**DEPARTMENT OF TRANSPORTATION**

**Research and Special Programs Administration**

**49 CFR Parts 171, 172, 173, 174, 175, 176, and 177**

**[Docket No. HM–206; Notice No. 94–8]**

**RIN 2137–AB75**

## Improvements to Hazardous Materials Identification Systems

**AGENCY:** Research and Special Programs Administration (RSPA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** RSPA is proposing changes to hazard communication requirements of the Hazardous Materials Regulations (HMR). The proposed changes are based on comments received in response to an advance notice of proposed rulemaking (ANPRM), recommendations of the National Academy of Sciences (NAS), and agency initiative. This action will improve the existing hazard communication system; better identification of hazardous materials in transportation will assist emergency response personnel in responding to and mitigating the effects of incidents and accidents involving hazardous materials.

**DATES:** *Written comments:* Comments must be received on or before December 2, 1994.

*Public hearing:* A public hearing will be held beginning at 9:00 a.m., October 18–19, 1994.

**ADDRESSES:** Written comments: Address comments to the Dockets Unit (DHM–30), Research and Special Programs Administration, U.S. Department of Transportation, Washington, DC 20590–0001. Comments should identify the Docket (HM–206) and be submitted in five copies. Persons wishing to receive confirmation of receipt of their comments should include a self-addressed stamped postcard showing the docket number. The Dockets Unit is located in Room 8421 of the Nassif Building, 400 Seventh Street, SW., Washington, DC 20590–0001. Public dockets may be viewed between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

*Public hearing.* The public hearing will be held in the Auditorium of the Federal Aviation Administration Building located at 800 Independence Avenue, SW., Washington, DC 20591. Persons desiring to make oral statements at the hearing should notify the Research and Special Programs Administration (RSPA) Docket Clerk by telephone (202) 366–5046 or in writing by October 3, 1994. Mail written requests to: Docket Clerk, Office of Hazardous Materials Safety, Research and Special Programs Administration, 400 Seventh Street, SW., room 8421, Washington, DC 20590–0001. Each request must identify the speaker; organization represented, if any; daytime telephone number; and the anticipated length of the presentation, not to exceed 10 minutes. Written text of the oral statement should be presented to the hearing officer and reporter prior to the oral presentation. Hearings may conclude before 5:00 p.m. and the second day of the hearing (October 19, 1994) may be cancelled if all persons wishing to give oral comments have been heard. To confirm plans to attend, contact Ms. Helen Engrum at (202) 366–8553.

**FOR FURTHER INFORMATION CONTACT:** Helen Engrum or John Potter, telephone (202) 366–4488, Office of Hazardous Materials Standards, Research and Special Programs Administration, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590–0001.

**SUPPLEMENTARY INFORMATION:**

### I. Legislative Requirements

*A. Rulemaking*

On November 16, 1990, the President signed into law the Hazardous Materials Transportation Uniform Safety Act of 1990 (HMTUSA; Pub. Law 101–615) which amended the Hazardous Materials Transportation Act (HMTA), 49 App. U.S.C. § 1801 *et. seq.* Section 25 of HMTUSA requires DOT to initiate a rulemaking to determine methods of improving the current system of placarding vehicles transporting hazardous materials and to determine methods for establishing and operating a central reporting system and computerized telecommunication data center that can provide information to facilitate responses to accidents and incidents involving the transportation of hazardous materials. It directs DOT to consider methods of improving the placarding system to include: (1) methods to make placards more visible; (2) methods to reduce the number of improper and missing placards; (3) alternative methods of marking vehicles for the purpose of identifying hazardous materials being transported; (4) methods of modifying the composition of placards to ensure their resistance to fire; (5) improving the coding system used with respect to such placards; (6) identification of appropriate emergency response procedures through symbols on placards; and (7) display of telephone numbers for continually-monitored emergency response telephone systems on vehicles transporting hazardous materials.

Section 25 also requires DOT to evaluate in a rulemaking proceeding whether a central reporting system and computerized telecommunication data center should be operated by the Federal Government or a private entity, either on its own initiative or under contract with the United States. The evaluation must address: (1) the estimated annualized cost of establishing, operating and maintaining such a system and center and for carrier and shipper compliance with such a system; (2) methods for financing the cost of establishing, operating, and maintaining such a system and center; (3) the projected safety benefits of establishing, operating and maintaining such a system and center; (4) whether shippers, carriers and handlers of hazardous materials should have access to such a system; (5) methods for ensuring the security of the information and data stored in such a system; (6) types of hazardous materials and types of shipments for which information and data should be stored in such a system; (7) the degree of liability of the operator of such a system and center for providing incorrect, false or misleading information; (8) deadlines by which shippers, carriers and handlers of hazardous materials should be required to submit information to the operator of such a system and center, and minimum standards relating to the form and content of such information; (9) measures for ensuring compliance with the deadlines and standards for operating such a system; and (10) methods for accessing such a system through mobile satellite service or other technologies having the capability to provide two-way voice, data, or facsimile service.

Section 26 of the HMTUSA requires DOT to initiate a rulemaking on the feasibility, necessity, and safety benefits of requiring hazardous materials carriers (in addition to an existing requirement for shippers) to maintain continually-monitored telephone systems to provide emergency response information and assistance. DOT is required to determine which hazardous materials, if any, and which segments of industry (including persons who own and operate motor vehicles, trains, vessels, aircraft, and in-transit storage facilities) should be covered by such a requirement.

On June 9, 1992, RSPA published an advance notice of proposed rulemaking (ANPRM) in the **Federal Register** [Docket HM–206; 57 FR 24532] posing

63 primary questions, most with secondary questions, under three categories. The ANPRM solicited comments on methods of improving the current system of placarding vehicles transporting hazardous materials, methods to improve the system of identifying hazardous materials in transportation, and the feasibility and necessity of requiring carriers to maintain continually-monitored telephone contacts for emergency response information.

*B. NAS Study/DOT Report*

Section 25 of HMTUSA requires DOT to contract with the National Academy of Sciences (NAS) to conduct a study of the feasibility and necessity of establishing and operating a central reporting system and computerized telecommunication data center that would receive, store, and retrieve data on all daily shipments of hazardous materials by all modes. DOT is to provide Congress a summary of the NAS report with DOT's recommendations concerning implementation of the NAS recommendations, giving substantial weight to recommendations on the feasibility and necessity of implementing a central reporting and computerized telecommunication data center.

In May 1991, DOT entered into a contract with NAS to conduct the study. A 16-member committee was formed, representing industry, academia, and the emergency response and firefighting communities. The scope of the study was limited to matters that may affect the consequences of hazardous materials incidents after they occur, and not methods of preventing incidents. The committee focused on various potential applications of communications and information technology that would aid emergency responders in obtaining information at hazardous materials incidents and accidents and nontechnological options for improving information through better regulation, enforcement, or training. NAS made recommendations regarding the national central reporting system, a long-term approach to using technology in support of emergency response, and regulatory, enforcement, and training needs.

The committee also reviewed DOT's existing hazard communication system with respect to regulatory, enforcement and training options in the context of not relying on the introduction of new information technologies. The NAS report was submitted to Congress and DOT on April 29, 1993.

On February 15, 1994, the DOT submitted a report to Congress which included a summary of the NAS report and DOT's recommendations. A copy of DOT's report has been included in the Docket.

**II. Hazard Identification and Communication System Under the HMR**

Over the last 25 years, DOT has developed a comprehensive hazardous materials identification and communication system. The system is designed to provide fire and emergency response personnel with information in the event of a transportation incident or accident involving the release of hazardous materials. Hazard communication and emergency response information requirements are set forth in Subparts C through G of Part 172 of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171–180). The system involves communication of the following types of information: (1) hazardous materials descriptions, including specific or generic proper shipping names, chemical or technical names, hazard classes, identification numbers, and other special information, entered on shipping papers carried on the transport vehicle by the transporter; (2) hazardous materials proper shipping names and identification numbers, marked on non-bulk and bulk packages; (3) primary and subsidiary hazards, identified by labels affixed to packages; (4) primary hazards, identified by placards affixed to transport vehicles, freight containers and bulk packagings; and (5) emergency response information, entered on shipping papers or presented in separate documents.

Emergency response information must be maintained on the transport vehicle, train, or vessel during transportation of the hazardous material in the same manner as is required for shipping papers. On aircraft, emergency response information must be maintained in the same manner as is required for the notification of the pilot-in-command. The information describes immediate hazards to health, risks of fire or explosion, precautions to be taken by responders first arriving at the scene of an incident, initial methods for handling spills and leaks in the absence of fire, and preliminary first aid measures to be taken. This information may be entered on shipping papers, or be presented on appropriate guide pages in DOT's "Emergency Response Guidebook (ERG)," on material safety data sheets, or on other appropriate emergency response guidance documents.

A shipper who offers hazardous materials for transportation must also enter an emergency response telephone number on a shipping paper. The number must be monitored at all times while a shipment is in transportation, including storage incidental to transportation. A first responder using that number must be able to contact, in one phone call, a person who is either knowledgeable about the material and has comprehensive response and mitigation information, or has immediate access to such a person.

Firefighters and emergency response personnel have been trained to use hazard communication and emergency response information in responding to incidents. Shipping names and identification numbers are cross-referenced to emergency response guides in DOT's ERG. The ERG provides guidance for initial actions to be taken in response to hazardous materials incidents. Since 1980, RSPA has distributed more than 3.5 million copies of the ERG to emergency response entities without charge.

The current hazard communication system is recognized worldwide. DOT has aligned U.S. hazard communication requirements with international standards by adoption of shipping descriptions, labels and placards conforming to United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations). Hazard communication requirements currently in effect have been successfully used in identifying the hazards of materials involved in releases during transportation.

Over the past five years, DOT has substantially amended the U.S. hazard communication requirements. On December 21, 1990, a final rule was published [Docket HM–181; 55 FR 52402 and final rule revisions on 12/21/91; 56 FR 66124] which comprehensively revised the HMR with respect to hazard communication, classification, and packaging requirements. This action simplified and reduced the volume of the HMR, enhanced safety through improved classification and packaging, promoted flexibility, and facilitated international commerce through harmonization with international transport standards. Further, changes to labeling requirements for Division 6.1 Packing Group (PG) III materials, requiring a KEEP AWAY FROM FOOD label, are addressed in an ANPRM recently published in the **Federal Register** [Docket HM–217; 58 FR 59224; 11/8/93]. The issues addressed in Docket HM–217 are not otherwise addressed in this document.

## III. NAS Findings and Recommendations

The central recommendation contained in the National Academy of Sciences (NAS) report is that the Federal Government should not attempt to implement the national central reporting system as originally proposed for consideration. NAS said:

> There is no sound basis for defining performance criteria for information to be provided and threshold reliability needed in such a system. There would be no opportunity to allow on-going evaluation to guide implementation, as a phased implementation would allow; and the system would not be designed to make maximum use of existing shipper, carrier, and responder capabilities.

NAS found that the original national central reporting system proposal "is not aimed at the most serious failures of the existing system," such as incidents "in which [shipping] papers or placards are inaccessible because of a crash or fire." NAS concluded that, "because of these shortcomings, the originally proposed system would be unlikely to function as intended or to produce benefits sufficient to justify its costs."

Although NAS recommended that the Government "should not attempt to implement such a system as the originally proposed national central reporting system," it did recommend DOT participation in the evaluation of new information technologies. NAS stated that DOT should, on an ongoing basis, and in conjunction with the shipper and carrier industries and emergency responders, systematically investigate opportunities for application of information technologies to aid emergency responders and reduce the costs of hazardous materials incidents. Specifically, NAS called for pilot programs comprising "controlled experiments with independent, rigorously designed evaluation protocols."

NAS found that, in most instances, the existing hazardous materials communication system is effective and that information available at hazardous materials transportation incident sites meets critical information needs of emergency responders. Based on case studies of 125 incidents, NAS identified six kinds of potential information problems encountered by responders: (1) required sources of information were missing or inaccurate; (2) information sources were obscured, destroyed, or inaccessible because of fire, wreckage, or other barriers; (3) information sources were available and in compliance with the regulations, but failed to fully or efficiently convey essential information; (4) essential information was not provided because the shipment was not subject to the HMR; (5) vehicle operator did not assist emergency responders in obtaining essential information; and (6) responders did not properly use available information. Based on this finding, NAS made the following recommendation:

- DOT, together with the other responsible federal agencies, should form a plan of action to alleviate each of the six categories of information failures identified in this study through changes in regulations, more effective enforcement, and support for improved training of emergency responders and inspectors.

NAS made a number of additional recommendations to improve identification of hazardous materials to minimize the dangers and costs of accidents and enhance emergency response efforts. They are as follows:

- The government should not attempt to implement a system such as the originally proposed national central reporting system, that is, one entailing immediate and universal application of a requirement for shipper or carrier real-time filing of vehicle contents information in a central data base.
- Improvements to the existing system for providing information to emergency responders at hazardous materials incidents are necessary. Therefore, Congress, DOT, and other responsible federal agencies should plan and carry out a program to improve the system. This program should include appropriate measures to apply technology; reforms in regulations, enforcement, and training; and evaluation of the existing system so that efforts can be directed at the most pressing problems.
- DOT should immediately undertake one or more limited start-ups of automated information systems.
- DOT should, on an ongoing basis and in conjunction with the shipper and carrier industries and emergency responders, systematically investigate opportunities for application of information technology to aid emergency responders and reduce the costs of hazardous materials incidents.
- The U.S. Fire Administration, DOT, and the other federal, state, and local agencies that maintain data bases of hazardous materials incidents should formally coordinate to ensure that data are defined and collected uniformly, duplicate reporting is avoided, and data collection is designed to serve essential program evaluation and research needs.
- DOT should establish a monitoring capability that allows it to determine whether its regulations intended to provide emergency responders with information at hazardous materials transportation incidents are working adequately.
- DOT and the U.S. Fire Administration should jointly conduct a study of costs and means of organizing and delivering training to hazardous materials emergency responders and enforcement officers.

