

DEPARTMENT OF TRANSPORTATION**Research and Special Programs Administration****49 CFR Parts 171, 172, 173 and 175****[Docket No. RSPA-02-11654 (HM-228)]****RIN 2137-AD18****Hazardous Materials: Revision of Requirements for Carriage by Aircraft**

AGENCY: Research and Special Programs Administration (RSPA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: RSPA is proposing changes to the requirements in the Hazardous Materials Regulations (HMR) for the transportation of hazardous materials by aircraft. These proposed changes include clarifying the applicability of part 175; excepting cargo aircraft from the quantity limits in § 175.75; reformatting the exceptions in § 175.10 into three sections based on applicability; and providing new separation distances for the shipment of radioactive materials by cargo aircraft. These changes are being proposed in order to clarify requirements to promote safer transportation practices; promote compliance and enforcement; eliminate unnecessary regulatory requirements; convert certain exemptions into regulations of general applicability; finalize outstanding petitions for rulemaking; facilitate international commerce; and make these requirements easier to understand.

DATES: Comments must be received by January 31, 2005.

ADDRESSES: You may submit comments identified by any of the following methods:

—**Web Site:** <http://dms.dot.gov>. Follow the instructions for submitting comments on the DOT electronic docket site.

—**Fax:** 1-202-493-2251.

—**Mail:** Docket Management System; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001.

—**Hand Delivery:** To the Docket Management System; Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

—<http://www.Regulations.gov>.

Instructions: You must include the agency name and docket number

(RSPA-02-11654 (HM-228)) or the Regulatory Identification Number (RIN) for this notice at the beginning of your comment. You should identify the docket number RSPA-02-11654 (HM-228) at the beginning of your comments. You should submit two copies of your comments, if you submit them by mail. If you wish to receive confirmation that RSPA received your comments, you should include a self-addressed stamped postcard. Internet users may submit comments at <http://www.Regulations.gov> and may access all comments received by DOT at <http://dms.dot.gov>. Note that all comments received will be posted without change to <http://dms.dot.gov> including any personal information provided. Please see the Privacy Act section of this document.

Docket: You may view the public docket through the Internet at <http://dms.dot.gov> or in person at the Docket Management System office at the above address.

FOR FURTHER INFORMATION CONTACT: Deborah Boothe, Office of Hazardous Materials Standards, (202) 366-8553, Research and Special Programs Administration, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590.

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I. Background

The HMR (49 CFR parts 171-180) govern the transportation of hazardous materials in commerce by all modes of transportation, including aircraft (49 CFR 171.1, parts 172 and 173 of the HMR include requirements for classification and packaging of hazardous materials, hazard communication, and training of employees who perform functions subject to the requirements in the HMR. Part 175 contains additional requirements applicable to aircraft operators transporting hazardous materials aboard an aircraft, and authorizes passengers and crew members to carry hazardous materials on board an aircraft under certain conditions. In addition, aircraft operators must comply with the training requirements in 14 CFR parts 121 or 135, as appropriate.

RSPA ("we" or "our") and the Federal Aviation Administration (FAA) are proposing amendments to part 175 and other sections of the HMR applicable to transportation of hazardous materials by

aircraft. These amendments will increase safety in the air transportation of hazardous materials by:

- (1) Modifying or clarifying requirements to promote compliance and enforcement;
- (2) Eliminating unnecessary regulatory requirements;
- (3) Adopting current exemptions and outstanding petitions for rulemaking;
- (4) Facilitating international commerce; and
- (5) Making the regulations easier to understand.

On February 26, 2002, RSPA published an advance notice of proposed rulemaking ("ANPRM"; 67 FR 8769) inviting public comments on how to accomplish the goals of this rulemaking. This provided an opportunity for comment on amendments that RSPA is considering and a forum for the public to present additional ideas for improving the safe transportation of hazardous materials by aircraft. We received 26 comments addressing the various issues in the ANPRM from the Air Line Pilots Association, International (ALPA), individual air carriers, and others involved in the transportation of hazardous materials by aircraft. Most commenters were supportive of RSPA's efforts to simplify and revise part 175 in order to clarify some issues in the industry and make the part more user friendly. Some comments received were beyond the scope of this rulemaking and, therefore, are not specifically addressed by RSPA in the comment summary below. Comments concerning the International Civil Aviation Organization's (ICAO) Technical Instructions (TI) for the Safe Transport of Dangerous Goods by Air will be addressed in another docket (Docket HM-215F) which is reviewing §§ 171.11, 171.12, and 171.12a. In addition, comments related to reducing the number of undeclared shipments of hazardous materials by passengers and cargo shippers will be used by RSPA and FAA as we continue to work with the airline industry and others on regulatory and non-regulatory initiatives to increase public awareness through outreach and education efforts.

