DEPARTMENT OF TRANSPORTATION **Billing Code 4910-60-P**

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 172, 173, and 176

[Docket No. PHMSA-2009-0241) (HM-242)]

RIN 2137-AE52

Hazardous Materials Regulations: Combustible Liquids

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

ACTION: Withdrawal of Advance Notice of Proposed Rulemaking (ANPRM) and denial of petitions P-1498, P-1531, and P-1536.

SUMMARY: On April 5, 2010, PHMSA issued an Advance Notice of Proposed Rulemaking (ANPRM) in the Federal Register [75 FR 17111] under Docket No. PHMSA-2009-0241 (HM-242) soliciting comments on whether PHMSA should consider harmonization of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transportation of combustible liquids with the UN Recommendations, while maintaining an adequate level of safety, and posed a series of questions. The major issues being examined and addressed are: Safety (hazard communication and packaging integrity); International commerce (frustration/delay of international shipments in the port area); Increased burden on domestic industry (elimination of domestic combustible liquid exceptions); and Driver Eligibility (exception from placarding which would exempt seasonal workers from the Federal Motor Carrier Safety Administration's Commercial Driver's License (CDL) and Hazmat Endorsement requirements, and the Transportation Security Administration's (TSA) fingerprinting and background check provisions). PHMSA also addressed three petitions for rulemaking in the April 5 ANPRM; two suggesting that domestic requirements for the transportation of

combustible liquids should be harmonized with International standards, and one suggesting that the HMR should include more expansive domestic exceptions for shipments of combustible liquids.

The issuance of this notice constitutes a decision by PHMSA to withdraw the April 5, 2010 ANPRM, and to deny the International Vessel Operators Dangerous Goods Association (IVODGA) petition, P-1498, the Dangerous Goods Advisory Council (DGAC) petition, P-1531, and the U.S. Customer Harvesters, Inc. petition, P-1536.

ADDRESSES: For access to the docket to read background documents and comments received, go to http://www.regulations.gov at any time and insert "PHMSA-2009-0241" in the "Keyword" box, and then click "Search." You may also view the docket online by visiting the Docket Management Facility, Ground Floor, Room W12-140, U.S. Department of Transportation, West Building, Routing Symbol M-30, 1200 New Jersey Avenue, SE. Washington, DC 20590-0001, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

PRIVACY ACT: Anyone is able to search the electronic form of any written communications and comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, and labor union, etc.). You may review the U.S. Department of Transportation's (DOT) complete Privacy Act Statement in the Federal Register published on January 17, 2008 (73 FR 3316), or you may visit *http://edocket.access.gpo.gov/2008/pdf/E8-785.pdf.*

FOR FURTHER INFORMATION CONTACT:

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I. Background

A. Issues Prompting Advanced Notice of Proposed Rulemaking

When packaged in non-bulk packagings, a material with a flash point of 38 °C (100 °F) or more but less than 60 °C (140 °F) may be reclassed as a combustible liquid under the HMR. A combustible liquid in a non-bulk packaging that is not a hazardous substance, hazardous waste, or a marine pollutant is not subject to HMR in domestic transportation, by highway or rail. However, these same materials are regulated as flammable liquids when transported by vessel, in accordance with the International Maritime Dangerous Goods (IMDG) Code and by aircraft, in accordance with the International Civil Aviation Organization's Technical Instructions (ICAO Technical Instructions).

When packaged in bulk packagings, a material with a flash point between 60 °C (140 °F) and 93 °C (200 °F) is regulated as a combustible liquid in domestic transportation. A combustible liquid in bulk packagings is only minimally regulated in domestic transportation, and allows a shipper to use a less expensive, non-specification bulk packaging, in addition to having only to comply with the requirements contained in 49 CFR 173.150. In addition, bulk shipments of a combustible liquid must be placarded with a COMBUSTIBLE placard. When combustible liquids are shipped internationally, the COMBUSTIBLE placard is not recognized overseas because there is no combustible liquid hazard class under the international standards. Subsequently, shipments prepared in accordance with the HMR may be frustrated by inspectors and enforcement personnel who are not familiar with the U.S. requirements. To avoid confusion and delay in port areas, shippers and carriers often remove the COMBUSTIBLE placard prior to placing the shipment on board a vessel for overseas shipment. Conversely, shipments

originating overseas and bound for the United States must affix the COMBUSTIBLE placard prior to the shipment's movement out of the port area.

In addition, a combustible liquid that is not a hazardous substance, a hazardous waste, or a marine pollutant is not subject to HMR requirements if it is a mixture of one or more components that has a flash point at or above 93 ºC (200 ºF), comprises at least 99 percent of the volume of the mixture, and is not transported as a liquid at a temperature at or above its flash point. Also, a combustible liquid that does not sustain combustion is not subject to the requirements of the HMR as a combustible liquid. Either the test method specified in ASTM D 4206 or the procedure in appendix H of part 173 of the HMR may be used to determine if a material sustains combustion when heated under test conditions and exposed to an external source of flame.

Further, the classification system in the UN Recommendations has no combustible liquid category or hazard class. There is no provision in the UN Recommendations, the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Aircraft (ICAO Technical Instructions), or the International Maritime Dangerous Goods (IMDG) Code for flammable liquids to be reclassed as combustible liquids. PHMSA recognizes that the HMR provisions for the transportation of combustible liquids may potentially be confusing to both domestic and international shippers and carriers of flammable and combustible liquid shipments. We have also received opinions that the lack of understanding or clarity of the U.S. regulations involving the transportation of combustible liquids may present a tangible safety concern, such as the mishandling or misidentification of these shipments in transportation, or the transportation of undeclared shipments.

B. Advanced Notice of Proposed Rulemaking

On April 5, 2010, PHMSA issued an Advance Notice of Proposed Rulemaking (ANPRM) in the Federal Register [75 FR 17111] under Docket No. PHMSA-2009-0241 (HM-242) soliciting comments on whether PHMSA should consider harmonization of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transportation of combustible liquids with the UN Recommendations, while maintaining an adequate level of safety, and provided a series of questions. In the ANPRM, we also indicated that we were considering amendments to the HMR as they apply to the transportation of combustible liquids. Specifically, we considered whether to harmonize the domestic regulations applicable to the transportation of combustible liquids with international transportation standards. In addition, we indicated that we were examining ways to revise, clarify, or relax certain regulatory requirements to facilitate the transportation of these materials while maintaining an adequate level of safety. The intent of the ANPRM was to invite public comments on how to accomplish these goals, provide an opportunity for comment on amendments PHMSA was considering, and present a forum for the public to offer additional recommendations for the safe transportation of combustible liquids.

In response to the ANPRM, comments were received from chemical distributors; printing, painting, explosives, international airline pilots, solid waste, railroad, trucking, tank truck carriers, and custom harvesters trade associations and a state farm bureau; international and national firefighters associations; the State of Alaska DOT and Public Facilities; and several international and national private citizens. The majority of the commenters opposed harmonization and elimination of the combustible liquid classification, while expressing support for maintaining the non-bulk and bulk combustible liquid packaging exceptions for domestic

transportation. In addition, many commenters expressed the belief that burdens on the domestic industry would be increased for certain non-bulk shipments, and that the deregulation of bulk shipments would compromise the safety of the public and emergency responders if the domestic combustible liquid provisions were harmonized with the international United Nations (UN) Recommendations.

Although PHMSA's primary focus is on the safe transportation of hazardous materials, one of our associated goals is to facilitate international commerce through harmonization with international standards, to the extent that harmonization does not compromise our safety objectives. Presently and formerly, some in the regulated industry have asserted that the exceptions in the HMR for combustible liquids create a variance between domestic and international transportation and increase the potential for non-compliance. This being both a safety and economic issue, PHMSA disagrees with those who advocate elimination of the combustible liquid class altogether, believing that a significant number of domestically-regulated materials pose risks in transportation that cannot be ignored.

Therefore, because most commenters opposed harmonization that would eliminate the combustible liquids hazard class altogether, thereby removing the combustible liquids exceptions in domestic transportation in the U.S., in addition to PHMSA's own economic analysis that implementation costs could be significant, we are denying the International Vessel Operators Dangerous Goods Association (IVODGA) petition, P-1498, the Dangerous Goods Advisory Council (DGAC) petition, P-1531, and the U.S. Customer Harvesters, Inc. petition, P-1536. Accordingly, issuance of this notice constitutes a decision by PHMSA to withdraw the April 5, 2010 ANPRM [75 FR 17111] published in the Federal Register under Docket No. PHMSA-2009-0241 (HM-242).