## IV. Regulatory Issues

### *A. Summary*

Over 230 comments were submitted in response to the ANPRM. Commenters included shippers, carriers, firefighter and police departments and associations, farmers, Federal and State governments, trade associations, emergency response telephone services organizations, and private individuals.

Based on the comments to the ANPRM, the National Academy of Sciences (NAS) recommendations in its report, and RSPA's initiative, several improvements to the existing hazard communications system have been identified as needed and are proposed in this notice of proposed rulemaking (NPRM).

RSPA is proposing to: (1) require identification number markings on transport vehicles and freight containers to improve identification of hazardous materials poisonous by inhalation offered in amounts of more than 400 kilograms (kg) (882 pounds) aggregate gross weight; 2) require identification number marking displays on truckload and carload shipments of non-bulk packages of hazardous materials having a single identification number; 3) require unique labels and placards for both liquids and gases that are poisonous by inhalation; 4) lower the placarding exception in § 172.504(c) from 454 kg (1,000 pounds) to 400 kg (882 pounds) aggregate gross weight of hazardous materials; 5) revise the requirements for use of a FUMIGANT marking; 6) lower from 2,268 kg (5,000 pounds) to 1,000 kg (2,205 pounds) the quantity for specific hazard class placarding when one category of material is loaded on a transport vehicle at one loading facility; 7) prohibit display on transport units of slogans, such as "Drive Safely," which could be confused with placards; 8) require motor carriers to instruct operators of transport vehicles in methods to contact the motor carrier; and 9) require placarding for any quantity of "Organic peroxides, Type B, controlled temperature" materials. Also, included in this proposal are editorial corrections that clarify certain other requirements under the HMR.

A number of changes considered in the ANPRM are not being proposed. Based on the comments and its own analysis, RSPA is *not* proposing to: 1) eliminate the DANGEROUS placard; 2) require added emergency response information to be displayed on placards or vehicles; 3) revise placard visibility, size and location, information display and format, or construction and attachment methods; 4) change existing

color tolerance requirements; or 5) establish a centralized reporting system and computerized telecommunication data center.

Proposals and the decision not to undertake further rulemaking action for certain issues are discussed in detail in the following paragraphs. The complexity of the issues raised and the manner in which commenters responded make it appropriate to synopsize comments addressed to groups of questions pertaining to the same issue.

*B. Improvements to placarding identification system*

Placard visibility, size and location

1. Would increasing the size of placards, incorporating larger identification numbers and hazard class symbols, improve hazard recognition? What size would be most effective? Are there any specific incidents in which the use of larger placards would have improved emergency response? The HMR specify a minimum size of 273 millimeters (mm) on edge for domestic placards and 250 mm for those conforming to international standards.

2. Is the existing square-on-point configuration too restrictive for adding emergency response guidance and hazard identification information? What changes, if any, should be made? And if so, what would be the costs and benefits?

3. To improve placard visibility, should RSPA require placards to be affixed on a vehicle in a manner so that, in the event of an accident, they can be observed regardless of orientation of the vehicle? For example, should placards be located on the tops and bottoms (in addition to each side and end) of transport vehicles to ensure placard visibility in the event of rollover incidents? This was suggested by the National Transportation Safety Board (NTSB) Safety Recommendation I–90–11 addressing a November 30, 1988 incident involving an overturned motor vehicle. NTSB pointed out that "front placards on the trailer have often been obscured by the tractor, and rear placards attached to removable gates have been thrown from the vehicle during an accident sequence." Section 172.504(a) prescribes the location of placards on transport vehicles.

4. Should the three-inch (76 mm) separation distance between placards and other information displayed on transport vehicles specified in § 172.516(c)(4) be increased to improve the presentation of placards? If so, please specify what distance or height would be effective to ensure that placards are readily identifiable by emergency responders.

5. RSPA is aware of comments that claim that slogans or advertisements displayed on configurations similar to placards can confuse emergency responders. Should RSPA prohibit display of advertisements and such slogans as "Drive Safely" or other information configured in shapes similar to DOT placards?

6. As an alternative to placarding, are there other methods of marking a transport vehicle to improve hazard communication including visibility and durability? For example, would a color banding scheme for marking transport units, as allowed under Canadian Transport of Dangerous Goods (TDG) Regulations, be a workable alternative to placarding?

7. To improve hazard identification and communication during emergencies, should RSPA consider an additional placarding system to include a national motor vehicle numbering system similar to the Universal Machine Language Equipment Register (UMLER) system now used to identify all rail cars in North America?

8. Domestically, use of reflective placards are permitted but not required under the HMR. However, placards constructed of reflective styrene material have been required under Part 5.27 of the Canadian TDG regulations for explosives and certain bulk shipments since January 1986. We estimate the cost per reflective placard as ranging between $6.85 and $15.85 depending on the quantity of placards ordered and information contained. Should reflective placards be required? If so, for what class of hazardous materials? What would be the cost of replacing existing placards with reflective placards?

9. Should RSPA require placards to be displayed at places where hazardous materials are stored incidental to transportation? If so, under what circumstances and in what manner?

Generally, most commenters saw no need to modify DOT's existing system of placard and identification number display. Since the square-on-point configuration of placards is internationally recognized, they believed this standard configuration must be maintained. Most commenters opposed any increase in placard size or change in the square-on-point configuration to accommodate additional emergency response information. Some commenters indicated that an alternative hazard warning system, such as vehicle color banding, which would force some carriers to operate dedicated vehicles, should not replace the existing placarding system. The American Trucking Associations (ATA) estimated that "for one mid-size regional carrier alone, the cost to retrofit its fleet of 1000 vehicles [with revised or additional placarding] would be $540,000 using the costs of existing products."

Several commenters indicated that panels on roll-up doors of trailers and other box-type freight containers are sized to accept the present placard holders and that companies using permanent flip-type placards would be forced to utilize a split design (half-on one panel and half on another) or replace all roll-up doors to accommodate an increase in size. They said the costs to replace doors would be enormous.

Most commenters supported prohibiting display of extraneous information in placard holders. These commenters perceived that safety slogans or signs, such as "Drive Safely," displayed in a diamond-shaped format can be confusing to emergency responders when placed in placard holders or on placard-type displays and, therefore, should be prohibited. Some commenters indicated that increasing the three-inch separation distance between placards and other information would not improve the recognition of placards because placards are readily identifiable by their shape and color.

Most commenters asserted that, because of the numbers of vehicles, a national motor vehicle numbering system would prove to be too complex and ineffective. Several commenters stated that the Universal Machine Language Equipment Register (UMLER) system is designed for fixed route transportation systems, such as rail transportation.

Many commenters questioned the extent to which transport vehicles must be placarded in situations considered to be "incidental to transportation." For example, they asked if placards are required to be maintained on transport vehicles not on public roads until hazardous materials are unloaded, such as when a vehicle remains loaded for an indefinite period in a consignee's fixed facility.

As long as a hazardous material is in transportation, it is subject to the HMR, including any requirements for placarding of the vehicle which contains it. "Incidental to transportation" includes hazardous materials being loaded, unloaded or stored during transportation (e.g., at a trucking company terminal or in a railroad switching yard). RSPA notes that on July 19, 1994, the Occupational Safety and Health Administration (OSHA) published a Final Rule [Docket No. H–022l; 59 FR 36695] in the **Federal Register** requiring employers to maintain package marking, labeling and transport vehicle placarding prescribed under the HMR until hazardous materials are removed. As proposed, OSHA's regulation would require that placards be maintained on a transport vehicle containing hazardous materials even when that vehicle is no longer subject to regulation under the HMR.

A number of commenters supported an increase in the size of placards and identification number displays to make them more visible to improve hazard recognition by responders. However, most commenters indicated that the costs of any major changes to the existing system would be prohibitive.

the benefits would be minimal and the current placarding system should be maintained.

Based on information available, including estimation of costs, RSPA believes that revising placard size, orientation or separation distance requirements, requiring color banding, or implementing a national motor vehicle numbering system would result in substantial cost increases without significant improvement in emergency responder abilities to readily identify hazardous materials in transportation. Therefore, RSPA is not proposing any changes to the HMR concerning placard size, visibility or location.

Most commenters believed that retro-reflective placards would only minimally improve safety and stated that the use of such placards should remain optional because of their high cost.

RSPA believes that requiring retro-reflective placards would not provide benefits that are even a small fraction of potential costs, which may be approximately eight times greater than for current placards. Therefore, RSPA is not proposing to require retro-reflective placards.

Placard Information and Format

10. Should placards display information identifying appropriate emergency response procedures related to the hazardous materials being transported? Should placards display appropriate DOT Emergency Response Guidebook guide numbers referencing potential hazards and corresponding emergency actions?

11. Should there be changes in basic placard format? What specific incidents, if any, demonstrate the need for such changes? Do existing hazard class symbols on placards, like the burning "O" on the OXYGEN placard, adequately convey hazard information to emergency responders? Are there other symbols that could be used to more effectively display hazard warnings?

12. Should RSPA require an additional rectangular placard for information that cannot effectively be contained in the square-on-point configuration? For example, the square-on-point placard could be used as an immediate indicator to responders that hazardous materials are present in the transport vehicle. Responders could then refer to the rectangular placard for essential response and hazard identification information.

13. Should the display of hazardous materials (UN, NA) identification numbers be more extensively used to convey emergency response information? Section 13.7.5 of the UN Recommendations on the Transport of Dangerous Goods (7th Edition) recommends that a fully-loaded truckload of a packaged commodity be identified with the UN identification number for that commodity.

14. Would the display of the CLASS 9 or KEEP AWAY FROM FOOD placards provide emergency responders with needed information in the event of an incident or accident? Should a CLASS 9 placard be required for Elevated Temperature Materials?

15. Should DOT develop a new "Poison Inhalation Hazard" placard to more specifically identify liquids and gases that are poisonous by inhalation? If so, what should the placard design be? Under § 172.505 in Docket HM–181, any quantity of a poisonous material subject to the "Poison-Inhalation Hazard" shipping description in § 172.203(m)(3) must be placarded with either a "POISON" or a "POISON GAS" placard.

16. Under § 172.510, if Division 2.3 Zone A gases and Division 6.1 Packing Group I Hazard Zone A liquids poisonous by inhalation are shipped by rail, the "POISON" and "POISON GAS" placards must be placed within a white square background. Should this requirement be extended to other modes? Should other hazard classes be included in such a requirement?

17. Technical specifications for color tolerance charts for determining the acceptability of colors used on labels and placards are set forth in Appendix A to Part 172. Are color tolerance charts meeting these or other specifications (e.g., the Pantone Color Code System which is used in Canada) available from commercial sources? Are there color standards available which could be incorporated by reference into the HMR? What would be the cost of these standards to users?

Generally, commenters believed that RSPA's regulations provide for an appropriate amount of information through placarding and identification number markings, and that further changes were not needed. Most commenters on this issue did not support addition of emergency response procedural information, such as ERG guide numbers, on placards. They believed that no changes should be made to basic placard format. Most commenters were opposed to requiring an additional placard for other information which they said would complicate compliance, cause confusion and lead to delays in response. They believed that these changes are not justified, would be inconsistent with international hazard communication standards and would add confusion with no added safety.

Commenters were divided on whether identification numbers should be used more extensively. For example, the Chlorine Institute and other commenters supported use of placards with identification numbers on all full load shipments of packaged hazardous materials. Others said requiring further display of identification numbers would not enhance safety, that no change is necessary, and that display of identification numbers on less-than-truckloads (LTL) could result in information overload.

Emergency responders have for over a decade been trained in the use of the existing hazard communication system. There is little evidence to show that additional information, such as the Emergency Response Guidebook (ERG) guide numbers on existing placards or a requirement for a new rectangular placard containing response information would result in any significant improvement to safety. Therefore, RSPA is not proposing to require either additional information or an additional rectangular placard for the display of emergency response information.

There was no consensus on whether a new POISON-INHALATION HAZARD (PIH) placard is needed to more specifically identify materials which are poisonous by inhalation. The Chlorine Institute was not sure a more specific display of PIH information on a placard is warranted, and believed that such a change should be approved by the UN before being considered domestically. Others asserted that a new placard to specifically identify PIH materials would improve response.

Most commenters contend that the current requirement for rail transportation of PIH materials, specifying a square white background for POISON and POISON GAS placards, should not be extended to all modes. The International Association of Fire Chiefs (IAFC) stated that a square white background aids visibility of the placard and should be used whenever a background color causes the placard to be less visible. However, other commenters recommended eliminating the square white background requirement altogether. One commenter said that use of the square white background is not necessary for PIH materials since the words "Inhalation Hazard" are already stenciled as a PIH identification.

RSPA is proposing new labels and placards for materials poisonous by inhalation, i.e., Division 6.1, Packing Group I, Zones A and B, liquids and gases in Division 2.3, Zones A, B, C and D. For poisonous gases, new graphics for the existing POISON GAS label and placard are proposed. For liquids, a new POISON INHALATION HAZARD label and placard is proposed. For both liquids and gases, labels and placards would display a white skull and crossbones on a diamond-shaped black background placed at the top point/corner of the placard. This proposal is responsive to a petition (P–1021) submitted by the American Trucking Associations (ATA) and recognizes one of NAS's principal recommendations to add greater specificity in the communication of hazardous materials.

RSPA believes the effort to clearly identify the hazards of these volatile inhalation poisons, already addressed in shipping paper descriptions and package markings, would be further enhanced by adding a unique label and placard. Michael Hagen of the City of Los Angeles Police Department submitted the graphic design which is proposed in this NPRM.