II. Section-by-Section Review of Part 175**Sections 175.1 and 175.5 Purpose, Scope and Applicability**

Part 175 of the HMR prescribes requirements for aircraft operators transporting hazardous materials aboard aircraft that are in addition to those contained in parts 171, 172, and 173 (§ 175.1). Part 175 applies to the

acceptance for transportation, loading, and transportation of hazardous materials in any aircraft in the United States, and in aircraft of United States registry anywhere in air commerce (§ 175.5). Part 175 includes exceptions from the requirements of the HMR for those aircraft under the direct, exclusive control of a government and not used for commercial purposes (§ 175.5).

Three commenters offered suggestions with regard to clarification of the applicability of part 175. All three suggested that we clarify in § 175.1 that part 175 applies to all persons who perform acceptance functions, including indirect air carriers.

We believe there is some confusion over the applicability of the HMR, specifically, part 175 to persons who are not air carriers, such as freight forwarders. Although the language of § 175.1 refers to aircraft operators, part 175 also applies to persons who are not direct air carriers but perform the same functions. Such persons include: persons who accept packages for air commerce; ground handling crews; contracted employees; air freight forwarders; and subsidiary companies formed by aircraft operators that perform pallet building and handle, load, and unload hazardous materials in air commerce.

Currently, some packaging, shipping, and freight forwarding facilities erroneously believe they are not subject to the requirements of the HMR, in particular § 175.26, because they are not air carriers. The HMR require each person who accepts or transports packages for transportation by air to display notification signs. Packaging, shipping, and freight forwarding facilities are not excepted from § 175.26, because they are performing carrier functions when they accept packages on a carrier's behalf. Therefore, in this rulemaking we are proposing to clarify that the requirements of the HMR apply to those persons who offer, accept, or transport hazardous materials in commerce by aircraft to, from, or within the United States. In addition, we are modifying § 175.1 to clarify that part 175 applies to any person who performs, attempts to perform, or is required to perform any function subject to this subchapter, including—

(1) Air carriers, indirect air carriers, and freight forwarders and their flight and non-flight employees, agents, subsidiary and contract personnel (including cargo, passenger and baggage acceptance, handling, loading and unloading personnel); and

(2) Air passengers that carry any hazardous material on their person or in their carry-on or checked baggage.

For purposes of clarity we are proposing to move the relevant paragraph of § 175.5 to § 175.1 or § 173.3 (see preamble discussion of § 173.3). We are also proposing to remove unnecessary provisions of § 175.5, such as § 175.5(a)(1).

Section 175.3 Unacceptable Hazardous Materials Shipments

No amendments are proposed for this section.

Section 175.10 Exceptions

Section 175.10(a)(2) excepts from the HMR certain hazardous materials required to be aboard an aircraft in accordance with applicable airworthiness requirements and operating instructions. However, items of replacement for such materials and other company materials (COMAT) of an airline that are hazardous materials must be properly classed, described, marked, labeled, packaged, handled, stored, and secured in accordance with the HMR. These requirements are discussed in an advisory notice on COMAT published on December 13, 1996 (61 FR 65479).

The HMR provide the following limited exceptions for COMAT: (1) Items of replacement for installed equipment containing hazardous materials are excepted from the packaging requirements of the HMR if they are contained in specialized packaging providing at least an equivalent level of protection to that of the required packaging; (2) aircraft batteries are excepted from the quantity limitations in §§ 172.101 and 175.75(a); and (3) an aircraft tire assembly is not subject to the HMR if it is not inflated to a gauge pressure exceeding the maximum rated pressure for the tire. Other hazardous materials such as paint, chemicals for corrosion removal, automotive batteries, wastes, and engine-powered ground equipment containing fuels do not qualify for this limited relief.