C. Petitions for Rulemaking

In the April 5, 2010 ANPRM, PHMSA also solicited comments on issues related to three petitions pertaining to the transportation of combustible liquids in both domestic and international commerce. The petitions are discussed below.

1. IVODGA Petition for Rulemaking

The International Vessel Operators Dangerous Goods Association (IVODGA), formerly VOHMA, submitted a petition for rulemaking [P–1498; PHMSA-2007-28238] concerning differing domestic and international requirements for the transportation of combustible liquids. The UN Recommendations do not include a definition or classification for combustible liquids. In its petition, IVODGA asserts:

(a) the display of a UN identification number for shipments that are not regulated internationally may "confuse" foreign inspectors, interlining carriers, foreign stowage planners, and intermodal feeder systems in other jurisdictions [who may delay forwarding the shipments until the confusion is resolved];

(b) These frustrated shipments not only impede commerce but also result in additional risks in the ports and terminals where they are held;

(c) emergency responders might also be confused by the UN identification number marking on the bulk packaging such as "1263" or "1210", which are the numbers assigned to flammable paint and flammable printing ink, respectively;

(d) Reclassed combustible liquid shipments "find [their] way" into international distribution "unlabeled and unmarked" with the result that they are undeclared as dangerous goods; and

(e) for materials with a flash point above 60 °C (140 °F) but below 93 °C (200 °F) authorize use of the proper shipping name "Combustible liquid, n.o.s. [if hazard class modified to read "combustible liquid" and intended for rail or highway transportation only].

IVODGA notes that the differing domestic and international requirements for combustible liquids has resulted in conflicting and confusing hazard communication requirements with the result that international shipments may be frustrated as foreign authorities attempt to reconcile HMR hazard communication schemes with international regulations. For example, IVODGA said that many paints, inks, adhesives, solvents, and petroleum products have flash points between 60 ºC (140 ºF) and 93 ºC (200 ºF) and are offered for transportation as combustible liquids within the United States. However, the HMR permit such shipments to be described on a shipping paper and to display markings, labels, and placards in the same manner as shipments of flammable liquids with flash points of less than 60 ºC (140 ºF). when these shipments are destined for export [by vessel] to a jurisdiction outside the United States, because of the confusion, such shipments may be delayed until the confusion is resolved.

2. DGAC Petition for Rulemaking

The Dangerous Goods Advisory Council (DGAC) submitted a petition for rulemaking [P-1531; PHMSA-2008-0303] for amendment of the requirements for combustible liquids in bulk packagings in order to reduce port congestion and improve transportation efficiency in port areas. In its petition, DGAC asserts:

(a) the HMR requirements for high-flash-point combustible liquids (HFCL) are disruptive to the flow of goods in port areas and contribute to port congestion;

(b) the required markings and labels and/or placards (safety marks) that must be applied for purposes of U.S. domestic transport of an HFCL export shipment must be removed in the port area in order to bring the shipment into compliance with the requirements of the IMDG Code;

(c) industry practice in transporting HFCL by vessel provides a higher level of safety than that afforded by the HMR, providing further justification for regulatory changes facilitating transport of HFCL transported by vessel;

(d) when HFCLs are transported by vessel [i.e., imported to the U.S.] they are transported in ISO portable tanks or Intermediate Bulk Containers (IBCs) conforming to the UN performance requirements (these packagings provide considerable package integrity beyond that provided by the HMR requirements which permit HFCL to be transported in non-specification packagings); and

(e) DGAC further petitions PHMSA to relieve IBCs containing HFCL from currently required HMR safety mark requirements independent of whether they are being transported in international commerce.

The DGAC petition highlights many of the same issues identified by IVODGA, with a particular focus on problems encountered in international transportation for shipments of materials DGAC terms "high flash point combustible liquids" – that is, combustible liquids with flash points between 60 ºC (140 ºF) and 93 ºC (200 ºF). DGAC suggests that the regulatory differences between the HMR and international regulatory requirements for these combustible liquids are disruptive to the flow of goods in port areas and contribute to port congestion. Imported bulk shipments of high flash point combustible liquids arriving in U.S. ports must be marked and placarded in accordance with HMR requirements. Similarly, the marks and placards

that are applied to bulk shipments of combustible liquids for transportation in the U.S. must be removed in the port prior to export. DGAC estimates that export shipments are delayed for an average of three days awaiting removal of HMR-required marks and placards and import shipments are delayed an average of five days awaiting application of HMR-required marks and placards. To alleviate this problem, DGAC requests that PHMSA except HFCLs from all HMR requirements when transported in specification packages of less than 3,000 liters (793 gallons) capacity, or when in an ISO (UN) portable tank in international commerce.

3. U.S. Custom Harvesters, Inc.

U. S. Custom Harvesters, Inc. (Custom Harvesters) submitted a petition for rulemaking [P-1536; PHMSA-2009-0099] requesting modification of current requirements applicable to combustible liquids. In its petition, Custom Harvesters states that:

(a) a custom harvester has invested in the equipment (which includes grain harvesting combines, silage harvesters, grain trucks, tractors and grain carts) necessary to harvest 50% of the nation's wheat, 25% of the nation's corn, 50% of the nation's corn silage and 25% of the nation's cotton. Because of the tremendous cost of the equipment, it doesn't make sense for most farmers to invest in the harvesting equipment that will only be used one month of the year. Our industry replaces the farmer in the field during harvest;

(b) the custom harvesters' equipment has changed immensely over the past ten years. Custom harvesters have grown from using tandem axle trucks (which allows for the Class B CDL and a Restricted Class B Seasonal CDL license) to using tractor/trailer combinations which require the Class A CDL license. Under exemption 391.2, a Restricted Class B Seasonal CDL driver is allowed to transport hazardous materials limited to 1,000 gallons or less of diesel fuel. However, in order to legally drive the

tractor/trailer combination, we are required to have Class A CDL drivers. The Restricted Class B Seasonal CDL driver is not required to take a written or driving test. The only requirement is to have a good driving record;

(c) custom harvesters hire seasonal truck drivers and combine operators, usually beginning in mid-May and lasting until November when the harvest has been completed. Most of the drivers hired do not have the Class A CDL license which is required for them to drive the tractor/trailer combinations. Once they are hired, the owner typically assists the truck drivers in obtaining the appropriate CDL licenses. The custom harvester hires seasonal drivers approximately two weeks prior to the beginning of harvest. Because the Hazardous Materials (hazmat) endorsement requires a 60-90 day wait period, the requirement of the hazmat endorsement to haul diesel fuel has created a great burden to our industry. It is not economically feasible for the custom harvester to hire its employees 60-90 days in advance of needing them. Additionally, many harvesters employ H2A workers. An H2A worker is currently allowed to obtain a nonresidential CDL, but is not lawfully able to obtain a hazmat endorsement;

(d) the harvesting equipment used requires 200+ gallons of diesel fuel per machine daily. Most custom harvesters have at least two or three machines and a tractor/grain cart combination. This combination of equipment would require up to 1,000 gallons of diesel fuel daily. The diesel fuel is hauled to the field to fill the harvesting equipment each day. In order to bring the fuel to the field, the diesel fuel is pumped from a pump at the local service station or farmer's COOP (just like it would be for a pickup truck or car) to a fuel tank that is mounted in a service vehicle. The distance to the farmer's field determines the distance the fuel is hauled, typically between 1 mile and 50 miles. The roads are

always rural roads and highways. Once the fuel is unloaded into the harvest equipment, the fuel tank sits empty the rest of the day. At the end of the day, the service vehicle (and empty fuel tank) will be driven back to the town where the custom harvester is staying. (A harvester typically stays in one location for approximately two weeks.) Each morning, the refueling process will be repeated;

(e) the current limitation of the 119-gallon fuel tank puts a burden on the custom harvesting industry in more ways than one. First, the 119-gallon fuel tank requires the custom harvester to make several trips from the field to the fuel station each day just to fill each piece of harvesting equipment one time. Second, current requirements state the only persons who can legally drive the service vehicle down the road are those with hazmat endorsements. The custom harvesting business owner often ends up being the only person with the necessary endorsements due to time requirements for obtaining a hazmat endorsement. Having to drive the service vehicle limits the flexibility of the business owner, preventing him or her from driving other commercial vehicles in his or her fleet. When the harvesting job has been completed and the custom harvesting fleet is moved to the next location, the fuel tank on the service vehicle will be empty while moving on state and federal highways. The custom harvester will empty the fuel tank before moving to the next job location, eliminating the weight on the truck and preventing possible problems while on the road.