Several commenters suggested that DOT should require a consistent color scheme such as the Pantone (TM) color code for labels and placards. The National Industrial Transportation League (NITL) said the existing color tolerance system is obsolete and that a range of color tolerance should be acceptable. Others did not support a change in color tolerances, saying that colors already used seem to be adequate. Color tolerance specifications are necessary to ensure color uniformity of placards and labels. The present label and placard color code system, in Appendix A of Part 172 of the HMR, refers to the Munsell Notation Color Specifications. Some commenters believed that the Munsell Notation Color Specifications are antiquated. The Pantone (TM) system was recommended by several commenters. Canada, Great Britain and European countries use colors based on Pantone. It is RSPA's understanding that the Pantone system uses specific colors and does not provide for deviations as does Munsell. At this time, RSPA believes there is insufficient cost and safety information to justify adopting a new color system. Therefore, no changes to the present label and placard color code system are proposed in this notice. However, RSPA requests comments concerning color code systems which allow for a range of color, and estimates of the costs and benefits of adopting a new color tolerance system. RSPA also requests that commenters provide information regarding specific Pantone (TM) colors that, in their view, constitute compliance with the label and placard color specifications, including tolerances, currently referenced in the HMR.

## Placard Construction and Attachment

18. Should the composition of placards be improved to minimize destruction and loss during a fire incident? General placard specifications are contained in § 172.519. Please provide examples where fire-resistant placards effectively conveyed hazard warning information to first responders at incidents involving vehicular fires?

19. Should means for attaching placards be improved to minimize tampering or placard loss in an incident? Specifications for a recommended placard holder are contained in Appendix C to Part 172.

Under the HMR, a placard may be made of any plastic, metal, tagboard or other material capable of withstanding, without deterioration or a substantial reduction in effectiveness, a 30-day exposure to open weather conditions. Placards must also withstand, without substantial change, a 72-hour fade-resistance test. In its report, the National Academy of Sciences (NAS) recommended evaluation of new materials for prolonging the fire resistance of placards.

Most commenters on this issue doubted that the safety benefits of fire resistance would offset the additional costs of changing the composition of placard materials. The commenters believed that DOT had not gathered sufficient data to conclude that any placard, regardless of composition, can effectively withstand fire conditions. Several commenters believed that even with the use of other material, the intense heat, fire, and smoke would either destroy or obscure the placard. The majority of commenters on this issue asserted that materials now used for constructing placards are adequate. The International Association of Fire Chiefs (IAFC) doubted that a truly fire-resistant placard could be created and suggested that any attempt to do so would involve substantial cost. Most commenters indicated that the existing system for attaching placards is adequate. They noted that placards cannot be protected from every possibility for destruction, such as vandalism and weather. The Illinois EPA said a more secure method of placard attachment should be specified to reduce the number of lost placards, but offered no specific information. One commenter said there may be a need for weather- and accident-proof placards and holders within reasonable costs. Another commenter suggested that RSPA look at the feasibility of requiring spare placards on transport vehicles. The National Tank Truck Carriers (NTTC) stated that certain mechanical elements in "flip-type" placards impinge upon the legibility of letters and numbers. For example, in certain instances, designers and manufacturers have permitted mechanical elements (e.g., centerposts, pivot rods and retaining clips) to impinge on the letters or digits on a placard. Thus, NTTC suggests an amendment to specify that placard space used to contain digits or numbers contain no other element of manufacture.

RSPA believes that, although the design of mechanical elements of certain types of placard holders (e.g., flip-type) used for attaching placards may encroach upon the legibility of letters and numbers displayed on placards, placard holders manufactured and designed in accordance with the specifications and dimensions in Appendix C of Part 172 are adequate, pose little, if any, problem with placard attachment, and are designed in a manner not to impinge upon the legibility of placards.

There are insufficient data concerning placard loss due to weather, fire, or tampering, and the impact of mechanical elements on placard recognition to conclude that requiring new placard construction standards would significantly improve overall hazard identification. Therefore, no changes in placard construction requirements are proposed at this time. However, for future consideration, RSPA invites further comment on this issue, particularly from manufacturers of placards and researchers on fire retardant materials and placard recognition. Similarly, there is little evidence of significant problems with placard loss due to inadequate securement. Some commenters indicated that secure attachment, tampering and placard loss have not been problems when flip-type placards or placard holders are used. RSPA believes that plastic or metal placard holders presently used by industry provide adequate securement of placards on transport vehicles, and that developing new methods of securement is unnecessary. No changes are proposed for methods of attaching and securing placards.

## Exceptions From Placarding Requirements

20. Should the aggregate gross weight exception for Table 2 materials in § 172.504(c) be raised or lowered? If so, to what level?

21. If the 1,000-pound placarding exception is maintained, should it be modified to require that transport vehicles containing packages of certain size (volume or weight) be placarded? For example, should a transport vehicle containing a 55-gallon package be required to be placarded?

22. Should use of the DANGEROUS placard, now specified in § 172.504(b) to indicate the presence of two or more classes of Table 2 materials, be further restricted or eliminated?

23. Should RSPA require the DANGEROUS placard for all shipments of Table 2 materials in amounts less than 1,000 pounds, and specific placards for all shipments of more than 1,000 pounds or other amounts? Should all hazardous materials, regardless of quantity, be required to be placarded when in transportation? Would the meaning and impact of placarding be diminished should all hazardous materials, regardless of quantity, be required to be placarded?

24. Based on the risks involved, should RSPA transfer certain Table 2 materials to

Table 1? If so, please detail your recommendation.

The HMR contains two tables in 49 CFR 172.504. Table 1 specifies categories of hazardous materials for which any quantity must be placarded. A transport vehicle, freight container, or unit load device containing a Table 2 material in non-bulk packagings need not be placarded unless it contains 454 kilograms (kg) (1,000 pounds) or more aggregate gross weight. Also, under § 172.504(b), a transport vehicle or freight container containing two or more classes of materials requiring different placards specified in Table 2 may be placarded DANGEROUS in place of the separate placarding. When 2,268 kg (5,000 pounds) or more of one class of material is loaded at one loading facility, the placard specified for that material in Table 2 must be used.

Most commenters addressing this issue urged RSPA to retain the "1,000-pound" placarding exception for Table 2 materials. The commenters believed that the current placarding exceptions are acceptable and should not be changed, although they were divided on whether to retain the DANGEROUS placard or to limit its use. Most commenters indicated that there is no justification for the transfer of placarding assignments from Table 2 to Table 1.

Some commenters contended that a substantial lowering or elimination of the 1,000-pound exception would result in a proliferation of placards with the cumulative effect of desensitizing responders and the public to the warnings placards are intended to convey. Several commenters said elimination of the exception would subject sales personnel and small package carriers to commercial drivers' licensing (CDL) requirements. Another commenter said DOT should maintain the exception because carrier personnel and shippers are familiar with it. ATA stated that the 1,000-pound exception for placarding of Table 2 materials should remain unchanged. ATA also believed no modifications should be made to the 1000-pound exception based on package size because a vehicle transporting bulk packages must display the proper class placard for any amount of material in the package; thus, the cut-off for package size is already in place at 450 liters (119 gallons) for bulk shipments. Most commenters believed that to modify or eliminate this exception would promote error and loss of responder confidence. Most commenters also saw no need to modify the 1000-pound exception on the basis of package size.

Several commenters, including the Chemical Manufacturers Association (CMA), indicated support for a reduction or elimination of the exception. The CMA stated:

> In the interests of assisting emergency responders, CMA urges DOT to consider reducing the 1,000 pound placarding exception for hazardous materials and discontinue use of the DANGEROUS placard. For less than truckload shipments of multiple hazardous materials, placards for the top three materials (based on the level of hazard, as specified in 49 CFR, Section 173.2a, "Classification of a material having more than one hazard") could be required.

However, CMA believed that if DOT chooses to reduce the placarding exception, DOT should not trigger modifications to the CDL requirements based on placarding; in this case the 1000-pound exception should remain. The IAFC believes that the exception should be lowered to no more than 200 pounds to cover 55-gallon drums. The National Association of Chemical Recyclers (NACR) said that all vehicles transporting hazardous materials in any quantity should be placarded. One commenter believed that eliminating the exception would make things simpler for shippers, enforcement personnel and responders. Another commenter stated that the current 1000-pound exception leaves the door wide open for hazardous materials tragedies.

A majority of commenters on this issue said no change to the exception allowing use of the DANGEROUS placard is needed. Commenters who urged retaining the DANGEROUS placard said that it is well recognized and understood. They acknowledged that the DANGEROUS placard offers no specific instruction to responders except to alert them that there is more than one hazard class in a vehicle; on the other hand, they said that, if hazard class placards were used for each product in a mixed load, the response system would be overburdened and diluted. Other commenters said not only should the DANGEROUS placard be retained but that its use should be extended to Table 1 materials.

Opponents of the continued use of the DANGEROUS placard cited its lack of useful information and supported its elimination. One commenter supported elimination of the placard because it offers little information to responders and the complexity of the DANGEROUS placard requirements promotes non-compliance. Most commenters opposed transferring certain Table 2 materials to Table 1 and alleged that they do not pose the same level of risk.

In this notice, RSPA is proposing three changes to placarding requirements in § 172.504.

The DANGEROUS placard and the 1,000-pound placarding exception are components of a well-understood system which has been in use for many years; however, without these, or similar, exceptions, RSPA believes there might be such a proliferation of placards on transport vehicles as to diminish the effectiveness of placarding. However, RSPA agrees with NAS recommendations and commenters' suggestions that some modification of provisions for use of the DANGEROUS placard is warranted. RSPA is proposing to revise 49 CFR 172.504(b) to specify that when 1,000 kg (2,205 pounds) (rather than 2268 kg (5,000 pounds) as currently specified) of one or more category of materials requiring the same placard is loaded on a transport vehicle at one loading facility, the specific placard for that class is required to be displayed. This proposal recognizes both the needs of enforcement personnel for more specific identification when large quantities of non-bulk packagings are present on a transport vehicle and the operational difficulties for shippers and carriers when transporting mixed loads of categories of hazardous materials requiring different placards. It is believed that this proposal would incrementally improve hazard communication without unduly impacting current practices. RSPA also proposes to lower the placarding exception in § 172.504(c)(1) from 454 kg (1,000 pounds) to 400 kg (882 pounds) aggregate gross weight of hazardous materials. The 400-kg level is proposed also to incrementally improve hazard communication without unduly impacting current practices. This breakpoint was selected because it is generally consistent with the breakpoint between non-bulk and bulk packagings. In general, this proposed lowering of the placarding exception would allow one 55-gallon drum of Table 2 hazardous material on a transport vehicle to go unplacarded, whereas the current exception would allow two. RSPA recognizes that lowering the placarding exception to 400 kg (882 pounds) may increase costs to industry but believes that more specific hazard warning information is needed to aid emergency responders in making more effective emergency response decisions.

A third change is proposed to placarding Tables 1 and 2 of § 172.504(e). RSPA believes materials that must be refrigerated during transportation should be identified without regard to quantity. Certain

organic peroxides can decompose with such rapidity within a package that the resultant heat and gas will violently burst the package. A control temperature is the temperature above which a package of this material may not be offered for transportation, or transported. RSPA believes that such organic peroxides may pose significant risk if involved in accidents that result in a loss of temperature control. Because of the unique hazards associated with these materials in transportation, RSPA proposes to include "Organic peroxides, Type B, liquid or solid, temperature controlled" in Table 1 of § 172.504(e), which would require placarding in any quantity.

Transition Period

25. Is there a need for a longer transition period, beyond October 1, 1994 as required in § 171.14(b)(4) under HM–181, for the implementation of placarding requirements? What effect would a longer transition period have on the ability of emergency responders to respond to hazardous materials incidents?

Many of the comments concerning the 1994 effective date are no longer applicable because the transition period for implementing the new placarding system was extended for hazardous materials transported domestically by motor vehicles. On October 1, 1992, in response to numerous petitions from motor carriers to minimize the impact of converting to the new placarding system, RSPA amended § 171.14(c)(2) to extend the transition period from October 1, 1994, until October 1, 2001, for highway operations only (see Docket HM–181; 57 FR 45446).

Many commenters, including the Conference On the Safe Transportation of Hazardous Articles, Inc. (COSTHA) and the CMA, urged RSPA to establish one effective date for the implementation of new placarding requirements under HM–181 and HM–206. They contended that different effective dates for changes made under HM–181 and for changes made under HM–206 would result in additional implementation costs. A number of commenters said the original October 1, 1994 effective date for implementation of HM–181 placarding changes (applicable to domestic, intermodal and rail shipment) would be adequate, provided the final rule in HM–206 made no major revision to the placarding system. Several commenters suggested a flexible transition period, depending on the extent of changes to the system. Most commenters believed that major revisions in HM–206 would require new transition periods.

RSPA is not proposing any change to the transitional placarding provisions in § 171.14 in this notice. With regard to placarding changes proposed in this notice, it is anticipated that a minimum of a one year transition period would be provided for implementation of new requirements following issuance of a final rule. (See section-by-section highlights for § 172.502).

*C. Central Reporting System and Computerized Telecommunication Data Center*

Establishment of Data Center

26. Should a central reporting system and computerized telecommunications data center be established? If so, should it be operated by the Federal Government or by a private entity, either on its own initiative, or under contract to the Government?

27. What would be the projected safety benefits of establishing and operating such a system?

28. Should remote locations, such as Alaska, be excluded from mandatory participation in a central computerized data reporting system?

29. To what extent do existing centralized data reporting systems already provide dispatcher-to-vehicle transmissions? Could these systems be modified to provide information to emergency responders in the event of incidents or accidents involving hazardous materials?

30. What elements of DOT's hazard communication system, if any, could be eliminated by the use of centralized reporting? Marking, Labeling and/or Placarding? Shipping papers? Incident reporting?