Section 175.10 also provides limited exceptions for the transportation of: (1) Certain personal items of passengers or crew members that are hazardous materials, such as toiletries, alcoholic beverages, and medicinal items; and (2) certain hazardous materials for special aircraft operations, such as avalanche control flights, aerial applications, and sport parachute jumping.

In its comments to the ANPRM, ALPA stated that reorganizing § 175.10 into three sections, applicable to passengers and crewmembers, COMAT, and special operations respectively, would produce better organization than the current format and be more user friendly. In

addition, ALPA stated that the exceptions, including those applicable to persons with medical conditions, should remain in § 175.10. ALPA also stated that more specific wording should be added prohibiting carriage of another carrier's COMAT.

In general, ALPA stated that COMAT should only be carried to facilitate repair or dispatch of an "aircraft-on-ground." According to ALPA, it is common practice for an airline to pre-position oxygen bottles, aircraft batteries, and tires at outlying stations. ALPA stated that all these types of items could be pre-positioned by way of surface transportation domestically and pre-positioned as declared hazardous material on an all-cargo aircraft, if required, internationally.

ATA did not oppose reorganizing § 175.10, but, stated that the "ATA member air carriers are familiar with the application of § 175.10 as it now stands." ATA stated it did not see the need to remove any of the exceptions applicable to persons with medical conditions from § 175.10 and place them into another part of the HMR.

In reference to the COMAT exceptions, ATA commented that clarification would be helpful. ATA stated that "regarding the few exceptions applying to the operators materials and the aircraft-on-the ground (AOG) question, DOT must realize that there is no possible way for individual airlines to manage a COMAT program if the exceptions apply to only AOG shipments. The few COMAT exceptions that exist should apply to the operator's property at any time and place. The few exceptions are helpful in the operation of an airline in situations other than AOG."

ATA commented that RSPA should provide additional exceptions in § 175.10 for personal monitors and devices, but questioned RSPA's ability to keep current with new technology changes and maintain a large list of such items. ATA stated that "the entire list should be reviewed and such issues as the number of CO₂ cartridges in a life jacket should be harmonized. (e.g., ICAO permits two spare cartridges, 49 CFR permits one spare cartridge), etc. It would be helpful if the lists could be compared and matched."

ATA also stated that hazardous materials for emergency response situations should not be excepted from the HMR, and that the current exemption process is appropriate and adequate. ATA stated that, "we suggest that there could be unforeseen safety implications should certain considerations be made for emergency response that takes decisionmaking out

of the hands of DOT-RSPA. An exemption must come from DOT-RSPA." ATA commented that only provisions on aircraft airworthiness should require FAA approval.

The Regional Airlines Association (RAA) recommended that we relocate all "excepted hazmat" to a single, easily referenced section. According to RAA, present exceptions are located throughout the subchapter, *e.g.*, inconsistent exceptions for the air mode exist in § 175.10 and also in § 173.307. It recommended RSPA develop this new "excepted hazmat" section with no other exceptions included in this new section, divided by modes, *e.g.*, "Excepted Hazmat: All modes." RAA stated that this approach will also achieve better consistency regarding exceptions in the HMR.

RAA also stated that the § 175.10(a)(5) reference to 14 CFR 108 is obsolete and should be updated. In addition, RAA recommended that RSPA "create within part 175, a dedicated subpart containing only the requirements (or with very limited references to other locations) for "R & R (recognition and refusal) only" air operations, those choosing not to transport regulated hazmat. A & C (acceptance and carriage) operators may need to refer to this subpart for certain rules (*e.g.*, discrepancy reporting, training, etc.)." RAA states that this is necessary because, "it is extremely difficult to extract from part 175 the requirements that apply to R & R carriage."

RAA also recommended that RSPA expand the COMAT exception for "R & R" carriers to include small quantity hazardous material COMAT "items used for repair," *e.g.*, bonding and sealant kits, as well as certain items presently allowed in the passenger cabin. RAA stated that this is necessary because "R & R carriers presently can ship only a very limited number of hazmat COMAT." RAA stated that operators should be permitted to carry items considered hazardous materials, in limited quantities, as passengers and crewmembers do, *e.g.*, toiletries, alcohol, etc. that are hazardous due to their flammable properties. RAA stated that unlike these items referenced, the COMAT is already properly packaged and unopened. According to RAA, "This one change and clarification of the § 175.10 exceptions would save carriers hundreds of thousands of dollars in labor, transportation costs, AOG aircraft and lost revenues with only an insignificant increase in risk. For example, the transportation costs and time needed to transport small items used for minor aircraft repairs is extremely costly for R & R carriers.