Currently, under the HMR, bulk shipments of combustible liquids must be placarded. In accordance with Federal Motor Carrier Safety Regulations (FMCSR) found at 49 CFR Part 383, a hazmat endorsement is required for drivers of commercial motor

vehicles that transport placarded shipments of hazardous materials. A hazmat endorsement on a CDL triggers the need to comply with the Department of Homeland Security's Transportation Security Administration's fingerprinting and background check. In its petition, the Custom Harvesters asks PHMSA to consider an exception from placarding for combustible liquids transported in bulk quantities that do not exceed 3,785 L (1,000 gallons) in a single packaging.

II. Summary of Comments to ANPRM

Approximately, one-hundred and forty (140) comments were received in response to the April 5, 2010 ANPRM on whether PHMSA should consider harmonization of the domestic regulations applicable to the transportation of combustible liquids with international transportation standards. Generally, the majority of commenters oppose harmonization, indicating that many of its members utilize the exceptions provided in §§ 173.120(c) and 173.150(f) for reclassification and packaging of their products or material as combustible liquids in domestic transportation, and that any changes to these exceptions will negatively impact their industry. Approximately twenty-nine (29) of the comments addressed harmonizing domestic and international classification standards for combustible liquids. Of the 29 comments, approximately seventeen (17) of the commenters on this issue were opposed to harmonization of the domestic combustible liquids regulations with the international standards for classification of flammable liquids and would maintain the combustible liquids hazard class and packaging exceptions in domestic transportation in commerce. In contrast, approximately twelve (12) of the commenters support harmonization, and elimination of the combustible liquids classification and packaging exceptions.

Of the one-hundred and forty (140) comments, approximately one-hundred and eleven (111) of the commenters were custom harvesters and the Indiana Farm Bureau, and support the U.S. Custom Harvesters, Inc., petition. The Custom Harvesters only requested that PHMSA consider an exception for agribusiness (i.e., the operations and businesses that are associated with large-scale farming) from placarding combustible liquids transported in bulk quantities that do not exceed 3,785 L (1,000 gallons) in a single packaging. Many commenters stress the difficulty of hiring seasonal, foreign workers who may not be able to obtain a CDL with a hazmat endorsement in a timely fashion.

A. Examples of Comments Opposed to Harmonization and Granting Petitions P-1498 and P-1531

Commenters, such as the American Trucking Associations (ATA); American Petroleum Institute (API); Institute Makers of Explosives (IME); National Tank Truck Carriers (NTTC); National Fire Protection Association (NFPA); Association of Hazmat Shippers, Inc. (AHS); Utility Solid Waste Activities Group (USWAG); Dow Corning Corporation; Evonik Degussa Corporation; Association of American Railroads (AAR); Council on Safe Transportation of Hazardous Articles (COSTHA); State of Alaska, Department of Transportation and Public Facilities, and Mr. Owen Bruce Bugg, citizen, expressed opposition to harmonization of the domestic combustible liquids requirements with the international standards for flammable liquids.

NTTC expresses the belief that more information is needed to determine what the benefits would be of deregulating combustible liquids with a flash point above 60 ºC (140 ºF) and below 93 ºC (200 ºF). NTTC strongly asserts that the HMR should continue to allow Class 3 materials with a flash point between 38 ºC (100 ºF) and 60 ºC (140 ºF) to be reclassified and

transported as combustible liquids, further states that this has been the practice for many years, and it is not aware of any negative impact on safety.

The API said that the loss of the reclassification exception for non-bulk combustibles would move a large segment of the supply & distribution industry from "Not Regulated" to "Regulated Hazmat" status. API states that it does not support deregulation (e.g., a complete harmonization of the 49 CFR with IMO/IMDG) of HFCLs being transported in bulk cargo tanks or rail cars. The HMR, though sometimes confusing, provide a practical framework to handle HFCLs such as gas oils, diesels, fuel oil, or heating oil with flash points that actually "straddle" the international threshold of flammable liquids 60 ºC (140 ºF). These regulations (HMR) allow for consistent hazard communications for petroleum fuel and other products with a similar range of flash point.

The ATA has significant concerns with the potential changes to the classification and regulation of combustible liquids. The ATA states that while it appreciates the benefits of a globally harmonized classification of flammable liquids, it believes that deregulation of combustible liquids could create certain safety risks. For example, certain bulk tank trucks utilize compressed air to unload. These compressors generate air pressure and may reach a temperature of 170 ºF. As such operators should not use these compressors to unload certain flammable and combustible liquids. In the absence of effective hazard communication requirements, a safety risk could be created, as operators may not know whether it is safe to use compressed air for unloading. In addition, effective hazard communication is needed to ensure that tools used to repair valves and other appurtenances to containers used to transport combustible materials are "non-sparking" to reduce the risk of ignition.

The IME said that over 3.4 million metric tons of high explosives, blasting agents, and oxidizers are consumed annually in the U.S. IME member companies produce ninety-nine percent of these commodities. These products are used in every state and are distributed worldwide. IME states that the most widely-used commercial explosive product in the U.S. is ammonium nitrate/fuel oil ("ANFO"). The fuel oils most commonly used in ANFO mixtures are transported as reclassed combustibles. Accordingly, IME members are very concerned that PHMSA is considering eliminating the reclassification option in the HMR. FO in the range of 38 °C (100 °F) to 93 °C (200 °F) is blended from multiple sources with varying flash points (e.g., 2D diesel; 4, 5, 6 diesels; used oil, and the like) including deliveries that exceed 60 °C (140 °F). Ordinarily, this does not pose a problem for its operations because multi-purpose bulk trucks ("MBTs") technology allows accommodating adjustments to be made at the jobsite where custom mixing of the explosive materials occurs. This flexibility also allows commercial explosives companies to purchase FO with a flash point slightly above 60 °C (140 °F) when it is more economical to do so. Because adjustments for viscosity (FO flash point is directly proportional to viscosity) can be made at the jobsite, there is no need to separate the storage of fuels according to flash point (<60° C (140 °F) and >60 °C 140 °F)). However, if the exception is eliminated and FO with a flash point between 38 °C (100 °F) and 60 °C (140 °F) is designated flammable and is deregulated at flash points above 60 °C (140 °F), IME members would be forced to test every load of FO before it is transferred from storage to an MBT in order to determine the proper transport classification. This would require testing every time the FO tank is replenished. All FO can therefore be stored in a single above ground storage tank. However, IME said that an exception is FO with a flash point at the lower end of the range (e.g., <115 °F) that is used for operations in colder climates.

The AHS said that some history may provide helpful guidance. Before HM-102, flammable liquids were defined with a ceiling open-cup flash point of 80 °F. In that docket, in order to harmonize with then relatively-new OSHA regulations, the two agencies worked together to set the ceiling at 100 °F and to change the closed-cup flash point method. At no time was there a claim that materials having flash points above 80 °F had posed a safety problem in transportation in non-bulk packaging sizes. Nonetheless, for convenience and harmony, the ceiling was raised to 100 °F. With the UN setting the international ceiling for Class 3 at 140 °F, DOT once again was faced with a harmonization issue. There was no history of safety problems with liquids in the 100-140 °F range in non-bulk packaging in the US, thus the basis for the exception now appearing in §173.150(f). The facts remain unchanged. Transportation safety does not support imposing full Class 3 requirements on materials in ground transport in non-bulk packaging having a flash point above 100 °F. An enormous volume of materials, including paints and a variety of consumer products, falls within this range and the shippers and carriers of these materials have benefitted from this exception, without notable safety problems. AHS said, therefore, it believes it is critical for PHMSA to retain this exception.

The NFPA is concerned that adopting such a change in the domestic requirements for offering and transporting combustible liquids would negatively impact emergency response to incidents involving such materials. NFPA encourages PHMSA to retain the current requirements regarding classification and regulation for combustible liquids. NFPA recommends that PHMSA maintain the current requirements that include those combustible materials with flash point above 60 ºC (140 ºF) and below 93 ºC (200 ºF). NFPA states that this category of material is still capable of posing a fire or explosion hazard during transportation, especially if involved in an accident where other, more easily ignited materials are present.