Out of 196 commenters responding to Question 26, 170 were opposed to such a system. They contended that costs were incalculable and that such a system is unworkable and of minimal use to responders. One commenter summarized his opposition to mandatory participation in a central reporting system. The commenter stated:

> It would not add one piece of information not already required under 49 CFR. It would require a massive effort to train industry employees and an estimated 40,000 paid and volunteer fire departments. It would encourage non-compliance due to the cost and complexity of complying with reporting requirements, and it would increase risk of misinformation. Mandatory reporting would put US businesses at a disadvantage or, if applied to foreign shippers, encourage trade retaliation.

Five commenters stressed that emphasis should be placed on training rather than tracking shipments. Seventeen commenters opposed the proposed data system but supported the application of some kind of electronic notification for tracking extremely hazardous materials, such as those requiring registration. Three commenters said the proposed reporting system and data center needs further study.

Three commenters supported establishment of the reporting system, one without qualification, the International Association of Firefighters (IAFF), and two on the condition that the U.S. Government operate it. The IAFF presented no information in response to questions 26 through 55. The National Transportation Safety Board (NTSB) stated:

> Because the Safety Board has not investigated any accidents in which a computerized tracking system would have affected the outcome of the response to the accident, the Board has no basis for comments on this issue.

Commenters offered little detailed discussion of whether a mandatory central reporting system should be operated by the Federal Government or by a private entity. Several commenters asked why a government-operated reporting system should be established in competition with existing services being operated in the private sector. The National Propane Gas Association (NPGA) referred to extensive voluntary cooperation between shippers and existing communication services that would disappear if a central reporting system is set up and operated by the Federal Government. NPGA stated that the costs of government operation of this system would exceed the costs of operating existing communication network. They also said that a government-operated central reporting system would be subjected to budget cuts and appropriation constraints.

Many commenters indicated that a centralized reporting system could not replace all or part of DOT's existing hazard communication requirements.

*D. Other Comments Relating to the Central Reporting System*

RSPA Evaluation

RSPA agrees with the central recommendation contained in the NAS report and the majority of commenters on this issue. Therefore, RSPA is not proposing to establish a centralized reporting system and telecommunication data center. RSPA believes that the national central reporting system described in the Hazardous Materials Transportation Uniform Safety Act would be extremely complicated, burdensome, expensive in its implementation, and of questionable benefit. In the long term, however, RSPA believes that the existing system will be augmented by real- or near-real-time technologies capable of providing information to responders electronically. RSPA also believes that

such capabilities will piggy-back communications systems established by industry for economic rather than safety reasons.

RSPA agrees with NAS' finding that overall information system improvement would best evolve from advances in the efficiencies of many existing systems already applied daily to hundreds of shipper and carrier operations. Carefully phased-in improvements will build overall effectiveness of hazard communications systems already universally relied on.

RSPA will continue to review the emerging technology of electronic monitoring for both rail and highway modes. In the near term, RSPA will evaluate the results of such pilot programs for rail carriers as the Houston Cooperative Emergency Planning Project. This project establishes the first direct computer link between a railroad and a major fire department designed to exchange hazardous material and freight information for the benefit of first responders.

Based on the findings and recommendation in the NAS report and lack of supporting information by commenters to the ANPRM and our assessment, RSPA is not proposing the establishment and implementation of the central reporting system and computerized telecommunication data center.

### Data Entry and Removal

31. When, and by whom, would data be entered into the system? For example, must a farmer who picks up a variety of pesticides from a chemical distributor enter data into this system? Who would enter data, and when would data be entered, for shipments originated by foreign shippers? How would required data be entered by shippers and carriers who do not have computer capabilities?

32. At what points in the distribution chain would additional entries have to be made, e.g., highway/rail interchanges? How would the system accommodate data interchange between carriers? Between modes? Who would be responsible for entering data regarding intermodal shipments?

33. If *only* shippers enter data, how would the system include less-than-truckload distribution where an average shipment will involve multiple vehicles (pickup, line hauls, and delivery)?

34. Should a shipment report contain: the name and address of the party providing the data; point of shipment origin; point of shipment destination; vehicle identification; DOT proper shipping name, hazard class and commodity identification number; emergency telephone contact number; and quantity of materials involved and reportable quantities for hazardous materials that are also hazardous substances? Are disclosures related to so-called "blind" shipments of any relevance to current business practices?

35. What additional information should be included for hazardous waste shipments? Who should be required to enter hazardous waste data? The original shipper or generator? The consolidator of various waste shipments from small generators? The treatment facility? The disposal facility?

36. How can the accuracy of data entered into the system be assured?

37. Once data is entered into the system, how long should it remain in the data base until it is purged? Who should purge the system once shipments reach consignees: The originating shipper; carrier; consignee or system personnel?

Many commenters dismissed Questions 31–37 by reiterating that no such system should be established. Several commenters said these questions indicate the complexity of running such a system. Responsibilities need to be assigned, information needs to be entered, transferred and accepted in timely fashion. They said for the system to work effectively, data reliability must be perfect and noted that the system must be promptly purged of data when shipments are complete or it will be overwhelmed.

Commenters questioned expected benefits gained from such a system since information on placards, labels, shipping papers, and emergency response information documents is already available to emergency responders, without delay, at incident sites. One commenter indicated that the complicated operations involved in establishing and maintaining a reporting center increase the risk of error. Probability of error increases as a result of making and deleting entries throughout hazardous materials distribution.

Commenters contended that the proposed system provides no mechanism to ensure accuracy of massive amounts of data. Deletions from the data base relating to completed shipments may seriously lag behind actual termination. The American Trucking Associations commented that, "Vigilance on the part of the person entering information is the only 'assurance' of accuracy. With only a 1% error rate that vigilance results in excess of 365 million errors per year. The key to accurate data is to minimize and control those who can change data." Many commenters indicated, given that the system would accept data from a variety of people, accuracy could suffer.

### System Access and Safeguards

38. Who should have access to such a system for obtaining information about hazardous materials shipments and technical and other emergency response information? Should other governmental organizations, such as Federal and state emergency response teams, or law enforcement agencies monitoring the distribution of chemicals commonly used in illegal drug manufacture, be permitted to access the system? Should industry emergency response teams have access?

39. What methods should be employed for ensuring the security of the information in such a system?

40. How can shipment information be limited to persons who have no competitive interest in other shippers' or carriers' information?

No consensus emerged from Questions 38–40 regarding who should have access to the system or how to maintain confidentiality of data. Many commenters stated that there is an enormous potential for abuse of the system and indicated that, as proposed, the system would lack access control. Commenters indicated that uncontrolled access to a centralized system would be a threat to individual business security and confidentiality. Some commenters said that private enterprises should not have access to shipping data because of competitive reasons. Others said that no government entity should have access to any centralized data system. National Tank Truck Carriers commented that it is essential that access be limited only to governmental entities that pledge confidentiality.

A few commenters stated that access cannot be limited in any way if the system is to work well. INFOTRAC said, "There is no way to accurately forecast who might have emergency need of the information and under what circumstances." Another commenter agreed that tight security to confidential and sensitive business data would lead to delayed access, negating the intended effect of such a system.

Some commenters suggested procedures for maintaining confidentiality of data. Their concerns are illustrated by the National Industrial Transportation League's comments. NITL stated:

> Only emergency response personnel that are certified and bonded for handling confidential information should have access to any central data base system. Access by any individual must be fully traceable, and with a documented need-to-know reason for accessing the system.
>
> No government organization at any level, other than Emergency Responders, should have access to a central reporting system.
>
> Confidential data is involved. ICC rules prohibit carriers from disclosing shipping data; same rules should apply here.
>
> No data should remain on system after it is purged.

Another commenter said computer passwords could be issued to parties approved for access.

Emergency Responders: Use of System

41. What data elements pertaining to emergency response should be required to be entered into the system? If emergency response information is to be a part of the system, who should be responsible for its inclusion for uniformity of presentation and content?

42. How would emergency responders identify individual shipments in transit by using this system? By vehicle identification numbers? By vehicle registration numbers? By aircraft tail numbers? By other means?

43. How would the system deliver information to emergency responders? Direct data center-to-response vehicles? Data center-to state or local level dispatching units-to-vehicle? Modem-to-modem? Telephonic link? Facsimile hard copy to vehicle receivers? Other methods? Would data from an electronic notification system reach on-scene responders in time to make basic first-response decisions?

44. How can such a system be accessed through mobile satellite service or other technologies having the capability of providing 2-way voice, data or facsimile services?

45. Would *only* satellite tracking-augmented real-time information (providing vehicle identification at all times) be of any use to responders?

46. If the electronic shipment notification system is extended to the local level, would it be more cost-effective to link the system with local emergency planning committees (LEPCs) established under Superfund Amendments and Reauthorization Act (SARA) of 1986, local fire departments, police departments or other local organizations?

47. Please provide details regarding any accident in which emergency response personnel have been killed or injured due to involvement of hazardous materials transported in compliance with existing regulations (e.g., placarding, labeling, package marking and shipping paper requirements) that would have been averted had a centralized data system been established and operating at that time.

Considering the complexities involved in manipulating massive amounts of data nationwide, most commenters to this issue indicated that response information from a central reporting system may not reach first-responders in time to be of much use. They believed that no centralized system would effectively replace the real-time observance of placards, package labels, markings, shipping papers and emergency response information required under 49 CFR part 172.

Some commenters asserted that, if a centralized system is implemented, only the information now required by DOT for emergency response should be entered into it. Others expressed concern over an inevitable lack of data uniformity in a nationwide system involving a diversity of users and varying levels of response expertise. One way to assure uniformity of information, they said, would be to rely on the Chemical Transportation Emergency Center's (CHEMTREC's) files of response data that already cover the most commonly transported hazardous materials. One commenter suggested that a data base with information similar to DOT's Emergency Response Guidebook (ERG) should be established. INFOTRAC commented that "emergency response elements should be left to existing professional response systems with the experience and ability to deal with the unique attributes of hazardous materials emergencies. The uniformity of content would be impossible to control."

Some commenters were not sure how emergency responders would identify individual shipments in transit by using a central reporting system. They suggested that either vehicle identification numbers could be entered into the system and used to access cargo manifest data or shipment information could be linked with the vehicle registration system or with vehicle license plate numbers. Commenters contended that a centralized computer system would be of little use without real-time capabilities. No information was presented about how a nationwide satellite tracking system might be configured or how satellite tracking capabilities might be meshed with a near-real-time notification system presumably consisting of telephonic data entries to a mainframe computer at system headquarters for voice, data, or facsimile access by responders.

Some commenters concluded that any lag time resulting from the intricacies of transferring data from thousands of terminals to a mainframe for responder access would defeat the intended purpose of centralized reporting, i.e., to provide cargo identification information in time for a first responder to make decisions. With so much information being entered into such a system, lag time between entry and transmission could be significant. They said some shipments may be completed before original entry is recorded in the system and made accessible. Given the presumed technical sophistication of a centralized reporting system, most commenters on this issue doubted that most local emergency response organizations like fire or police departments, have the technical capability to effectively link with it at this time. Many commenters, such as the Association of American Railroads (AAR) and National Tank Truck Carriers (NTTC), stated that they were not aware of any situation where a fatality or an injury occurred due to hazardous materials transportation that would have been mitigated had a central reporting system existed.

Training In Use of System

48. How would training for operating a central computerized tracking system be presented? How often? To whom should training be presented or required?

49. How would the system be organized to allow for different operational training levels or operator sophistication?

Some commenters asserted that training for the operation of a centralized reporting system must be substantial and widespread. Many commenters said all system users would have to obtain equal levels of basic training in order to properly enter, change, retrieve and delete information. Some said training must reflect different uses of the system and that training should be customized based on use and need. Several commenters said training for those needing access to the system would present the biggest problem.

As a first step, ATA said RSPA should develop a manual on use of the system and suggested that initial and recurrent training requirements could mirror the training schedules in 49 CFR part 172, subpart H. Several commenters, including NPGA, said that, although it would be very difficult to estimate the scope of training needed without knowing the dimensions of the system, it could be accomplished in cooperation with appropriate trade associations and professional societies.

System Costs

50. What would be the total annualized estimated costs of employing a nationwide central reporting system?

51. What would be the capital costs, operating costs (including telecommunication costs), and personnel or contractor costs for establishing and maintaining a centralized reporting system?

52. Should user fees be imposed to cover the costs of operating such a system? If so, should fees be based on total annual shipments? On a per shipment basis? On a per entry basis? Should governmental agencies using the system be charged a fee based on the amount of system usage?

53. What would be the impact of the added costs of complying with mandatory electronic shipment notification requirements on the ability of U.S. industry to compete in the international marketplace?

54. What would be the impact of imposing a user fee on foreign shippers or carriers?

55. What would be the cost impact of requiring Federal agencies to comply with mandatory electronic shipment notification requirements? (Federal agencies make over 500,000 hazardous materials shipments a year.)

A number of commenters said the cost of implementing the system would be

prohibitive to industry, would drive up pass-through costs to the public and could have the effect of making U.S. industry non-competitive in European and Asian markets. Several commenters said they had no idea of a total cost of implementing the proposed reporting system. NTTC said that since proponents of the system have given the public "not a clue" regarding the elements or dimensions of the system, it was refraining from comment on system costs. Another commenter said it is impossible to evaluate this proposal without a specific study of the hardware, software and administration that would be put in place to establish this system. Several commenters said required software alone would cost tens of millions of dollars.

Many commenters addressing total system cost ventured a range of total cost estimates from "billions" for all industry to tens of millions annually for association-represented groups of businesses. Individual companies claimed they would pay millions annually. The National Agricultural Chemical Association (NACA) claimed that the cost would be prohibitive and especially burdensome and discriminatory for small business and that no justification has been given to prove it would provide more accurate or even more timely information to responders. One commenter said that creation and maintenance of this system would impose enormous costs on shippers and carriers of hazardous materials not only in terms of computer manifest fees but in terms of the labor needed to generate and transmit them. The NITL stated that, at $12 per shipment, total system costs could run in the billions of dollars. NITL added that internal costs for training and administering the system would add an additional loss to productivity—and that this does not include capital expense needed to implement and utilize the system.