Often these kits consist only of a 1–2 oz individually sealed tube within a prefabricated kit. The mechanic would fly to the station on the carrier's aircraft but his/her repair kit cannot.

Consequently, an air carrier's mechanic often takes lengthy 'road trips' to simply transport the needed repair kits."

RAA also recommended RSPA remove all rules related to "aerial work operations" and relocate them to one specific subpart (perhaps a revised subpart C, titled "Special Air Transport Exceptions and Rules, and Aerial Work Operations Involving Hazardous Materials") stating that "most readers of part 175 do not need to read thru the 'clutter' of portions of part 175 including: § 175.10(a)(3), (9), (11), and (12), and § 175.85 (c)(2) and (3)."

Federal Express (FedEx) commented that it understands the exceptions, including COMAT, as written. However, it indicated that clarification would be helpful regarding COMAT in order to prevent another carrier's materials from being transported on its aircraft as hazardous materials.

FedEx commented that the authority to transport hazardous materials for emergency response situations where the possibility of imminent loss of life or property exists should be granted only through an exemption issued by DOT and not by an exception in the HMR. FedEx recommended that, in the absence of an exemption, the material be shipped fully regulated.

United Parcel Service (UPS) commented regarding revising the approval provisions in part 175, stating, "RSPA may consider revising 49 CFR 175.10(a)(12)(vi), 175.31(a), and 175.85(c)(2) to recognize the integration of the FAA's Civil Aviation Security Organization into the newly formed Transportation Security Agency (TSA). These provisions of the HMR require persons to make certain communications to FAA Civil Aviation or Air Transportation Security Field Offices. In light of the TSA integration, UPS is uncertain as to whether such Security Field Offices still exist."

UPS commented that RSPA should reorganize § 175.10 into three sections based on their applicability. UPS does not agree with applying the COMAT exception to the transportation of only those materials intended for aircraft-on-ground. UPS stated:

There is no safety justification or other compelling basis for limiting the COMAT exception to the transportation of COMAT intended for aircraft-on-ground. Section 175.10(a)(2) is narrowly drafted to provide an exception solely for (i) hazardous materials required to be carried aboard an aircraft, and (ii) items of replacement for such hazardous

materials. This narrow exception provides a more than adequate margin of safety. RSPA fails to cite any incidents directly resulting from the transportation of COMAT not intended for an aircraft-on-ground. Without an articulated reason for why a drastic limitation of the HMR's COMAT provisions would promote safe air transportation, RSPA should not revise § 175.10(a)(2).

Southwest Airlines commented on the exceptions in § 175.10, stating that "the personal smoking material exception in § 175.10(a)(10) is often confusing. While safety matches or a lighter are allowed on one's person, air carriers are often left with the decision on how many lighters or safety matches to allow each customer to carry. A regulatory published limit on the number of lighters and/or safety matches allowed on one's person would greatly help consistency among carriers and the Transportation Security Administration (TSA)."

Southwest Airlines also stated, "when transporting ammunition under the exception in § 175.10(a)(5), it would be helpful (if this is the intent) to add a sentence that states (as provided in § 176.63 for OMR–D) that magazines or clips must have the primers (firing mechanism) protected from accidental initiation." Southwest Airlines also indicated that it attempted to identify mechanical limbs operated by carbon dioxide cartridges (§ 175.10(a)(18)), for purposes of training staff, and were unsuccessful in identifying any currently on the market. Therefore, there may be no need to specify this exception if technology is not currently available.

Southwest stated that the exception in § 175.10(a)(25) for carbon dioxide cylinders when used in a self-inflating life vest, is inconsistent with the allowable quantities of two small cylinders plus two spares in the international rules, and that consistency is needed between the two sets of regulations. Southwest stated that in addition, the exception for carbon dioxide, solid (dry ice) should be reviewed and compared with the simplified version in the IATA Dangerous Goods Regulations that limits dry ice to 4.4 pounds in checked or carry on baggage.