From the perspective of the emergency responder, any effort to deregulate combustible liquids represents a reduction in the current safety practices that protect and alert those responding to transportation incidents or other emergencies involving this class of hazardous material. Note that NFPA 30, Flammable and Combustible Liquids Code, has a category of liquid (Class IIIB) for those liquids with flash points equal to or greater than 93 ºF (200 ºF). This category presents much lower risk in a transportation accident.

Mr. Rich Sewell, State of Alaska, Department of Transportation and Public Facilities, Office of Statewide Aviation, states that many remote Alaskan communities receive fuel oil and diesel fuel by air cargo, and stresses this circumstance is particularly important as changes to the regulations governing the transportation of combustible liquids are considered. He further states that shipping of fuel by air cargo is common to rural Alaskan communities that sometimes encounter bitter cold during the winter, and that it is not over-stating the situation to say that lives depend on efficient distribution of fuel oil in rural Alaska. Mr. Sewell states that any changes to regulations that might increase the costs of fuel distribution in rural Alaska would be onerous and burdensome, where fuel in the past year has cost $8.50 per gallon in some rural communities, and asserts that power generation and heat are already very expensive in rural Alaska. In addition, he claims that most rural communities qualify as economically distressed. If any new rulemaking were to adversely affect fuel distribution in rural Alaska, Mr. Sewell urges an exception to the rules be made for the domestic transportation of combustible fuels in Alaska.

B. Examples of Comments in Support of Harmonization and Granting Petitions P-1498 and P-1531

Commenters, such as the URS Corporation; Airline Pilots Association International; Bayer MaterialScience; International Vessel Operators Dangerous Goods Association, Inc.; Dangerous

Goods Advisory Council; Air Products and Chemicals, Inc.; Momentive performance materials; Philip Jonckheere of the European Chemical Industry Council (CEFIC); Mr. Roy Boneham, New Alchemy Training and Consultancy Organization, United Kingdom; the International Association of Fire Chiefs; and Applied Industrial Technologies support harmonization of the domestic combustible liquids regulations with the international standards for flammable liquids.

URS Corporation said that it supports international harmonization and the deregulation of combustible liquids, and expresses the belief that the Combustible Liquid placard is too similar to the Flammable Liquid placard, resulting in confusion and rejection of bulk shipments in the international community. URS stated that the HMR should no longer continue to apply to materials with a flash point above 60 ºC (140 ºF) and below 93 ºC (200 ºF).

Mr. Phillip Jonckheere said that the European Chemical Industry Council (CEFIC) supports the harmonization of the domestic regulations (HMR) applicable to the transportation of combustible liquids with international transportation standards. Mr. Jonckheere stated that the existing deviation on classification, marking and, placarding creates a burden on international trade rather than improving safety.

Bayer Material Science supports deregulation of materials with a flash point above 60 °C (140 ºF) and below 93 °C (200 ºF). Bayer said a temperature of 60 °C (140 ºF) is generally recognized as the highest ambient temperature a material will encounter during the course of transportation. Therefore, a combustible liquid will not encounter conditions that will meet or exceed its flash point. This also allows for harmonization with the international regulations. Bayer expresses the belief that there would be an added cost benefit in product development and logistics to be able to move products in this category with one consistent classification. Emergency responders would still review the Material Safety Data Sheet as well as established procedures for dealing with these materials whether or not it was marked combustible.

Air Products and Chemicals, Inc. is both a shipper and carrier of hazardous materials in both bulk and non-bulk packaging utilizing all modes of transportation. Air Products fully supports the move towards global harmonization of dangerous goods transport regulations and expresses the belief that doing so will result in reduced risk, greater efficiency, lower costs, fewer delays, and much less confusion.

Momentive performance materials said that for over a year, it has been shipping bulk packages of combustible liquids from Europe into Canada by vessel and then trucking them through Canada into the United States for delivery to various locations because certain shipping lines do not allow these bulk packages to display the [ID] number "1993" on either a placard or an orange panel. Essentially, the number "1993" represents Flammable Liquids in the IMDG code, and combustible liquids are not recognized by the IMDG Code as a Dangerous Good. Therefore, as a result of the higher costs of such shipments of bulk packages and logistical difficulties, Momentive believes that PHMSA should harmonize the bulk package transportation of combustible liquids with international transportation standards, by removing Section 173.120(b)(1) from Title 49 CFR. Momentive also states that this declassification would pose no significant risk to human health or the environment due to the simplification of shipping routes by highway, which will significantly, reduce the distance over which such shipments travel.

Applied Industrial Technologies states that while PHMSA continues to comment on trying to be in Harmonization with the United Nations Recommendations, it falls short by allowing the exception of "Combustible Liquids" and questions this practice. The commenter states that if this exception is eliminated; all "Flammable Liquids" would be regulated to the same standards, thereby allowing true Harmonization with the United Nations Recommendations. This would also eliminate any confusion with shipping domestically and internationally. The commenter further states that as a

HazMat shipper with over twenty years of experience and providing training for its company, this aspect continues to be one of the most confusing parts of the HMR for its associates to learn.

DGAC said that the HMR requirements for high flash point combustible liquids (HFCLs) are disruptive to the flow of goods in port areas," costing between $300 to $500 for demurrage [the charge for detaining a ship beyond the time allowed for loading/unloading per container]. DGAC also stated that industry practice in transporting HFCL by vessel provides a higher level of safety than that afforded by the HMR; and that HFCLs should be excepted from all HMR requirements when transported in specification packages of less than 3,000 liters (793 gallons) capacity (the upper capacity limit for Intermediate Bulk Containers (IBCs)) or when in an ISO (UN) portable tank in international commerce.

C. Examples of Ambiguous Comments on Harmonization

Many of the comments supporting harmonization were ambiguous; some recommending retention of the non-bulk combustible liquids packaging exceptions, while others requested elimination of the bulk combustible liquids packaging exceptions, and vice versa. For example, DGAC states that the most significant benefit of deregulation of combustible liquids with a flash point above 60 ºC (140 ºF) and below 93 ºC (200 ºF) (hereafter referred to as high flash point combustible liquids or HFCLs) is that it would harmonize the HMR with the requirements used throughout the world, and in doing so, it would eliminate many of the frustrations that DGAC members experience in importing and exporting these materials. However, DGAC acknowledged that from the history of the combustible liquid requirements and considering that non-specification bulk packagings are authorized, it is clear the primary purpose of the existing combustible liquid requirements pertaining to high flash point combustible liquids is to alert emergency responders of the presence of a combustible liquid in the event of an incident.

DGAC said that with this in mind the safety benefit of continuing to regulate HFCLs depends on the benefit derived from knowing a material involved in an incident is a combustible liquid.

The National Association of Chemical Distributors (NACD) said that although elimination of the reclassification exception would promote the desired objective of harmonization, level the playing field, eliminate confusion, and enhance safety, on the other hand, eliminating the reclassification exception would increase costs for some because it is more expensive to ship hazardous materials than non-hazardous materials, and could also potentially lead to negative safety implications. Further, deregulation of materials with a flash point above 60 °C (140 °F) and below 93 °C (200 °F) would result in more complete harmonization with international standards as these only regulate up to 60 °C (140 °F). This would minimize confusion in trade and commerce. However, NACD stated that the disadvantage is that this could result in complications for chemical distributors who receive regular visits from local fire officials. The NFPA has its own system of markings for various flashpoints, but generally follows DOT. In this case, the materials are NFPA Class III A Combustible Liquids. If these materials are not covered by the HMR and labeled accordingly, fire officials are likely to require NFPA labels on more packages because there would not be DOT hazardous materials markings to recognize. As well, NACD said those who currently ship these materials through areas such as tunnels that prohibit hazardous materials would have to avoid these areas and take alternative routes that could involve longer distances and conditions such as dangerous mountain passes.