ATA estimated a total cost to the trucking industry, based on an estimate of $12 per entry, would be in excess of $2.19 billion a year. ATA said that this cost does not take into account shipments in LTL (less-than-truckload) operations that will be transferred in transit up to six times. The National Welding Supply Association (NWSA) in its summary of expectations said, at a minimum, each distributor would have to transmit 156 sets of shipping papers daily by facsimile to the system. The association said that even at the low end cost range the average NWSA member would pay $1,872 each day in manifest fees, and that assuming a distributor operates 250 days/year that distributor would pay $468,000 in manifest fees. NWSA notes that this cost would have a devastating effect on profits for the average NWSA distributor, and that system fees would amount to an annual operating cost of from 9.4% to 28% of gross sales.

Commenters representing regional interests emphasized the high cost of a national program to their areas. For example, the Petroleum Marketers of Iowa estimated an annual cost of between $5.8 and $19.4 million annually for Iowa petroleum businesses.

Because so little is known about the specifics of the central reporting system as proposed, many commenters said it would be very difficult to arrive at precise estimates of the costs of participating in such a system. Many commenters were unable to give good estimates of specific capital or operating costs to establish and maintain a centralized reporting system introduced as a concept with few parameters. The Fertilizer Institute's comment is representative: "Costs would be extremely high and anybody's guess at this time. Since there is no system and no staff currently, everything would be new and would include development costs."

Commenters were divided about the efficacy of imposing user fees to support a government-operated system. Many commenters believed that if a system is established, it is certain user fees would be imposed, and that equitable fees would be based on annual shipment data. Some commenters said imposition of user fees would push many companies beyond profit margins.

A majority of commenters on this issue, including NITL, said mandatory requirements to participate in a centralized reporting system would definitely reduce the trade surplus that chemicals generate every year for the United States. ATA said a required centralized reporting system would raise costs of goods transported within, imported into, and exported from the U.S., cutting deeper into imbalance of trade. Considering massive cost to U.S. chemical companies if the system is implemented, CMA said our global competitiveness would be greatly affected. Many commenters warned that the impact of imposing user-fee requirements on foreign shippers for the operation of the U.S.-based system would create a substantial barrier for companies seeking to export to our country, undercutting U.S. trade policies. Many commenters envisioned retaliatory actions.

If the proposed central reporting system is imposed, most commenters on this issue said agencies of the Federal Government must not be exempted from participating in the system regardless of what it would cost. Other commenters noted, that based on an estimate of 500,000 government shipments annually, the cost to taxpayers would be in excess of $6 million a year.

*E. Continually-monitored Telephone Systems*

56. Should carriers, in addition to shippers, be required to maintain continually-monitored emergency response telephone systems for all or certain hazardous materials in transportation as specified in 49 CFR 172.604? Why? What would be the costs or benefits? What specific incidents, if any, demonstrate the need for the carrier requirement?

57. What has been the experience of the continually-monitored telephone system requirement in 49 CFR § 172.604 imposed on shippers?

58. Should a requirement for a carrier continually-monitored telephone system be triggered by a specific amount of hazardous materials being carried? Should a requirement for carrier continually-monitored telephone systems be applied only to shipments of hazardous materials in bulk packaging?

59. Should such a requirement be applied only to certain types and quantities of hazardous materials, such as Packing Group I or II poisons, flammable or corrosive materials; certain classes of explosives, or highway-route-controlled radioactive materials?

60. Should a carrier's continually-monitored number be added to shipping papers or other shipper documentation? Or should it be marked on the transport vehicle or on the transport vehicle placarding? Any or all of these options?

61. How would carriers obtain detailed emergency response information regarding the hazardous materials on their vehicles? Would placement of continually-monitored phone numbers on placards, or transport vehicles, be useful to emergency responders? Would the addition of this kind of information diminish the effectiveness of placards?

62. What qualifications should be established for carriers to carry out response assistance through a continually-monitored telephone system?

63. As shippers are permitted to do, should carriers be authorized to use such chemical information services such as CHEMTREC to perform the carrier's monitored phone responsibility?

Most of the 93 commenters on this issue opposed requiring carriers to maintain a continually-monitored 24-hour telephone number for providing emergency response information. Opponents of this requirement believed the existing emergency response communication system is sufficient. The National Transportation Safety Board (NTSB), among others, said that since shippers already provide a 24-hour

emergency response telephone number on shipping papers, they see no need for a continually-monitored telephone system for motor carriers. Some carriers have voluntarily provided 24-hour telephone numbers, although it is not clear whether these numbers are intended to be used for emergency response purposes. Many commenters said they believed this would be a duplication of effort and the cost of such a system and of training personnel to operate it would be enormous, without any increase in the level of safety.

Sixteen commenters supported requiring carriers to maintain continually-monitored emergency response telephone systems. Some of the commenters said it may only be feasible to apply this requirement to carriers transporting extremely hazardous materials, such as radioactive materials, chlorine and explosives. The International Association of Fire Chiefs stated:

> The easiest way to do this when shipping papers or further identification is not available, is to be able to immediately contact the carrier. The carrier can then identify the load on that vehicle and refer us to the proper manufacturer for information.

Commenters opposed to the requirement believed that it would result in confusion to have two 24-hour emergency response telephone numbers on the shipping paper, which could result in delays from mistakes. The Conference on Safe Transportation of Hazardous Articles, Inc. (COSTHA) stated:

> Without additional study of the potential costs and benefits of a continually monitored telephone system for carriers, DOT should not saddle transporters with this responsibility. Additional telephone numbers could seriously complicate emergency response efforts and coordination.

Several commenters believed placement of an additional emergency response telephone number on a shipping paper may actually hinder emergency response, since the carrier would most likely only be knowledgeable about the transport equipment and not necessarily the characteristics and constituents of the material being transported. NITL stated that they support CMA's position that a carrier number, in addition to other numbers on a shipping paper, could actually confuse responders, seriously complicate the situation, and could delay proper mitigation.

In their response to the issue of whether a carrier's continually-monitored telephone number should be marked on a transport vehicle or on transport vehicle placarding, most commenters opposed display of any additional information on placards, including a carrier's continually-monitored emergency response telephone number. Although several commenters, such as, the Illinois EPA and PPG Industries, Inc., supported marking of the transport vehicle with a carrier's continually-monitored emergency response telephone number, the majority of the commenters made no specific comment or recommendation on whether a carrier's continually-monitored emergency response telephone number should be marked directly on a transport vehicle.

Opposition to marking a carrier's continually-monitored emergency response telephone number on a transport vehicle is illustrated by ATA's comment. ATA stated:

> As the name and address of the motor carrier already is required to be displayed on the sides of the power unit (and in most cases company logos are prominently displayed across all four sides of a trailer) emergency responders generally have no trouble identifying the carrier. Paperwork accompanying shipments generally are imprinted with home office telephone numbers and other company information. Motor carrier identification and telephone notification generally is needed to inform the motor carrier that their vehicle has been involved in an incident, not to request information regarding incident management.

Most commenters believed that such a requirement would be costly and confusing, and there is no evidence that the current emergency response information requirements are not adequate.

RSPA generally agrees with commenters that potential problems and confusion may occur by requiring a carrier contact telephone number, in addition to the shipper's and possibly other organizations (e.g., CHEMTREC) telephone numbers, on shipping papers for accessing emergency response information. RSPA also agrees with the commenters that the display of a carrier contact telephone number on the carrier's transport vehicle would not be necessary in most situations, since there is other identifying information already displayed on the transport vehicle to assist responders. However, RSPA shares NAS' concerns that in some instances vehicle operators may be unprepared or unable to provide pertinent carrier-related information to emergency responders and others at the scene of hazardous materials accidents/incidents. Consequently, RSPA proposes to require each carrier who transports or accepts a hazardous material for transportation by air, highway, rail, or water, for which shipping papers are required, to instruct the operator of the transport vehicle to contact the carrier in the event of an emergency involving hazardous materials.

In addition, RSPA has been made aware that emergency responders have had difficulty in identifying what hazardous materials are present on a transport vehicle when the transport vehicle is disconnected or separated from its motive power and dropped or parked at such places as truck stops, motels, or other locations. RSPA believes there is a need to assist emergency responders in obtaining information about hazardous materials in these situations. Therefore, RSPA proposes to require each carrier to mark its telephone number on the separated transport vehicle, have shipping papers and emergency response information readily available on the separated transport vehicle, or comply with the emergency response information facility requirements specified in § 172.602(c)(1). This proposal would not apply to transport vehicles that are dropped or parked at a carrier facility, e.g., terminal or consignee/consignor facility, since these facilities are subject to the requirements in § 172.602(c)(1). Nothing in this proposal would waive or modify the Federal Motor Carrier Safety Regulations' (49 CFR 385–399) vehicle parking requirements (§ 397.7) for motor carriers. RSPA believes that this proposal is responsive to NAS' concerns on the ability of carriers to provide some assistance to emergency responders at the scene of hazardous materials accidents/incidents and would be a beneficial augmentation to the current hazard communication requirements.

*F. Other RSPA Initiatives*

In evaluating potential improvements of the existing hazard communication system, RSPA identified a number of potential changes which were not specifically addressed in the ANPRM. These are discussed in the following paragraphs.

Identification Numbers

Under the HMR, identification numbers are currently required to be displayed on cargo tanks, portable tanks, multi-unit tank car tanks, and other bulk packagings. RSPA believes that application of identification number markings to packaged hazardous materials shipments in truckload or carload quantities would enhance the ability of emergency responders to respond effectively to incidents involving these types of shipments. Although NAS made no specific recommendation to require

identification numbers for packaged hazardous materials in fully loaded transport vehicles, RSPA believes such a requirement would be responsive in part to NAS' concerns regarding sufficiency of emergency response information available to responders. For example, fully loaded transport vehicles containing packaged hazardous materials marked with a single identification number would display the identification number on the outside of the vehicle. This would be used in conjunction with the DOT ERG by emergency responders to more quickly obtain mitigation information. In most instances, responders now must rely on shipping paper information and package markings inside the vehicle to determine identification numbers. RSPA believes this extension of the use of identification numbers would add to the overall effectiveness of DOT's hazard communications system by improving on-scene recognition of hazardous materials by emergency responders. Therefore, RSPA proposes to require the display of the identification number on a fully-loaded transport vehicle or freight container (proposed § 172.323) containing one category of packaged hazardous materials, and on transport vehicles or freight containers containing more than 400 kg (882 pounds) aggregate gross weight of a material poisonous by inhalation (§ 172.313). RSPA believes these two changes would improve mitigation efforts and be responsive to NAS' concerns for improving the identification of hazardous materials in emergency situations.

In certain instances, a cargo tank or other bulk packaging may be transported inside a closed transport vehicle or freight container, and identification numbers may not be displayed on the transport vehicle or freight container. In this notice, RSPA is proposing to revise § 172.328 to clarify that an identification number marking must be displayed on a transport vehicle or freight container containing a hazardous material in a cargo tank, if the identification number marking on the cargo tank is not visible during transportation. Similarly, § 172.331 would be clarified to provide that a transport vehicle or freight container containing a hazardous material in a bulk packaging other than a cargo tank, portable tank, tank car and multi-unit tank car tank must be marked with the identification number, if the identification number is not visible during transportation. This proposed clarification of the two sections is consistent with the requirement in § 172.326(c)(1) for portable tanks.

Fumigant Marking

Many consignments of goods are treated with fumigants that pose a risk during transportation, in particular to workers who may be exposed unknowingly when they open transport units. Currently, § 173.9 sets forth requirements, for rail transportation only, for identifying each transport unit containing a lading that has been treated with a fumigant.

In this notice, RSPA proposes to: 1) extend the requirements in § 173.9 to all modes of transportation; 2) extend the requirement to display the FUMIGANT marking from only Division 2.3 and Division 6.1 materials to every material used to fumigate the contents of a transport vehicle or freight container; 3) specify that a fumigated transport vehicle or freight container is a package containing a hazardous material for application of the fumigation requirements; 4) for international shipments, require that the bill of lading or other shipping document accompanying the shipment contain hazard warning information concerning the fumigant; and 5) revise the FUMIGANT marking, consistent with the display specified in the United Nations Recommendations on the Transport of Dangerous Goods.

RSPA believes the FUMIGANT marking currently specified in § 173.9 is obsolete and ineffective for communicating hazard warning information. Furthermore, RSPA believes that the design of the FUMIGANT marking appearing in the United Nations Recommendations on the Transport of Dangerous Goods would better communicate the hazards through use of the POISON symbol, pared down text, and larger size. Adoption of the U.N. marking would align domestic regulations with international regulations. Therefore, RSPA also is proposing to revise the design of the FUMIGANT marking to more appropriately identify the hazard and to conform to international standards. As an alternative to the FUMIGANT marking, RSPA proposes to recognize use of the label authorized by the EPA in 40 CFR part 156. RSPA requests comments as to whether there is a need to reference requirements of other agencies pertaining to fumigants. RSPA also requests estimates of the numbers of fumigated shipments that would be marked under this proposal and the costs of marking.