Southwest Airlines also indicated that a reference to the diagnostic specimen exception would be helpful in clarifying the intent of § 173.199 provisions with shippers and carrier employees. In addition, Southwest Airlines indicated that no current exception exists for units that previously contained fuel, *e.g.*, camp stoves and internal combustion engines, and suggested regulations be reviewed to determine if an exception

could be provided for such units that have been emptied.

Southwest Airlines stated that, "Keeping the exceptions [applicable to persons with medical conditions] together simplifies the use of the regulations and maintains consistency. Every change requires updating of manuals and training material to accommodate the transition of information. Change should be substantive." With regard to providing additional exceptions for personal monitors and devices such as apnea and heart monitors, nebulizers, and nerve stimulators, Southwest stated, "Any exceptions that provide consistency with both the HMR and the ACAA (14 CFR 382) are welcome. The difficulty will be wording the exception in a manner that is general enough to meet the changing technologies in the medical equipment field."

Airborne Express indicated that it does understand that the COMAT exception does not apply to the transportation of another air carrier's material; however, it believed that a clarification would be helpful. Whether the COMAT exception should apply only to the transportation of those materials intended for an aircraft-on-ground (AOG), Airborne Express stated, "DOT must realize that there is no good way to manage a COMAT program if the exceptions apply only to AOG shipments. The few COMAT exceptions that exist should apply to the operator's property at any time and place. The few exceptions are helpful in the operation of an airline in situations other than AOG." Airborne Express indicated that the current exemption process regarding hazardous materials for emergency response situations is appropriate and adequate as it is applied today.

The United States Parachute Association (USPA) supports the retention of exceptions for skydiving activities in § 175.10, or a new section, which allows "smoke grenades, flares, or similar devices" when carried only for skydiving purposes. USPA stated that for consistency with other Federal regulations, the term "sport parachute jumping activity" should be replaced by the term "parachute operation," which was incorporated in 14 CFR part 105. Additionally, USPA proposed the inclusion of other devices often used, and in some cases required by the FAA and/or USPA, for skydiving safety. These devices include items such as light systems, oxygen bottle (bailout bottle), floatation device, and an automatic activation device. USPA recommended § 175.10(a)(9) be written as follows: "lights, oxygen bottles, floatation devices, automatic activation

devices, smoke grenades, flares, or similar devices carried only for use during a parachute operation."

Several commenters expressed concern on the proposal to remove or revise exceptions in § 175.10 on personal items, medicines, perfumes, and alcoholic beverages transported on aircraft by passengers or crew members and requested that the exceptions be maintained in § 175.10 as currently written. Commenters believed that any such revisions would not enhance air transportation safety and would create inconsistencies between the HMR and ICAO TI. Commenters included: Dangerous Goods Advisory Council (DGAC), Distilled Spirits Council of the United States (DISCUS), Association of Hazmat Shippers (AHS), International Association of Airport Duty Free Stores (IAADFS), Inflight Sales Group, Inc. (ISG), and the Cosmetic, Toiletry, and Fragrance Association (CTFA).

The American Chemistry Council (ACC) stated that § 175.10 should be reorganized into three sections applicable to passengers and crewmembers, COMAT, and special operations. In addition, ACC stated, "Passengers are shippers who are not directly under the control of the carrier prior to boarding the aircraft. However, while on the aircraft, passengers must be monitored by the carrier." ACC stated that, if § 175.10 is reorganized, reference to persons with medical conditions should remain in this section.

ACC stated that an exception to the HMR should be provided for hazardous materials necessary for emergency response situations where there is a possibility of imminent loss of life or property. ACC stated this exception should be limited to chartered aircraft taking part in the incident response. ACC stated, "Applying this limitation to the exception along with, using 'authorized' packaging for these materials, will enhance safety by limiting public access to these flights."

Based on the comments received, we are proposing to divide the current exceptions in § 175.10 into three different sections: § 175.8, 175.9, and 175.10. Each section will cover a category of exceptions. Section 175.8 will cover operator equipment and supplies (including COMAT); § 175.9 will cover special aircraft operations (crop-dusting, parachuting, etc.); and § 175.10 will cover exceptions for passengers and crewmembers. We believe that categorizing these exceptions will make the regulations easier to use and minimize confusion concerning the applicability of certain paragraphs.