The IAFC said it does not support Class 3 materials with flash points between 38 °C (100 °F) and 60 °C and (140°F) to be reclassified and transported as combustible liquids. The IAFC stated that the primary benefit of not allowing a reclassification is to ensure all shipments of materials identified as flammable would continue to be identified as such because emergency

response to flammable liquids versus combustible liquids may involve different fire and spill control tactics and agents, since combustible liquids are generally viewed as having a lower risk than a flammable liquid. By not taking the appropriate action for the material involved, the safety risk would increase. However, the IAFC said that materials with a flash point above 60 ºC (140 ºF) and below 93 ºC (200 ºF), also known as combustible liquids, have been subject to placard and label requirements for ease in identification and for the safety of emergency responders. IAFC asserted that while deregulation of those materials would decrease issues in international trade and ease the movement of those commodities, it would remove important warnings for emergency responders about the presence of combustible liquid. Further, the IAFC stated that while it appreciates the fact that these materials, in and of themselves, may pose a low risk due to their high flash point, there can be a significant risk factor in the event that these materials are exposed to a fire or other incident. Another consideration is whether or not such an exemption would increase security risk since these products can be used in combination with other products for the production of certain explosives such as ANFO (ammonium nitrate and fuel oil).

William J. Briner, Transportation Regulations Consultant, stated that the industry could adapt to the elimination of the combustible liquid classification and placard at a reasonable cost and with a reasonable amount of difficulty as long as the exceptions in §173.150(f) are retained. These exceptions have proven over many years of use to be a safe means of transporting material with a flash point at or above 38 ºC (100 ºF) and at or below 60 ºC (140 ºF). Without the retention of the §173.150 exceptions, a major disruption of the shipping operations of the Paint Industry and the Ag Chem industry would result.

Printing Industries of America (PIA) said it supports the deregulation of combustible liquids with high flash points as part of the effort to align the HMR with international standards. PIA states combustible liquids do not pose the same hazard as flammable liquids and therefore should not be subject to the same level of regulations. However, the PIA said the HMR should continue to permit Class 3 materials with flash points between 38 °C (100 °F) and 60 °C (140 °F) to be reclassed and transported as combustible liquids. PIA expresses the belief that removal of this exception will result in significant cost increases across the supply chain. Specifically, PIA is concerned that removing the domestic exception will cause printers, as offerors of hazardous materials in amounts that require placarding, to be subject to registration and security requirements.

American Coatings Association(ACA) supports the harmonization of regulatory requirements for materials with a flash point above 60 °C (140 °F) and below 93 C (200 °F); ACA expressed the belief that for this class of materials, the HMR should not apply. ACA said PHMSA could then harmonize the definition of flammable liquid with that of the international standards, thereby eliminating the confusion in the ports regarding these shipments of combustible liquids that carry Class 3 markings. However, ACA said that for those Class 3 materials with a flash point between 38 °C (100 °F) and 60 °C (140 °F), the option to reclassify and transport as a combustible liquid should be retained.

PPG Industries, Inc. recommend harmonization, unless upon evaluation PHMSA feels there is a reason to continue regulation of large packages of HFCLs, then consideration should be given to limiting regulation to cargo tanks and tank cars which are domestic packages. Recommend retaining LFCL exception option (non-bulk) because it provides significant regulatory relief, and DOT reporting system is already cluttered with the reporting of inconsequential coatings incidents for small packagings of flammable liquids with flash points less than 100 °F.

D. Examples of Comments in Support of Expanded Exceptions for Farm Operations or Agribusinesses and Granting Petition P-1536

The Indiana Farm Bureau Inc. supports petition P-1536 and said that given the changes in agricultural operations over the last few decades, its members believe that this change is warranted and necessary. In its comments, Indiana Farm Bureau states that tractors and combines now routinely have fuel tanks with a capacity well over 119 gallons. It is impractical for farm operations to transport quantities smaller than those needed to fully fill their tanks. Given that multiple implements may be used in the same field at any one time, it is not uncommon for quantities of fuel approaching or even exceeding 1,000 gallons to be needed to fill all the equipment at one time. Furthermore, 1,000 gallon fuel tender tanks are becoming more prevalent in the market and on farms. With the increasing size of farming operations and the resulting increased intensity of production in a small window for completion, farm-owner labor is often insufficient and supplemental labor through seasonal or temporary workers is often needed. The commenter further states that the regulations should recognize the necessity of these workers and the difficulty they may have in seeking a commercial driver's license with a hazmat endorsement in a timely manner.

In addition, the Indiana Farm Bureau Inc. states that for the sake of clarity in implementation, the regulations should be written so that they can be consistently applied across farming operations, regardless of how they are organized or whom they employ. As noted in the Custom Harvesters' petition, custom harvesters replace the farmer in the field during harvest. However, it is not only harvesting in which custom farming is done. Numerous farmers do some custom farming work for their neighbors, including but not limited to tillage, planting, spraying, and nutrient application. The members of the Indiana Farm Bureau Inc., support an expanded

exception from placarding for transportation of combustible liquids in a quantity not to exceed 1,000 gallons, and that the change in the exception is needed to keep pace with agricultural production. Furthermore, its members are confident that the expanded exception will still maintain the necessary standards of safety needed to protect farm workers and the public.

Zeorian Harvesting & Trucking states that the HMR should provide an expanded exception for the current regulation for the transportation of combustible liquids to a threshold of 3,785 L (1,000 gallons), and that packaging, hazard communication and other requirements would be exempt, as they are now under the non-bulk packaging classification of 450 L (119 gallons). The commenter suggests that a brightly colored signage or labeling stating "Combustible Liquid – Diesel Fuel" could be placed on all visible sides of the fuel tank to allow emergency personnel and the general public knowledge of the type of liquid they are dealing with in case of an accident. The commenter asserts that the label would give more detail than the current "1993" placard, as not everyone knows what this means, and that anyone coming upon an accident in the agricultural areas of the nation will already know that an overturned service truck would more than likely have diesel fuel in the tank. The commenter expresses the belief a "Combustible Liquid – Diesel Fuel" label would verify this. Further, the commenter stated that the HMR could provide a "sub" classification for the class of materials identified as combustible liquids. This "sub" classification could be an agricultural classification which would provide the expanded exception of the transportation of combustible liquid to 3,785 L (1,000 gallons) and all packaging, hazard communication and other requirements would be exempt – as non-bulk packaging (450 L/119 gallons) currently is. The commenter concludes that such signage or labeling, "Combustible Liquid – Diesel Fuel" could be brightly colored and visible on all sides of

the tank, and the costs would be minimal, i.e. the creation and costs involved in the signage, labeling or sticker.

Kent Braathen, currently Vice President of U.S. Custom Harvesters Inc., stated:

I strongly support the expanded exception for domestic transportation involving U.S. Custom Harvesters ability to transport a threshold amount of combustible liquid DIESEL no more than 1000 GALLONS. In our 40 years of operation, we have never had a reportable amount of diesel spilled. We have always stressed safety when operating a vehicle transporting diesel and when filling the tanks on all equipment, including trucks. Our safety awareness has increased dramatically the past couple of years due to safety meetings being attended at U.S. Custom Harvesters meetings. The meetings have been conducted by personal [sic] from PHMSA which has been a tremendous help to all of us. With the exemption I would strongly encourage replacing the current placards with COMBUSTIBLE DIESEL in red lettering on a white background making it easily identifiable by emergency responders and those that are first on the scene of any accident. We are not asking for an exemption that we already do not have, currently we have the ability to haul up to 1000 gallons of diesel with a seasonal class B CDL, you can be 16 years of age with a clean driving record, NO HAZMAT training and obtain this for a 6-month period. Now 18 years after we were given this exemption, we all are required to have a CLASS A CDL which requires all of us to have extensive training, but the inability to haul up to 1000 gallons of diesel unless we obtain the hazmat endorsement. Most of us do not have our employees in place until 2 weeks to 1 month before our seasonal harvest begins making it impossible to obtain the hazmat in a timely manner. Others of us hire H2A workers which cannot even be considered for a hazmat.

Alan Darrel Lutz said that as a custom harvester, we require laborers to travel for weeks and sometimes months at a time. This leads us to hire H2A workers and as they have limited time here, getting a HazMat endorsement as well as a CDL is impossible and unreasonable. With the numerous equipment our industry requires, and fields being twenty or more miles away from any town (fuel station), we need to haul the fuel to use it. It is not feasible to drive to a gas station twice a day for Choppers and Combines to re-fuel. Further, Mr. Lutz states that if we are allowed to haul at least 1,000 gallons, without the need of a Hazardous Materials Endorsement, we would conserve fuel, and traffic would be decreased along small two-lane highways. Not only does this allow for more conservation of fuel because of less running around, it reduces danger and risk to our help as well as other drivers. Less continuous travel back and forth on

dangerous highways decreases the number of trucks on the road and therefore decreases the possibility of accidents. Please consider this change.