Availability of Shipping Papers and Emergency Response Information

For transportation by highway, § 177.817(e) requires that a shipping paper "is readily available to, and recognizable by, authorities in the event of an accident or inspection." RSPA proposes to amend § 177.817(e) to clarify that the term "authorities" includes emergency response personnel such as volunteer and paid fire personnel and that the requirement also applies to an incident involving hazardous materials, not necessarily resulting from an accident such as a vehicular collision. RSPA proposes to add similar provisions to §§ 174.26, 175.33 and § 176.30 to ensure that hazardous materials information is readily available to authorities (including emergency responders) in the rail, air and water modes, respectively Although this is an obvious intent of existing requirements for maintaining shipping paper information, it is currently unstated. Similarly, RSPA proposes to revise requirements for emergency response information in § 172.602 to clarify that this information also must be made available to authorities, including emergency responders, in the event of an incident involving hazardous materials, or an inspection.

**V. Section-by-Section Highlights**

This section-by-section summary addresses highlights of the proposed changes to hazard communications requirements.

*Section 171.11, 171.12 and 171.12a.* In §§ 171.11(d)(9)(iii), 171.12(b)(8)(iii) and 171.12a(b)(5)(iii) the words "POISON INHALATION HAZARD" would replace the word "POISON" in reference to labeling poison inhalation hazard materials other than gases.

*Section 171.14.* The Placard Substitution Table in paragraph (c)(2) would be revised by addition of a POISON INHALATION HAZARD placard for Division 6.1, Packing Group I, materials poisonous by inhalation.

*Section 172.302.* A new paragraph (g) would be added to reference the fumigation marking requirements in § 173.9.

*Section 172.313.* Paragraph (c) would be added to require transport vehicles or freight containers containing more than 400 kilograms (kg) (882 pounds) aggregate gross weight of non-bulk packages containing a material poisonous by inhalation to be marked with the identification number of that material.

*Section 172.323.* Section 172.323 would be added to require an

identification number display on a fully-loaded transport vehicle or freight container containing non-bulk packages of hazardous materials having a single identification number. This requirement would not apply to materials classed as ORM-D or to limited quantities of hazardous materials that are excepted from identification number marking requirements.

*Section 172.328.* Paragraph (a)(3) would be added to clarify that an identification number marking must be displayed on a transport vehicle or freight container containing a hazardous material in a cargo tank, if the identification number marking on the cargo tank is not visible during transportation.

*Section 172.331.* Paragraph (c) would be added to clarify that a transport vehicle or freight container containing a hazardous material in a bulk packaging other than a cargo tank, portable tank, tank car and multi-unit tank car tank must be marked with the identification number, if the identification number marking on the bulk packaging is not visible during transportation.

*Section 172.332.* Paragraph (a) would be revised to reference new §§ 172.313(c) and 172.323.

*Section 172.400.* The table of label designations in paragraph (b) would be revised by adding reference to the new POISON INHALATION HAZARD label (proposed § 172.429) for Division 6.1, PG I, Zone A and B materials. The entry for the POISON label applying to 6.1, PG I and II materials would be revised to read "other than inhalation hazard."

*Section 172.416.* This section would be revised to prescribe the new POISON GAS label.

*Section 172.429.* Section 172.429 would be added to prescribe the new POISON INHALATION HAZARD label.

*Section 172.502.* Paragraph (a)(2) would be revised to specifically prohibit display of safety signs or safety slogans, such as "Drive Safely," that by their color, shape, design or content could be mistaken for a hazard warning placard. Paragraph (b)(3) would be added to provide a transition period for removing existing safety signs or safety slogans which could be confused with hazard warning placards.

*Section 172.504.* 1) Paragraph (b) would be revised by lowering from 2,268 kg (5,000 pounds) to 1,000 kg (2,205 pounds) aggregate gross weight, the amount of one category of material contained on a transport vehicle, freight container or rail car for which specific placarding is required. 2) In paragraph (c) the placarding exception would be lowered from 454 kg (1,000 pounds) to 400 kg (882 pounds) aggregate gross weight of hazardous materials. 3) In paragraph (e), Table 1 placard assignments would be revised to add the new POISON INHALATION HAZARD placard (proposed § 172.555) for Division 6.1, PG I, Zone A and B materials and to include the entry "5.2 (Organic peroxide, Type B, liquid or solid, temperature controlled)" in the first column, the placard name "ORGANIC PEROXIDE" in the second column, and "§ 172.552" in the third column. 4) In Table 2, the entry "5.2" would be replaced by the entry "5.2 (Other than Organic peroxides, Type B, liquid or solid, temperature controlled)" in the first column. 5) In paragraph (f), an exception would be provided from displaying a POISON placard in those instances when a POISON INHALATION HAZARD placard or POISON GAS placard is required.

*Section 172.505.* Paragraph (a) would be revised to replace "POISON" with "POISON INHALATION HAZARD" to correctly reference the new placard (proposed § 172.555) for Division 6.1, PG I, Zone A and B materials.

*Section 172.510.* In paragraphs (a)(2) and (e) "POISON" would be replaced with "POISON INHALATION HAZARD". In paragraph (a)(3), "POISON—RESIDUE" would be replaced with "POISON INHALATION HAZARD—RESIDUE" to correctly reference the placard proposed in § 172.555. Paragraph (d) would be removed and reserved, as requirements for fumigated transport vehicles would be relocated to §§ 172.302(g) and 173.9.

*Section 172.540.* This section would be revised to include the new POISON GAS placard.

*Section 172.555.* Section 172.555 would be added to prescribe the POISON INHALATION HAZARD placard.

*Section 172.602.* Paragraph (c) would be revised to clarify that emergency response information must be readily available to authorities, including emergency response personnel, in the event of an accident, incident involving hazardous materials, or inspection.

*Section 172.606.* This section would be added to require each carrier who transports a hazardous material, for which shipping papers are required, to instruct the operator of a motor vehicle, train, aircraft, or vessel to contact the carrier in the event of an accident or incident involving hazardous materials. The section would prescribe information requirements for transport vehicles separated from motive power and parked at other than consignee, consignor or carrier facilities.

*Section 173.9.* The FUMIGANT marking would be revised for consistency with changes provided in the United Nations Recommendations on the Transport of Dangerous Goods (8th Edition). These requirements would apply to transportation by rail, highway, vessel, and aircraft. In addition, the size of the FUMIGANT marking would be revised from "25 cm (9.8 inches) wide and 20 cm (7.9 inches) high" to at least "30 cm (11.8 inches) wide and at least 25 cm (9.8 inches) high." See discussion under Section IV.F. of this preamble.

*Section 173.29.* An empty packaging is not subject to any other requirements in the HMR if the shipping name and identification number markings and hazard warning labels or placards are removed, obliterated, or covered. For clarity, the introductory text of paragraph (b)(1) would be revised to add the phrase "any other markings indicating the material is hazardous (e.g., RQ, INHALATION HAZARD)."

*Section 174.25.* In the placard notation and endorsement table, the placard notation "POISON" for the entry "Division 6.1 PG I Zone A" would be revised to read "POISON INHALATION HAZARD;" and "Division 6.1 PG I Zone B, placarded POISON INHALATION HAZARD," would be added in its appropriate sequence to conform to the proposed placarding requirements for materials poisonous by inhalation.

*Section 174.26.* (1) Paragraph (a) would be revised to reference the new POISON INHALATION HAZARD placard for Division 6.1, PG I, Hazard Zone A materials, and to clarify that the referenced placards are displayed on a square background. (2) Although train consists are presumed to be accurate, the NTSB recommended that the matter be clarified in the HMR (*see* NTSB Safety Recommendation R–90–38). Therefore, paragraph (b) would be revised to clarify that a train consist must reflect the current position in the train of each rail car containing a hazardous material. (3) Also, paragraph (c) would be revised to require that shipping paper information be readily available to authorities, including emergency response personnel, in the event of an accident, incident involving hazardous materials, or inspection.

*Section 175.33.* Paragraph (b) would be revised to require that a copy of the written notification of pilot-in-command shall be made readily available to authorities, including emergency response personnel, in the event of an accident, incident involving hazardous materials, or inspection.

*Section 175.630.* This section would be revised to add references to the new POISON INHALATION HAZARD label

and delete obsolete references to "etiologic" substances.

*Section 176.30.* Paragraph (a) would be revised to require that the dangerous cargo manifest be made readily available to authorities, including emergency response personnel, in the event of an accident, incident involving materials listed on the manifest, or inspection.

*Section 177.817.* Paragraph (e) would be revised to clarify that the term "authorities" includes emergency response personnel and that an incident involving hazardous materials is an event requiring that shipping papers be made available to authorities.

*Sections 174.680, 176.600, and 177.841.* Editorial corrections would be made in these sections to reference the proposed POISON INHALATION HAZARD label.

## VI. Regulatory Analyses and Notices

*A. Executive Order 12866 and DOT Regulatory Policies and Procedures*

This proposed rule is considered a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, was subject to review by the Office of Management and Budget. The rule is considered significant under the regulatory policies and procedures of the Department of Transportation (44 FR 11034). A regulatory evaluation is available for review in the docket.

*B. Executive Order 12612*

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 12612 ("Federalism"). The Hazardous Materials Transportation Act contains an express preemption provision (49 U.S.C. App. 1804(a)(4)) that preempts State, local, and Indian tribe requirements on certain covered subjects. Covered subjects are:

(i) the designation, description, and classification of hazardous materials;

(ii) the packing, repacking, handling, labeling, marking, and placarding of hazardous materials;

(iii) the preparation, execution, and use of shipping documents pertaining to hazardous materials and requirements respecting the number, content, and placement of such documents;

(iv) the written notification, recording, and reporting of the unintentional release in transportation of hazardous materials; or

(v) the design, manufacturing, fabrication, marking, maintenance, reconditioning, repairing, or testing of a package or container which is represented, marked, certified, or sold as qualified for use in the transportation of hazardous materials.

This proposed rule concerns improvements to the standards mandated under 49 CFR Part 172 for placarding, labeling, marking, emergency response information and shipping papers. If a final rule is issued, it would preempt State, local, or Indian tribe requirements in accordance with the standards set forth above. The HMTA (49 App. U.S.C. 1804(a)(5)) provides that if DOT issues a regulation concerning any of the covered subjects after November 16, 1990, DOT must determine and publish in the **Federal Register** the effective date of Federal preemption. That effective date may not be earlier than the 90th day following the date of issuance of the final rule and not later than two years after the date of issuance. RSPA proposes that the effective date of Federal preemption for these requirements be six months after publication of the final rule. Comments are solicited on this proposed date. Thus, RSPA has limited discretion in this area, and preparation of a federalism assessment is not warranted.

*C. Regulatory Flexibility Act*

I certify that this proposed rule will not have a significant economic impact on a substantial number of small entities. Although this proposed rule would apply to all shippers and carriers of hazardous materials, some of whom are small entities, the proposals contained herein would not result in significant economic impacts.

*D. Paperwork Reduction Act*

The information collection requirements contained in this rule have been approved by the Office of Management and Budget under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3504(h)) and assigned control number 2137–0034 and 2137–0580.

*E. Regulation Identifier Number (RIN)*

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN number contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

**List of Subjects**

*49 CFR Part 171*

Hazardous materials transportation, General information, Regulations, and Definitions.

*49 CFR Part 172*

Hazardous materials transportation, Hazardous waste, Labels, Markings, Packaging and containers, Reporting and recordkeeping requirements.

*49 CFR Part 173*

Hazardous materials transportation, Packaging and containers, Radioactive materials, Reporting and recordkeeping requirements, Uranium.

*49 CFR Part 174*

Hazardous materials transportation, Radioactive materials, Railroad safety.

*49 CFR Part 175*

Air carriers, Hazardous materials transportation, Radioactive materials, Reporting and recordkeeping requirements.

*49 CFR Part 176*

Hazardous materials transportation, Maritime carriers, Radioactive materials, Reporting and recordkeeping requirements.

*49 CFR Part 177*

Hazardous materials transportation, Motor carriers, Radioactive materials, Reporting and recordkeeping requirements.

In consideration of the foregoing, title 49, chapter I of the Code of Federal Regulations would be amended as set forth below:

## PART 171— GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

1. The authority citation for Part 171 would continue to read as follows:

**Authority:** 49 App. U.S.C. 1802, 1803, 1804, 1805, 1808, 1815, 1818; 49 CFR Part 1.

**§ 171.11 [Amended]**

2. In § 171.11, in paragraph (d)(9)(iii), the word " 'POISON' or 'POISON GAS' " would be replaced with "POISON INHALATION HAZARD or POISON GAS".

**§ 171.12 [Amended]**

3. In § 171.12, in paragraph (b)(8)(iii), the word " 'POISON' or 'POISON GAS' " would be replaced with "POISON INHALATION HAZARD or POISON GAS".

**§ 171.12a [Amended]**

4. In § 171.12a, in paragraph (b)(5)(iii), the word " 'POISON' or 'POISON GAS' " would be replaced with "POISON INHALATION HAZARD or POISON GAS".

