues and questions.

- 1) Better classification and characterization of mined gases and liquids.
 - a) Written sampling and testing program for all mined gases and liquids, such as crude oil, to address:
 - i) frequency of sampling and testing;
 - ii) sampling at various points along the supply chain;
 - iii) sampling methods that ensure a representative sample of the entire mixture;
 - iv) testing methods to enable complete analysis, classification, and characterization of material;
 - v) statistical justification for sample frequencies; and, (6) duplicate samples for quality assurance.

Require offerer to certify that program is in place, document the testing and sampling program, and make program information available to DOT personnel, upon request.

- 2) Rail routing risk assessment.
 - a) Requires carriers to perform a routing analysis that considers 27 safety and security factors. The carrier must select a route based on findings of the route analysis. These planning requirements are prescribed in § 172.820 and would be expanded to apply to HHFTs.
- 3) Notification to SERCs.
 - a) Require trains containing one million gallons of Bakken crude oil to notify State Emergency Response Commissions (SERCs) or other appropriate state delegated entity about the operation of these trains through their States
- 4) Reduced operating speeds

¹ A unit train is a freight $\underline{\text{train}}$ composed of cars carrying a single type of commodity that are all bound for the same destination.

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- a) Restrict all HHFTs to 50-mph in all areas
- b) PHMSA is requesting comment on three speed restriction options for HHFTs that contain any tank cars not meeting the enhanced tank car standards proposed by this rule:
 - i) a 40-mph maximum speed restriction in all areas,
 - ii) a 40-mph speed restriction in high threat urban areas²; and
 - iii) a 40-mph speed restriction in areas with a 100K+ population. **Proposed that** the Contra Costa County Board of Supervisors supports this option.
- c) PHMSA is also requesting comment on a 30-mph speed restriction for HHFTs that do not comply with enhanced braking requirements.

5) Enhanced braking

- a) Require all HHFTs be equipped with alternative brake signal propagation systems. Depending on the outcome of the tank car standard proposal and implementation timing, all HHFTs would be operated with either electronic controlled pneumatic brakes (ECP), a two-way end of train device (EOT), or distributed power (DP).
- 6) Enhanced standards for both new and existing tank cars
 - a) Require new tank cars constructed after October 1, 2015 (that are used to transport flammable liquids as part of a HHFT) to meet criteria for a selected option, including specific design requirements or performance criteria (e.g., thermal, top fittings, and bottom outlet protection; tank head and shell puncture resistance). PHMSA is requesting comment on the following three options for the DOT Specification 117:
 - i) FRA and PHMSA Designed Car, or equivalent Contra Costa County Board of Supervisors supports this alternative
 - ii) AAR 2014 Tank Car³ or equivalent
 - iii) Jacketed CPC-12324 or equivalent

² As defined in 49 CFR 1580.3 – High Threat Urban Area (HTUA) means an area comprising one or more cities and surrounding areas including a 10-mile buffer zone, as listed in appendix A to Part 1580 of the 49 CFR.

3 On March 9, 2011 AAR submitted petition for rulemaking P-1577, which was discussed in the ANPRM. In response to the ANPRM, on November 15, 2013, AAR and ASLRAA submitted as a comment recommendations for tank car standards that are enhanced beyond the design in P-1577. For the purposes of this rulemaking this tank car will be referred to as the "AAR 2014 tank car." See http://www.regulations.gov/#!documentDetail;D=PHMSA-2012-0082-0090.

⁴ In 2011, the AAR issued Casualty Prevention Circular (CPC) 1232, which outlines industry requirements for additional safety equipment on certain DOT Specification 111 tanks ordered after October 1, 2011, and intended for use in ethanol and crude oil service.

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Require existing tank cars that are used to transport flammable liquids as part of a HHFT, to be retrofitted to meet the selected option for performance requirements, except for top fittings protection. Those not retrofitted would be retired, repurposed, or operated under speed restrictions for up to five years, based on packing group assignment of the lading

PHMSA has submitted the proposed regulations to OMB to start the regulatory approval process. A letter of support to OMB and PHMSA would assist in starting the official regulatory process.

CONSEQUENCE OF NEGATIVE ACTION:

The proposed regulations would increase the safety of shipping crude oil. The letter would support the proposed regulations that would assist in moving the regulations forward. If the letter is not written and sent, the proposed regulations may be weakened or not moved forward.

CHILDREN'S IMPACT STATEMENT:

Not Applicable