E. Examples of Comments Recommending No Action Until PHMSA Analyzes Flammable/Combustible Incident Data

Many commenters in support of and in opposition to harmonization both said that more analysis of incident data is necessary. DGAC said that in deciding whether to deregulate this group of materials entirely, it recommends that PHMSA undertake an in depth analysis of its incident data in deciding whether to continue to regulate materials with a flash point above 60 ºC (140 ºF) and below 93º C (200 ºF). API strongly recommends PHMSA consider the actual risk severity and frequency of incidents involving combustibles in non-bulk packagings before proposing changes to existing regulations in response to the IVODGA petition.

The IAFC said it recognizes and appreciates that container markings can create significant issues for the industry as related to compliance with hazardous materials shipping regulations; however, IAFC said eliminating the markings will pose an increased risk to emergency responders by removing critical hazard information. The IAFC recognize that providing some limited relief for shipments of HFCLs of certain quantities may be reasonable and appropriate, but would recommend a risk analysis be conducted to determine the appropriate volumes that would be acceptable.

COSTHA's members believe PHMSA should take a close look at the number of incidents involving these materials. COSTHA stated that in reviewing the 5800.1 reports posted on PHMSA's website, approximately 100,000 incidents involving Class 3 materials have been reported since 1998. Of those, only 8% involved materials classified as combustible liquids (3.8% of the total were packed in non-bulk packaging). Further, 0.02% of the nearly 8,300 incidents resulted in 21 fatalities. None of the reported fatal incidents involved

non-bulk packaged combustible liquids but instead was in bulk packaging. Industry has estimated the number of combustible liquid shipments may be as many as 10,000-20,000 per day, and that with over 12 years of reporting, assuming the lower estimate, that would equate to nearly 44 million shipments of combustible liquids.

IV. Summary of Commenters Responses to Specific Questions

A. Questions Raised in the ANPRM

PHMSA invited commenters to submit comments on a series of questions, based on the discussion of the issues raised in the preamble of the ANPRM. The questions are as follows:

1. Should the HMR continue to apply to materials with a flashpoint above 60ºC (140ºF) and below 93 ºC (200 ºF)? Should the HMR continue to permit Class 3 materials with flashpoints above 60 ºC (140ºF) to be reclassed and transported as combustible liquids? What benefits would result from de-regulation of combustible liquids? What are the safety implications of such de-regulation? How would such de-regulation affect emergency response?

2. Should the HMR continue to permit Class 3 materials with flashpoints between 38 ºC (100 ºF) and 60ºC (140ºF) to be reclassed and transported as combustible liquids? What are the benefits of eliminating this reclassification exception? Would there be costs associated with eliminating this reclassification exception? What are the safety implications of eliminating the reclassification exception? How would elimination of the reclassification exception affect emergency response?

3. Should the HMR provide expanded exceptions for the transportation of combustible liquids? For example, should the HMR except combustible liquids below a certain threshold (e.g., not more than 1,893 L (500 gallons), 3000 L (793 gallons), 3,785 L (1000 gallons) or 13, 240 L (3500 gallons) from packaging, hazard communication, or other requirements? What are the potential impacts on hazard communication and emergency response notification of such changes?

4. Should the HMR include expanded exceptions for farm operations or agribusinesses? Should the HMR include expanded materials of trade exceptions for persons who transport combustible liquids? What are the potential impacts on hazard communication and emergency response notification of such changes? Are there additional exceptions that should be considered?

5. Should the HMR continue to permit combustible liquids to be described using shipping names and identification numbers applicable to Class 3 materials? Should PHMSA adopt

a requirement for all combustible liquids to be described as "Combustible liquid, n.o.s."? For example, for hazardous materials in the §172.101 HMT, such as Paint, Diesel fuel, Fuel oil, Kerosene, Turpentine, Methallyl alcohol, etc. What safety benefits would result from the use of shipping descriptions unique to combustible liquid materials? How would such a change affect emergency response?

6. Should the HMR provide for use of a unique combustible liquid marking (e.g., the words "COMBUSTIBLE" or "COMBUSTIBLE LIQUID" in red letters on a white background) in place of COMBUSTIBLE placards and other hazard communication for bulk shipments of combustible liquids? Should the HMR provide for use of the domestic identification number, NA1993, on bulk packages utilizing a combustible liquid marking? What are the potential impacts on hazard communication and emergency response notification of such a change? Are there other practical alternatives to use of COMBUSTIBLE placards for bulk shipments?

The commenters opposed to and in support of harmonization were both mostly opposed to: (1) providing expanded exceptions for the transportation of combustible liquids, such as excepting combustible liquids below a certain threshold (e.g., not more than 1,893 L (500 gallons), 3,000 L (793 gallons), 3,785 L (1,000 gallons), or 13,249 L (3,500 gallons) from packaging, hazard communication, or other requirements; (2) expanded exceptions specifically for farm operations or agribusinesses; and 3) expanded materials of trade exceptions for persons who transport combustible liquids. Most of the commenters also do not support a requirement for all combustible liquids to be described as ''Combustible liquid, n.o.s.'', and recommend that the HMR require the use of shipping names that most appropriately and accurately describe the material being transported. Commenters believe that proper shipping names such as Kerosene, Turpentine, Diesel fuel, Paint, etc., provide much better information to emergency responders than does "Combustible liquid, n.o.s."

As well, except for U.S. Custom Harvesters' members, most commenters do not support providing for use of a unique combustible liquid marking (e.g., the words "COMBUSTIBLE" or "COMBUSTIBLE LIQUID") in place of COMBUSTIBLE placards and other hazard

communication for bulk shipments of combustible liquids. The commenters also do not support the use of the domestic identification number, NA1993, on bulk packages displaying a combustible liquid marking. Most commenters believe that COMBUSTIBLE placards must be maintained to communicate these hazards to emergency response personnel. Commenters believe a new marking to communicate the presence of Combustible Liquids would only add to confusion, and would increase cost for retraining employees and personnel.

B. Commenters Recommendations not addressed in the ANPRM

1. Dangerous Goods Advisory Council (DGAC) – recommended a new marking for reclassed, non-bulk (LFCL; 100 - 140°F) combustible liquids, which may end up on aircraft undeclared. DGAC recommends a package marking that consists of a circle surrounding figures of an airplane and a vessel with a line through the figures to alert shippers, and vessel and airline acceptance personnel.

2. DGAC requests that PHMSA except HFCL from regulation when transported in specification packages of less than 3,000 L (793 gallons) capacity (the upper limit for intermediate bulk containers (IBCs)), or when in an ISO (UN) portable tank in international commerce.

3. DGAC further petitions PHMSA to relieve IBCs containing HFCL from currently required HMR safety mark requirements independent of whether they are being transported in international commerce.

4. American Coatings Association (ACA) – recommend PHMSA retain option to reclassify LFCL in non-bulk packagings because the impact of eliminating reclassification option would subject such shipments to tunnel & local hazmat restrictions. However, would eliminate requirements regulating HFCL in bulk packagings.

5. National Association of Chemical Distributors (NACD) and Printing Industries of America (PIA) – the disadvantage of eliminating C/L reclassification exception could result in complications for chemical distributors who receive regular visits from fire officials. Note: NFPA has its own system of markings for various flash points, but generally follow DOT (OSHA, too); that is, for "NFPA Class IIIA Combustible liquids, NFPA/fire officials may require NFPA labels on such packages because there would be no DOT labels/markings to recognize. (See Chapter 4/NFPA "30" Classification of C/L and F/L).

6. American Petroleum Institute (API) – recommend other marking would mitigate undeclared C/L in non-bulk packaging (i.e., at risk packaging) as follows:

- "Ground Transport Only"
- "Not Authorized For Air Or Marine Transport"

7. American Trucking Associations (ATA) – recommend that PHMSA work not only on changes to the domestic regulations, but also utilize its influence at the UN to potentially align the UN Recommendations with the HMR. ATA also expressed the belief that deregulation of C/L could create certain safety risks. For example, certain bulk tank trucks utilize compressed air to unload. These compressors generate air pressure and may reach a temperature of 170°F. As such, operators should not use these compressors to unload certain F/L and C/L. In the absence of effective Hazcom requirements, a safety risk could be created, as operators may not know whether it is safe to use compressed air for unloading.