5. In § 171.14, the Placard Substitution Table in paragraph (c)(2) would be revised to read as follows:

**§ 171.14 Transitional provisions for implementing requirements based on the UN Recommendations.**

* * * * *

(c) * * *

(2) * * *

PLACARD SUBSTITUTION TABLE

| Hazard class or division No. | Current placard name | Old (Sept. 30, 1991) placard name |
|---|---|---|
| Division 1.1 | Explosives 1.1 | Explosives A. |
| Division 1.2 | Explosives 1.2 | Explosives A. |
| Division 1.3 | Explosives 1.3 | Explosives B. |
| Division 1.4 | Explosives 1.4 | Dangerous. |
| Division 1.5 | Explosives 1.5 | Blasting agents. |
| Division 1.6 | Explosives 1.6 | Dangerous. |
| Division 2.1 | Flammable gas. | Flammable gas. |
| Division 2.2 | Nonflammable gas. | Nonflammable gas. |
| Division 2.3 | Poison gas .... | Poison gas. |
| Class 3 ..... | Flammable .... | Flammable. |
| Combustible liquid. | Combustible .. | Combustible. |
| Division 4.1 | Flammable solid. | Flammable solid. |
| Division 4.2 | Spontaneously combustible. | Flammable solid. |
| Division 4.3 | Dangerous when wet. | Flammable solid W. |
| Division 5.1 | Oxidizer ..... | Oxidizer. |
| Division 5.2 | Organic peroxide. | Organic peroxide. |
| Division 6.1, PG I (Zone A and B, inhalation hazard). | Poison inhalation hazard. | Poison. |
| Division 6.1, PG I and II (other than Zone A and B). | Poison ..... | Poison. |
| Division 6.1, PG III. | Keep away from food. | (None required). |
| Class 7 ..... | Radioactive ... | Radioactive. |
| Class 8 ..... | Corrosive ..... | Corrosive. |
| Class 9 ..... | Class 9 ..... | (None required). |

* * * * *

## PART 172— HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGENCY RESPONSE INFORMATION, AND TRAINING REQUIREMENTS

6. The authority citation for Part 172 would continue to read as follows:

**Authority:** 49 App. U.S.C. 1803, 1804, 1805, 1808; 49 CFR Part 1, unless otherwise noted.

7. In § 172.302, paragraph (g) would be added to read as follows:

**§ 172.302 General marking requirements for bulk packagings.**

* * * * *

(g) A rail car, freight container, truck body or trailer in which the lading has been fumigated with any material, or is undergoing fumigation, must be marked as specified in § 173.9 of this subchapter.

8. In § 172.313, paragraph (c) would be added to read as follows:

**§ 172.313 Poisonous hazardous materials.**

* * * * *

(c) A transport vehicle or freight container loaded with more than 400 Kg (882 pounds) aggregate gross weight of packages containing a material poisonous by inhalation shall be marked as required by § 172.332 with the identification number specified for the material, in the § 172.101 Table, on each side and each end of the transport vehicle or freight container.

9. Section 172.323 would be added to read as follows:

**§ 172.323 Truckload and carload quantities of hazardous materials in non-bulk packages.**

A transport vehicle or freight container containing a truckload or carload quantity of non-bulk packages containing hazardous material having a single identification number must be marked with the identification number specified for the hazardous material in the § 172.101 Table on a placard, orange panel or plain white square-on-point configuration as specified in §§ 172.332 or 172.336, as appropriate. This section does not apply to packages containing ORM–D materials or limited quantities of hazardous materials excepted from identification number marking requirements by § 172.301(f)(1).

10. In § 172.328, paragraph (a)(3) would be added to read as follows:

**§ 172.328 Cargo tanks.**

(a) * * *

(3) For a cargo tank transported on or in a transport vehicle or freight container, if the identification number marking on the cargo tank required by § 172.302(a) is not visible, the transport vehicle or freight container must be marked as required by § 172.332 on each side and each end with the identification number specified for the material in the § 172.101 Table.

* * * * *

11. In § 172.331, paragraph (c) would be added to read as follows:

**§ 172.331 Bulk packagings other than portable tanks, cargo tanks, tank cars and multi-unit tank car tanks.**

* * * * *

(c) For a bulk packaging contained in or on a transport vehicle or freight container, if the identification number marking on the bulk packaging required by § 172.302(a) is not visible, the transport vehicle or freight container must be marked as required by § 172.332 on each side and each end with the identification number specified for the material in the § 172.101 Table.

12. In § 172.332, paragraph (a) would be revised to read as follows:

**§ 172.332 Identification number markings.**

(a) *General.* When required by §§ 172.302, 172.313, 172.323, 172.326, 172.328, 172.330, or 172.331 of this subpart, identification numbers must be displayed on orange panels or placards as specified in this section or, when appropriate, on white square-on-point configurations as prescribed in § 172.336(b).

* * * * *

13. In § 172.400, the table of label designations in paragraph (b) would be revised to read as follows:

**§ 172.400 General labeling requirements.**

* * * * *

(b) * * *

| Hazard class or division | Label name | Label design or section reference |
|---|---|---|
| 1.1 ..... | EXPLOSIVES 1.1. | 172.411 |
| 1.2 ..... | EXPLOSIVES 1.2. | 172.411 |
| 1.3 ..... | EXPLOSIVES 1.3. | 172.411 |
| 1.4 ..... | EXPLOSIVES 1.4. | 172.411 |
| 1.5 ..... | EXPLOSIVES 1.5. | 172.411 |
| 1.6 ..... | EXPLOSIVES 1.6. | 172.411 |
| 2.1 ..... | FLAMMABLE GAS. | 172.417 |
| 2.2 ..... | NONFLAMMABLE GAS. | 172.415 |
| 2.3 ..... | POISON GAS .. | 172.416 |
| 3 (flammable liquid). | FLAMMABLE LIQUID. | 172.419 |
| Combustible liquid. | (None) ..... | ..... |
| 4.1 ..... | FLAMMABLE SOLID. | 172.420 |
| 4.2 ..... | SPONTANEOUSLY COMBUSTIBLE. | 172.422 |
| 4.3 ..... | DANGEROUS WHEN WET. | 172.423 |
| 5.1 ..... | OXIDIZER ..... | 172.426 |
| 5.2 ..... | ORGANIC PEROXIDE. | 172.427 |
| 6.1 (Packing Group I, Zone A and B). | POISON INHALATION HAZARD. | 172.429 |

| Hazard class or division | Label name | Label design or section reference |
|---|---|---|
| 6.1 (Packing Groups I and II, other than inhalation hazard). | POISON | 172.430 |
| 6.1 (Packing Group III). | KEEP AWAY FROM FOOD. | 172.431 |
| 6.2 | INFECTIOUS SUBSTANCE[1]. | 172.432 |
| 7 (see § 172.403). | RADIOACTIVE WHITE–I. | 172.436 |
| 7 | RADIOACTIVE YELLOW–II. | 172.438 |
| 7 | RADIOACTIVE YELLOW–III. | 172.440 |
| 7 (empty packages, see § 173.427). | EMPTY | 172.450 |
| 8 | CORROSIVE | 172.442 |
| 9 | CLASS 9 | 172.446 |

[1] The ETIOLOGIC AGENT label specified in regulations of the Department of Health and Human Services at 42 CFR 72.3 may apply to packages of infectious substances.

14. Section 172.416 would be revised to read as follows:

**§ 172.416 POISON GAS label.**

(a) Except for size and color, the POISON GAS label must be as follows:

BILLING CODE 4910–60–P


BILLING CODE 4910–60–C

(b) In addition to complying with § 172.407, the background on the POISON GAS label and the symbol must be white. The background of the upper diamond must be black and the lower point of the upper diamond must be 14 mm (0.54 inches) above the horizontal center line.

15. Section 172.429 would be added to read as follows:

**§ 172.429 POISON INHALATION HAZARD label.**

(a) Except for size and color, the POISON INHALATION HAZARD label must be as follows:

BILLING CODE 4910-60-P


BILLING CODE 4910-60-C

(b) In addition to complying with § 172.407, the background on the POISON INHALATION HAZARD label and the symbol must be white. The background of the upper diamond must be black and the lower point of the upper diamond must be 14 mm (0. 54 inches) above the horizontal center line.

16. In § 172.502, paragraph (a)(2) would be revised and paragraph (b)(3) would be added to read as follows:

**§ 172.502 Prohibited and permissive placarding.**

(a) * * *

(2) Any sign, advertisement, slogan (such as "Drive Safely"), or other device that, by its color, design, shape or content, could be confused with any placard prescribed in this subpart.

(b) * * *

(3) The restrictions in paragraph (a)(2) of this section do not apply until October 1, 1997 to a safety sign or safety slogan (e.g., "Drive Safely" or "Drive Carefully"), which was permanently marked, on or before October 1, 1994, on a transport vehicle, bulk packaging, or freight container.

* * * * *

17. In § 172.504, paragraph (f)(11) would be added, the heading and introductory text to paragraph (c) would be revised, and paragraphs (b), (c)(1), and (e) would be revised to read as follows:

**§ 172.504 General placarding requirements.**

* * * * *

(b) *DANGEROUS placard.* A freight container, unit load device, or transport vehicle, which contains non-bulk packages with two or more categories of hazardous materials that require different placards specified in Table 2 of paragraph (e) of this section, may be placarded with DANGEROUS placards instead of the separate placarding specified for each of the materials in Table 2 of paragraph (e) of this section. However, when 1000 kg (2,205 pounds) aggregate gross weight or more of one category of material is loaded therein at one loading facility on a freight container, unit load device, or transport vehicle, the placard specified in Table 2 of paragraph (e) of this section for that category must be applied.

(c) *Exception for 400 kg (882 pounds) or less.* Except for bulk packagings and hazardous materials subject to § 172.505, when hazardous materials covered by Table 2 of paragraph (e) of this section are transported by highway or rail, placards are not required on—

(1) A transport vehicle or freight container which contains 400 kg (882 pounds) or less aggregate gross weight of hazardous materials covered by Table 2 of paragraph (e) of this section; or

* * * * *

(e) *Placarding tables.* Placards are specified for hazardous materials in accordance with the following tables:

| Category of material (hazard class or division number and additional description, as appropriate) | Placard name | Placard design section reference (§) |
|---|---|---|
| 1.1 | EXPLOSIVES 1.1. | 172.522 |
| 1.2 | EXPLOSIVES 1.2. | 172.522 |
| 1.3 | EXPLOSIVES 1.3. | 172.522 |
| 2.3 | POISON GAS | 172.540 |
| 4.3 | DANGEROUS WHEN WET. | 172.548 |
| 5.2 (Organic peroxide, Type B, liquid or solid, temperature controlled). | ORGANIC PEROXIDE. | 172.552 |
| 6.1 (PG I, inhalation hazard, Zone A and B). | POISON INHALATION HAZARD. | 172.555 |
| 7 (Radioactive Yellow III label only). | RADIOACTIVE[1] | 172.556 |

[1] RADIOACTIVE placard also required for exclusive use shipments of low specific activity material in accordance with § 173.425(b) or (c) of this subchapter.

TABLE 2

| Category of material (hazard class or division number and additional description, as appropriate) | Placard name | Placard design section reference (§) |
|---|---|---|
| 1.4 | EXPLOSIVES 1.4. | 172.523 |
| 1.5 | EXPLOSIVES 1.5. | 172.524 |
| 1.6 | EXPLOSIVES 1.6. | 172.525 |
| 2.1 | FLAMMABLE GAS. | 172.532 |
| 2.2 | NON-FLAMMABLE GAS. | 172.538 |
| 3 | FLAMMABLE | 172.542 |
| Combustible liquid. | COMBUSTIBLE | 172.544 |
| 4.1 | FLAMMABLE SOLID. | 172.546 |
| 4.2 | SPONTANEOUSLY COMBUSTIBLE. | 172.547 |
| 5.1 | OXIDIZER | 172.550 |
| 5.2 (Other than organic peroxide, Type B, liquid or solid, temperature controlled). | ORGANIC PEROXIDE. | 172.552 |
| 6.1 (PG I or II, other than PG I inhalation hazard). | POISON | 172.554 |
| 6.1 (PG III) | KEEP AWAY FROM FOOD. | 172.553 |
| 6.2 | (None) | |
| 8 | CORROSIVE | 172.558 |
| 9 | CLASS 9 | 172.560 |
| ORM-D | (None) | |

(f) * * *

(11) For domestic transportation, a POISON placard is not required on a transport vehicle or freight container required to display a POISON INHALATION HAZARD or POISON GAS placard.

* * * * *

18. In § 172.505, paragraph (a) would be revised to read as follows:

**§ 172.505 Placarding for subsidiary hazards.**

(a) Each transport vehicle, freight container, portable tank or unit load device that contains a poisonous material subject to the "Poison-Inhalation Hazard" shipping description of § 172.203(m)(3) must be placarded with a POISON INHALATION HAZARD or POISON GAS placard, as appropriate, on each side and each end, in addition to any other placard required for that material in § 172.504. Duplication of the POISON INHALATION HAZARD or POISON GAS placard is not required.

* * * * *

**§ 172.510 [Amended]**

19. In § 172.510, the following changes would be made:

a. In paragraph (a)(2), the words "POISON GAS or POISON" would be replaced with the words "POISON GAS or POISON INHALATION HAZARD".

b. In paragraph (a)(3), the term "POISON-RESIDUE" would be replaced by the words "POISON INHALATION HAZARD-RESIDUE".

c. Paragraph (d) would be removed and reserved.

d. In paragraph (e), the words "POISON GAS or POISON" would be replaced by the words "POISON GAS or POISON INHALATION HAZARD".

20. Section 172.540 would be revised to read as follows:

**§ 172.540 POISON GAS placard.**

(a) Except for size and color, the POISON GAS placard must be as follows:

BILLING CODE 4910-60-P


BILLING CODE 4910-60-C

(b) In addition to complying with § 172.519, the background on the POISON GAS placard and the symbol must be white. The background of the upper diamond must be black and the lower point of the upper diamond must be 38 mm (1-1/2 inches) above the horizontal center line. The text, class number, and inner border must be black.

21. Section 172.555 would be added to read as follows:

**§ 172.555 POISON INHALATION HAZARD placard.**

(a) Except for size and color, the POISON INHALATION HAZARD placard must be as follows:

BILLING CODE 4910-60-p


BILLING CODE 4910-60-C

(b) In addition to complying with § 172.519, the background on the POISON INHALATION HAZARD placard and the symbol must be white. The background of the upper diamond must be black and the lower point of the upper diamond must be 38 mm (1-1/2 inches) above the horizontal center line. The text, class number, and inner border must be black.

22. In § 172.602, the introductory text to paragraph (c) and paragraph (c)(1) would be revised to read as follows:

**§ 172.602 Emergency response information.**

* * * * *

(c) *Maintenance of information.* Emergency response information shall be made readily available to authorities, including emergency response personnel, in the event of an accident, incident involving hazardous materials, or inspection and must be maintained as follows:

(1) *Carriers.* Each carrier who transports a hazardous material shall maintain the information specified in paragraph (a) of this section and § 172.606 in the same manner as prescribed for shipping papers, except that the information must be maintained in the same manner aboard aircraft as the notification of pilot-in-command, and aboard vessels in the same manner as the dangerous cargo manifest. This information must be immediately accessible to train crew personnel, drivers of motor vehicles, flight crew members, and bridge personnel on vessels for use in the event of incidents involving hazardous materials.

* * * * *

23. Section 172.606 would be added to read as follows:

**§ 172.606 Carrier information contact.**

Each carrier who transports or accepts a hazardous material for which shipping papers are required for transportation—

(a) Shall instruct the operator of a motor vehicle, train, aircraft, or vessel to contact the carrier (e.g., by telephone or mobile radio) in the event of an accident or incident involving hazardous materials.

(b) For a transport vehicle for which shipping papers are required which is separated from its motive power and parked at other than a consignee's, consignor's, or carrier's facility shall—

(1) Meet the emergency response information requirements for facility operators specified in § 172.602(c)(1);

(2) Mark the transport vehicle with the telephone number of the motor carrier on the front of the transport vehicle near the electrical equipment and brake hose connections; or

(3) Have the shipping papers and emergency response information readily available on the transport vehicle.

## PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

24. The authority citation for Part 173 would continue to read as follows:

**Authority:** 49 App. U.S.C. 1803, 1804, 1805, 1806, 1807, 1808, 1817; 49 CFR Part 1, unless otherwise noted.

25. Section 173.9 would be revised to read as follows:

**§ 173.9 Transport vehicles or freight containers containing lading which has been fumigated.**

(a) For the purpose of this section, a rail car, freight container, truck body, or trailer in which the lading has been fumigated with any material, or is undergoing fumigation, is a package containing a hazardous material, unless the transport vehicle or freight container has been sufficiently aerated so that it does not pose an unreasonable risk to health and safety or property.

(b) No person may offer for transportation or transport a rail car, freight container, truck body, or trailer in which the lading has been fumigated or treated with any material, or is undergoing fumigation, unless the FUMIGANT marking specified in paragraph (c) of this section is prominently displayed so that it can be seen by any person attempting to enter the interior of the transport vehicle or freight container. For domestic transportation, a hazard warning label authorized by EPA under 40 CFR part 156 may be used as an alternative to the FUMIGANT marking.

(c) *FUMIGANT marking.* (1) The FUMIGANT marking must consist of red letters on a white background that is at least 30 cm (11.8 inches) wide and at least 25 cm (9.8 inches) high. Except for size and color, the FUMIGANT marking must be as follows:

BILLING CODE 4910-60-P

**DANGER**

**THIS UNIT IS UNDER FUMIGATION**

**WITH * APPLIED ON**

**Date**

**Time**

**DO NOT ENTER**

(2) The "*" shall be replaced with the technical name of the fumigant.

(d) No person may affix or display on a rail car, freight container, truck body, or trailer (a package) the FUMIGANT marking specified in paragraph (c) of this section, unless the lading has been fumigated or is undergoing fumigation.

(e) No person may offer for transportation or transport a rail car, freight container, truck body, or trailer which displays the FUMIGANT marking following:

(1) Unloading of the fumigated lading.

(2) Sufficient aeration of the transport vehicle or freight container to assure that it does not pose an unreasonable risk to health and safety or property.

(f) For international shipments, transport documents should indicate the date of fumigation, type and amount of fumigant used, and instructions for disposal of any residual fumigant, including fumigation devices.

(g) Any person that offers for transportation or transports a rail car, freight container, truck body, or trailer that is subject to the HMR solely because of the hazardous materials designation specified in paragraph (a) of this section is not subject to any requirements of this subchapter, except:

(1) The requirements of this section; and

(2) Training requirements specified in Subpart H of Part 172 of this subchapter.

26. In § 173.29, paragraph (b)(1) would be revised to read as follows:

**§ 173.29 Empty packagings.**

* * * * *

(b) * * *

(1) Any hazardous material shipping name and identification number markings, any hazard warning labels or placards, and any other markings indicating that the material is hazardous (*e.g.*, RQ, INHALATION HAZARD) are removed, obliterated, or securely covered in transportation. This provision does not apply to transportation in a transport vehicle or a freight container if the packaging is not visible during transportation and the

packaging is loaded by the shipper and unloaded by the shipper or consignee;

* * * * *

## PART 174— CARRIAGE BY RAIL

27. The authority citation for Part 174 would continue to read as follows:

**Authority:** 49 App. U.S.C. 1803, 1804, 1808; 49 CFR 1.53(e), 1.53, App. A to Part 1.

28. In paragraph (a)(2) of § 174.25, the placard endorsement table would be revised to read as follows:

**§ 174.25 Additional information on waybills, switching orders and other billings.**

(a) * * *

(2) * * *

| Class/Division | Placard notation | Placard endorsement |
|---|---|---|
| Division 1.1 | Placarded EXPLOSIVES 1.1[1]. | Explosives. |
| Division 1.2 | Placarded EXPLOSIVES 1.2[1]. | Explosives. |
| Division 1.1 or 1.2, and Div. 2.3[2] (chemical ammunition). | Placarded EXPLOSIVES 1.1 or EXPLOSIVES 1.2, and POISON GAS[1]. | Explosives and poison gas. |
| Diivision 1.3 | Placarded EXPLOSIVES 1.3. | Dangerous. |
| Division 1.4 | Placarded EXPLOSIVES 1.4. | Dangerous. |
| Division 1.5 | Placarded EXPLOSIVES 1.5. | Dangerous. |
| Division 1.6 | Placarded EXPLOSIVES 1.6. | (None). |
| Division 2.1 | Placarded FLAMMABLE GAS. | Dangerous. |
| Division 2.2 | Placarded NONFLAMMABLE GAS. | Dangerous. |
| Division 2.3 Zone A[2]. | Placarded POISON GAS.[1]. | Poison gas Zone A. |
| Division 2.3 (other than Zone A). | Placarded POISON GAS. | Dangerous. |
| Class 3 ..... | Placarded FLAMMABLE. | Dangerous. |
| Combustible liquid. | Placarded COMBUSTIBLE. | (None). |
| Division 4.1 | Placarded FLAMMABLE SOLID. | Dangerous. |
| Division 4.2 | Placarded SPONTANEOUSLY COMBUSTIBLE. | Dangerous. |
| Division 4.3 | Placarded DANGEROUS WHEN WET. | Dangerous. |
| Division 5.1 | Placarded OXIDIZER. | Dangerous. |
| Division 5.2 | Placarded ORGANIC PEROXIDE. | Dangerous. |
| Division 6.1 PG I Zone A[2]. | Placarded POISON INHALATION HAZARD[1]. | Poison PG I Zone A. |
| Division 6.1 PG I Zone B[2]. | Placarded POISON INHALATION HAZARD. | Poison PG I Zone B. |
| Division 6.1 PG I and II (other than PG I Zone A and B). | Placarded POISON. | Dangerous. |
| 6.1 (PG III) .. | Placarded KEEP AWAY FROM FOOD. | (None). |
| Class 7 ..... | Placarded RADIOACTIVE. | Radioactive material. |
| Class 8 ..... | Placarded CORROSIVE. | Dangerous. |
| Class 9 ..... | Placarded CLASS 9. | (None). |
| ORM–D ..... | (None) ..... | (None). |
| Mixed loads of hazardous materials placarded DANGEROUS. | Placarded DANGEROUS. | Dangerous. |
| Tank cars which contain a residue of a hazardous mateial other than a combustible liquid. | See § 174.25(c). | Dangerous. |
| Tank cars which contain a residue of a combustible liquid, a residue of a 6.1 PG III material, or a residue of a Class 9 material. | See § 174.25(c). | (None). |

[1] Use of square background required (See § 172.510(a) of this subchapter).

[2] Identified as required in § 172.203(m)(3) of this subchapter.

* * * * *

29. Section 174.26, would be revised to read as follows:

**§ 174.26 Notice to train crews of placarded cars.**

(a) At each terminal or other place where trains are made up or switched by crews other than train crews accompanying the outbound movement of cars, the carrier shall execute consecutively numbered notices showing the location in each train of each rail car placarded EXPLOSIVES 1.1 or 1.2 (EXPLOSIVES A), POISON GAS (Division 2.3, Hazard Zone A only) or POISON INHALATION HAZARD (Division 6.1, PG I, Hazard Zone A only) on a square background. A copy of each notice must be delivered to the train and engine crew concerned, and a copy thereof showing delivery to the train and engine crew must be kept on file by the carrier at each point where the notice is given. At points where train or engine crews are changed, the notice must be transferred from crew to crew. See paragraph (b) of this section for other placarded cars.

(b) The train crew must have a document that reflects the current position in the train of each rail car containing a hazardous material. An updated train consist may be used to meet this requirement.

(c) A member of the train crew of a train transporting a hazardous material shall possess a copy of the shipping papers for the shipment of hazardous materials being transported showing the information required by §§ 172.202 and 172.203 and § 172.602 of this subchapter. The shipping paper information must be made readily available to authorities, including emergency response personnel, in the event of an accident, incident involving the hazardous materials, or inspection.

30. In § 174.680, paragraph (a) would be revised to read as follows:

**§ 174.680 Division 6.1 (poisonous) materials with foodstuffs.**

(a) A carrier may not transport any package bearing a POISON or POISON INHALATION HAZARD label in the same car with any material marked as or known to be a foodstuff, feed, or any other edible material intended for consumption by humans or animals.

* * * * *

## PART 175—CARRIAGE BY AIRCRAFT

31. The authority citation for Part 175 would continue to read as follows:

**Authority:** 49 App. U.S.C. 1803, 1804, 1807, 1808, 49 CFR Part 1.

32. In § 175.33, the first sentence of paragraph (b) would be revised to read as follows:

**§ 175.33 Notification of pilot-in-command.**

* * * * *

(b) A copy of the written notification of pilot-in-command shall be readily available to the pilot-in-command during flight and a copy must be made readily available to authorities, including emergency response personnel, in the event of an accident, incident involving the hazardous material, or inspection. * * *

33. Section 175.630 would be revised to read as follows:

**§ 175.630 Special requirements for Division 6.1 (poisonous) material and Division 6.2 (infectious substance) material.**

(a) A hazardous material bearing a POISON, POISON INHALATION HAZARD, KEEP AWAY FROM FOOD, or INFECTIOUS SUBSTANCE label may not be carried in the same compartment of an aircraft with material which is marked as or known to be a foodstuff, feed, or any other edible material intended for consumption by humans or animals unless either the Division 6.1 (poisonous) material or material in Division 6.2 (infectious substance) and the foodstuff, feed, or other edible material are loaded in separate unit load devices which, when stowed on the aircraft, are not adjacent to each other, or the Division 6.1 (poisonous) material or material in Division 6.2 (infectious substance) are loaded in one closed unit load device and the foodstuff, feed or other material is loaded in another closed unit load device.

(b) No person may operate an aircraft that has been used to transport any package bearing a POISON or POISON INHALATION HAZARD label unless, upon removal of such package, the area in the aircraft in which it was carried is visually inspected for evidence of leakage, spillage, or other contamination. All contamination discovered must be either isolated or removed from the aircraft. The operation of an aircraft contaminated with such Division 6.1 (poisonous) materials is considered to be the carriage of poisonous materials under paragraph (a) of this section.

## PART 176—CARRIAGE BY VESSEL

34. The authority citation for Part 176 would continue to read as follows:

**Authority:** 49 App. U.S.C. 1803, 1804, 1805, 1808; 49 CFR Part 1.53. App. A to Part 1.

35. In § 176.30, the third sentence of paragraph (a) introductory text would be revised to read as follows:

**§ 176.30 Dangerous cargo manifest.**

(a) * * * This document must be kept in a designated holder on or near the vessel's bridge and must be made readily available to authorities, including emergency response personnel, in the event of an accident, incident involving materials listed on the manifest, or inspection. * * *

* * * * *

36. In § 176.600, paragraph (a) would be revised to read as follows:

**§ 176.600 General stowage requirement.**

(a) Each package required to have a POISON GAS, POISON INHALATION HAZARD, or POISON label thereon being transported on a vessel must be stowed clear of living quarters and any ventilation ducts serving living quarters and separate from foodstuffs.

* * * * *

## PART 177—CARRIAGE BY PUBLIC HIGHWAY

37. The authority citation for Part 177 would continue to read as follows:

**Authority:** 49 App. U.S.C. 1803, 1804, 1805; 49 CFR Part 1.

**§ 177.817 [Amended]**

38. In the introductory text of paragraph (e) of § 177.817, the phrase "authorities in the event of accident or inspection." would be replaced with the phrase "authorities, including emergency response personnel, in the event of accident, incident involving a hazardous material, or inspection.".

39. In § 177.841, paragraph (e) introductory text would be republished and paragraphs (e)(1) and (e)(2) would be revised to read as follows:

**§ 177.841 Division 6.1 (poisonous) and Division 2.3 (poisonous gas) materials.**

* * * * *

(e) A motor carrier may not transport a package:

(1) Bearing a POISON or POISON INHALATION HAZARD label in the same motor vehicle with material that is marked as or known to be a foodstuff, feed or edible material intended for consumption by humans or animals unless the inside package is overpacked in a liquid-tight and dust proof container identified as package 4000 in the National Motor Freight Classification 100–1 or is overpacked in a metal drum as specified in § 173.25(c) of this subchapter;

(2) Bearing or required to bear a POISON, POISON GAS or POISON INHALATION HAZARD label in the driver's compartment (including a sleeper berth) of a motor vehicle; or

* * * * *

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**Alan I. Roberts,**

*Associate Administrator for Hazardous Materials Safety.*

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