8. Institute Makers of Explosives (IME) -- Ninety-five percent of water-based explosive products (emulsions, slurries, watergels) and blends (Explosive 1.5D blasting agents) are delivered to jobsites in bulk and a significant quantity of that material is transported in "multi-purpose bulk trucks ("MBTS"). MBTs serve as mobile-work platforms that facilitate the off-loading of water-based explosive materials, ammonium nitrate/fuel oil materials ("ANFO"), of blends of the two directly into boreholes, which are equipped to mix AN and FO (and other materials) in a customized formulation appropriate to the conditions at a particular worksite; the frequent use of ANFO for blasting activity requires the transportation of combustible FO on MBTs.

   Currently, MBTs are operated under Special Permits ("SPs"). If PHMSA were to eliminate the regulatory option for reclassed combustibles, all commercial explosives companies operating MBTs would be forced to seek a new SP or a modification of their existing SPs to request a specific exception from the "flammable" classification for the transportation of FO with flash points between 38 °C (100° F) and 60° C (140° F). This action would be necessary because, under the HMR, flammable materials are incompatible with other hazardous materials transported on MBTs. This could be an addition of over 150 more SP applications that would add to this already daunting (serious backlog) workload.

9. Indiana Farm Bureau, Inc. – recommend applying placarding exception for 1,000 gallon capacity tanks not just to custom harvesting, but to custom farming. Numerous farmers do custom farming work for their neighbors, including but not limited to tillage, planting, spraying, and nutrient application. The Indiana Farm Bureau recommended, for the sake of clarity in implementation, the regulations should be written so that they can be consistently applied across farming operations, regardless of how they are organized or who they employ.

10. National Fire Protection Association (NFPA) -- recommend PHMSA retain current requirements for those combustible materials with flash point above 60° C (140° F) and below 93° C (200° F) because this category of materials is still capable of posing a fire or explosion hazard during transportation, especially if involved in an accident where other,

more easily ignited materials are present. NFPA believes that if some of the changes were adopted, they could impact label and other Hazcom provisions for this class of materials. NFPA noted that there is no discussion in this ANPRM regarding the pending OSHA rulemaking to amend its Hazard Communication Standard (HCS) in 29 CFR 1910.1200 by incorporation of the Globally Harmonized System (GHS). NFPA recommends that the rulemaking activities discussion in the ANPRM be reviewed and coordinated -- both will have significant impacts on the emergency responder sector.

11. International Association of Fire Chiefs (IAFC) – recommend retaining requirement for HFCL. IAFC said that while deregulation of those materials would decrease issues in international trade and ease the movement of those commodities, it would remove important warnings for emergency responders about the presence of a combustible liquid. While IAFC appreciates the fact that these materials may pose a low risk due to their high flash point, there can be a significant risk factor in the event that these materials are exposed to a fire or other incident. Another consideration is whether or not such an exemption would increase security risk since these products can be used in combination with other products for production of certain explosives such as ANFO.

12. Association of American Railroads (AAR) is concerned about applying train placement and switching restrictions to hazardous materials that have not been previously subject to them, without a need to do so, would be counterproductive, from a safety and economic perspective.

Since none of these issues were raised or examined prior to, or in the April 5, 2010 ANPRM, and there has been no consideration or discussion given to these issues, PHMSA is not addressing these subjects in this notice, at this time.

V. Denial of Petitions P-1498, P-1531, and P-1536

Issue: Treatment of flammable liquids in the U.S. HMR is at variance with the UN Recommendations. In the U.S., flammable liquids may be reclassed as combustible liquids by the material's flash point—the temperature at which it emits an ignitable vapor and can catch fire. The lower the flash point, the higher the fire hazard. The two systems are comparable as follows, with the variance shaded:

Flash Point	UN Recommendations	HMR (Domestic Ground Shipments)

Below 100°F	Flammable (Class 3)	Flammable (Class 3)
100-140°F	Flammable (Class 3)	Flammable (Class 3), with option to reclassify as Combustible, non-bulk shipments excepted
140-200°F (a.k.a. High Flash Point Combustible Liquids, or HFCLs)	Unregulated	Combustible (bulk only), non-bulk shipments excepted
Above 200°F	Unregulated	Unregulated

Two of the petitions claim there are inefficiencies in international trade due to frustration of shipments caused by intentional differences between the HMR and the UN Recommendations; and the third petition representing custom harvesters, a specialized industry, claims economic losses from the requirements placed on drivers of vehicles carrying bulk volumes of combustible materials, and requests relief from placarding for some agricultural tanks having a capacity of 1,000 gallons, claiming the delay due to FMCSA's CDL/hazmat endorsement provisions and TSA's background check for drivers required to have hazmat endorsements (HMEs) interferes with the efficiency of their business.

In accordance with 49 CFR 106.95, Petitions P-1498, P-1531, and P-1536 are denied for the following reasons:

A. Petitions P-1498 and P-1531

1. Harmonization of domestic regulations with the international standards for Class 3 (flammable liquids) materials with flash points between 38 ºC (100 ºF) and 60 ºC (140 ºF) would eliminate the domestic exception option for shippers to reclassify such materials as combustible liquids. Eliminating the combustible liquids hazard classification option could possibly result in many materials falling under the flammable

liquids classification (UN) criteria and require use of more expensive, specification, non-bulk and bulk packagings as opposed to less expensive, non-specification, non-bulk and bulk packagings, currently allowed for combustible liquids. Shipments of non-bulk packagings of combustible liquids in domestic transportation are currently shipped unregulated. Potentially adopting UN classification criteria for Class 3 (flammable liquids) and eliminating the combustible liquids classification criteria in the U.S. would greatly impact costs and increase burdens on the regulated industry.

2. The safety of emergency responders could be compromised if bulk shipments of combustible liquids having a flash point of 60 ºC (140 ºF) and 93 ºC (200 ºF) moving in domestic transportation were to be shipped as unregulated, with no hazard warning labels or placards, markings, or shipping papers to assist emergency responders in case of an incident involving such materials. Many commenters agree, including the NFPA and the IAFC.

3. The cost of retraining shippers, carriers, and emergency response personnel, who are extremely familiar with the current system, would be increased. Generally, commenters agree that there would be an added cost in implementation if the combustible liquid reclassification option and the domestic exceptions were eliminated.

4. Costs are broadly attributable to new packaging, training, registration, and marking costs. The wide range of industries affected by combustible liquids in transportation is widespread enough to outweigh potential benefits to either regulatory option.

5. Under full-harmonization, non-specification tanks carrying reclassed combustible liquids would have to be replaced by specification tanks in the absence of the reclassification option. Commenters have noted that current practice is to move tanks from specification

to non-specification service as they age and that requiring materials like asphalt to be carried in specification cargo tanks would make them unusable for other materials. Multiple commenters quoted a retail price for specification tanks at $75,000 to $80,000 each. Calls to Polar Tank for used tank prices yielded a range of $30,000 to $35,000 for specification tanks and $24,000 to $25,000 for non-specification tanks. The upper end of each of these ranges was used [see economic analyses on file in docket] due to an assumption that less-costly tanks were likely older and less appealing as a long-term investment.

This then means that the usual increment between a specification and non-specification tank is approximately $10,000. The number of tanks in use for shipping combustible liquids was determined by taking the U.S. Energy Information Administration's (EIA) reported figure for millions of barrels of fuel distillates transported through the U.S. per day, converting to gallons, and dividing that figure by the average assumed tank size (3,000 gallons) and the number of trips per day recorded by the most recent (2002) Vehicle Inventory and Use Survey (VIUS). This gives us an estimate of 12,100 cargo tanks that would require replacement. [Note that in HM-213D (the Wet lines rule), there is a standing estimate of 27,000 tank trucks operating in the U.S. just with undercarriage piping.] Therefore to upgrade all 12,100 cargo tanks at a cost of $10,000 each would cost carriers $121 million for a single upgrade. This assumes that used tanks will be widely available for the mass replacement of non-specification tanks by specification tanks; it is likely that a number of new tanks would be brought into service at a notably higher cost.

6. Non-bulk shipments would be another area of concern. Under the harmonization option, shippers of flammable liquids with a flash point of 60 °C (140 °F) or below would no longer have the option to reclassify them as combustible liquids, currently shipped unregulated. Such shipments would be required to be shipped in specification, non-bulk packagings. Although safety is maintained, shippers would be required to invest in more costly specification, non-bulk packagings to ship such materials as paint, ink, and adhesives.

7. Training and information would be required (at least one session of retraining) for all shippers, carriers, and emergency responders. (One commenter, Printing Industries of America, claimed to represent 10,000 companies which would require some form of training.) The overall cost would be substantial, with nearly 700,000 workers in the U.S. requiring updated training would cost $2.75 million per year or $27.5 million after 10 years; at 3% discount this is $23.3 million and at 7% discount this is $18.9 million. We can be certain there are also a number of large companies that would then be required to register annually and pay higher fees (not included in these figures) under harmonization. The ERG would have to be updated as well.

8. Under harmonization, many shippers/carriers would have to replace the COMBUSTIBLE placard with the FLAMMABLE placard. For the most part, four (4) square-on-point placards would be required. It is estimated that 80% of placards sold are removable vinyl or tag board, 10% are permanent vinyl, and 10% are durable aluminum. Therefore, replacement costs would be necessary. For 10,000 Cargo Tank Motor Vehicles (CTMVs), there would be four square-on-point placards required per tank. Private communication with J.J. Keller yielded estimates that 80% of placards sold are

removable vinyl or tag board, 10% are permanent vinyl, and 10% are durable aluminum. At market prices, it would cost about $126,000 to replace them all.

In practice, most flammable liquids with a flash point at or above 100°F to 200°F may be reclassed and shipped as combustible liquids within the U.S. There is no international hazard class definition for "combustible liquids." The combustible liquids provisions do not apply to transportation by aircraft or vessel, in most cases. The average new marking would thus likely cost around $3 on average. As with harmonization, for industry to replace a COMBUSTIBLE placard with a COMBUSTIBLE marking would require 40,000 units to be purchased, for a total of $120,000. A representative from J.J. Keller estimated that the cost to develop a new marking would likely be on the order of $4,000. The total would then be $124,000 for the new marking. Again, we refrain from including replacement costs for these markings following the initial changeover. Note also that the use of a COMBUSTIBLE marking vs. a COMBUSTIBLE placard would be an optional provision.

9. Although both petitioners claim the variance delays shipments moving internationally because these shipments are placarded with COMBUSTIBLE placards, which are not recognized internationally, international commerce would not necessarily be expedited by deregulation. DGAC's estimated delay cost for one freight container was approximately $300 to $500. For comparison, Maersk, the world's largest container line does not levy demurrage (delay charges) for (twenty-foot equivalent unit (TEU)) export shipments waiting up to seven days or import shipments waiting up to four days. Beyond this "free time," the charges average $100 per day for exports and $225 per day for imports. If placarding issues actually forced delays concomitant with DGAC's estimates, the cost

would be nothing for exports and $225 for imports—for one day in excess of the ”free time” granted.) Many commenters feel and PHMSA agrees that placing a non-recognized “Combustible” marking on international transport containers would not ultimately lead to a different outcome. Even so, this is a matter of shippers, carriers, and freight forwarders or agent’s responsibility to be knowledgeable about and observant of, the regulations.

10. The requirements for shipping combustible liquids in the U. S. are less costly and adequate level of safety is maintained. Neither IVODGA nor DGAC presented any evidence for its claim that the U.S. regulations as are currently applied are responsible for undeclared shipments in international transport, much less that there has been any harm from these shipments leading to incidents. Commenters in support of harmonization did not provide documentation, specific information or data to support their contention that mishandling, misidentification, demurrage or delay, or undeclared combustible liquids shipments occurred and is a major factor compromising safety or in causing non-compliance.

B. Petition P-1536

Comments were solicited on whether the HMR should provide use of a unique COMBUSTIBLE marking in place of COMBUSTIBLE placards for the custom harvester industry who replaces the farmer in the fields at harvest time. The purpose is to exempt custom harvesters from placarding bulk tanks having a capacity of 1,000 gallons, which in turn exempt them from FMCSA’s hazmat endorsement on a Commercial Driver’s License (CDL). The petition is denied for the following reasons:

1. Except for custom harvesters, the majority of commenters on harmonization opposed expanded exceptions and particularly for farm operations or agribusinesses only.

2. On June 28, 2011, Senator Pat Roberts (KS) introduced Senate Bill S. 1288 to the 112th Congress (2011 – 2012), read twice and referred to the Committee on Commerce, Science, and Transportation. The Bill directs the Secretary of Transportation to exempt from the requirement to obtain a hazmat endorsement all Class A CDL holders who are custom harvesters, agricultural retailers, agricultural business employees, agricultural cooperative employees, or agricultural producers who operate a service vehicle with a fuel tank containing 3,785 liters (1,000 gallons) or less of diesel fuel if the tank is clearly marked with a placard reading "Diesel Fuel." The Senate Bill has four (4) cosponsors.

3. On July 6, 2011, Representative Randy Neugebauer (TX), introduced to the 112th Congress (2011 – 2012), a related or identical House Bill H.R. 2429) which was referred to the House Subcommittee on Transportation and Infrastructure. On July 7, 2011 the House Bill H.R. 2429 was referred to the Subcommittee on Highways and Transit. The House Bill has twelve (12) cosponsors.

4. The two (2) Bills (S.1288 and H.R. 2429) introduced were aimed at increasing the amount of diesel fuel allowed to be hauled by agriculture sector employees – in some cases from 118 gallons to 1,000 gallons – without certain federal regulations applying. The two Bills are intended to help the agriculture industry to operate more efficiently. If passed, the legislation would allow the custom harvester and other agricultural related businesses to haul up to 1,000 gallons of diesel fuel in a bulk packaging without a hazmat endorsement on their Class A CDL. Since this issue would be addressed by the Federal Motor Carrier Safety Administration Regulations (FMCSR) governing Commercial

Driver's Licenses, PHMSA believes it would be in the best interest of all parties involved, including the U.S. Custom Harvesters, Inc., to await the outcome of this legislation. Thus, CDL legislation would be subject to, and implemented by, the Department's Federal Motor Carrier Safety Administration's Federal Motor Carrier Safety Regulations (FMCSR).

5. Prior to publication of the April 5, 2010 notice, FMCSA denied a request from the U.S. Custom Harvesters, Inc., to conduct a pilot program where custom harvesters would transport diesel fuel in bulk packagings, but would be excepted from placarding under the HMR and thus from the hazmat endorsement on the CDL, which triggers a TSA background check. During this same period, PHMSA also denied a request from the U.S. Custom Harvesters, Inc., for a special permit to transport bulk shipments of diesel fuel without placarding. Basically, both agencies felt that neither should diminish nor weaken the other agency's rules or enforcement.

VI. Conclusion

Many commenters recommended analysis of incident data to determine whether a proposed rule would be warranted. In the April 5, 2010 ANPRM, OHMS staff solicited comments on two possible regulatory options that may address these requests, as follows:

1. Harmonize with the UN Recommendations, eliminating the Combustible liquids hazard class and the domestic exceptions for non-bulk and bulk shipments. This would directly address IVODGA and DGAC's concerns, but may not maintain an adequate level of safety involving these materials transported in domestic transportation.

2. Adopt a new marking for Combustible liquids, designed to pass through international customs facilities without inciting frustration while still communicating emergency information. This may address the Customer Harvesters' issue and potentially satisfy IVODGA and DGAC's concerns at the port.

PHMSA believes that each option has the potential to reduce the level of safety and neither is guaranteed to expedite commerce. Quantitative information on costs and benefits is difficult to come by; a partial cost analysis was conducted on elements of the regulatory options that could be enumerated based on ANPRM comments and further research. These figures will serve as a "floor" for the cost analysis, that is, actual costs would likely be higher but no lower than the numbers cited. The benefit-cost summary outlines the economic difficulties of pursuing either option; benefits are estimated generously and costs are estimated to the extent possible with limited information in order to illustrate the confidence with which we state that neither regulatory option is cost-effective relative to current practice. The costs associated with implementing the petitions would far exceed the benefits. For access to the economic analysis go to http://www.regulations.gov.

In addition, from the perspective of the emergency responder, any effort to deregulate combustible liquids represents a reduction in the current safety practices that protect and alert those responding to transportation incidents or other emergencies involving this class of hazardous materials.

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R. Ryan Posten

Deputy Associate Administrator for Hazardous Materials Safety

Pipeline and Hazardous Materials Safety Administration

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