The proposed new § 175.8 incorporates the exceptions for operators covering:

- Aviation fuel and oil.
- Hazardous materials required for airworthiness and spares.
- Oxygen supplied by the operator.
- Dry ice used by the operator in food service.
- Alcohol, perfume, and lighters carried for use or sale by the operator.
- Aircraft equipment spares (COMAT).

The proposed § 175.8 also clarifies that the exceptions for aircraft spares (COMAT) are applicable only to an operator transporting its own equipment. The proposed paragraph on COMAT deletes the references to tires as this exception already exists in § 173.307(a)(2), which is also being revised.

We are proposing to revise § 173.307(a)(2) to reference Special Provision A59 for tires transported by aircraft. Special Provision A59 is added to § 172.102 and is aligned with the requirements in ICAO TI. Special Provision A59 deals with serviceable and undamaged tires versus unserviceable and damaged tires. It also requires tires and their valve assemblies to be protected from damage during air transport.

The proposed new § 175.9 incorporates exceptions for the following special aircraft operations:

- Aerial seeding, crop dusting, spraying, etc.
- Smoke grenades, flares, release devices, lights, and life-jackets for parachuting operations.
- Smoke grenades, flares, pyrotechnics, affixed to aircraft during air shows.
- Weather control, environmental protection, forest preservation, avalanche control.

Also added to this proposed section are exceptions for operations dedicated to firefighting and prevention; air ambulance and search and rescue operations. References to FAA approvals throughout this section have been edited to reflect either the FAA Flight Standards District Office or the FAA Principal Operations Inspector, whichever is more appropriate.

In the new § 175.10, we are proposing that this section only contain exceptions for hazardous materials carried by passengers and crewmembers. As many paragraphs from § 175.10 have been reassigned to §§ 175.8 and 175.9, the remaining sub-paragraphs are renumbered, as indicated in the following table. Many of the remaining paragraphs in § 175.10(a) have been edited for clarification only. The most common edit was to put the name of the

excepted article at the beginning of the sentence so that it is easy to find (as opposed to having a sentence start out

with “With the approval of the operator * * *”). Sections and paragraphs that have significant changes are listed

below—by *their new section and paragraph number*.

Old paragraph 175.10(a)	New paragraph
(a)(1) aviation fuel and oil in tanks	175.8(a).
(a)(2) operator equipment, spares	175.8(a)&(b), 173.307(a)(2), 172.102 A59.
(a)(3) aerial seeding, crop dusting, etc.	175.9(a).
(a)(4) medicinal/toilet articles, 2.2. aerosols	175.10(a)(1)—self defense spray (a)(9).
(a)(5) small arms ammunition	175.10(a)(8).
(a)(7) oxygen furnished by operator	175.8(c).
(a)(8) implanted medical devices	175.10(a)(3).
(a)(9) parachuting devices	175.9(b).
(a)(10) safety matches/lighters	175.10(a)(2).
(a)(11) pyrotechnics affixed to aircraft	175.9(c).
(a)(12) hazmat dispensed, environmental	175.9(e).
(a)(13) dry ice	175.10(a)(10), 175.8(d).
(a)(14) transport incubator	175.10(a)(13).
(a)(15) alcohol, etc., carried by operator	175.8(e).
(a)(16) duty free perfume, etc.	175.10(a)(5).
(a)(17) alcoholic beverages	175.10(a)(4).
(a)(18) gas cylinders for mechanical limbs	175.10(a)(12).
(a)(19) wheelchair, nonspillable battery	175.10(a)(16).
(a)(20) wheelchair, spillable battery	175.10(a)(17).
(a)(21) hair curlers, butane	175.10(a)(6).
(a)(22) mercurial barometer/thermometer	175.10(a)(14).
(a)(23) heat-producing articles	175.10(a)(15).
(a)(25) lifejacket with gas cartridges	175.10(a)(11).
(a)(26) small mercury thermometer	175.10(a)(7).

Section 175.10(a)(1) is edited to change the maximum net quantity of inner packaging for medicinal/toilet articles from 473 ml to 500 ml for consistency with other even metric quantities. Self-defense spray has been reassigned to its own paragraph since it has little in common with medicinal and toilet articles.

Section 175.10(a)(2) allows safety matches and approved lighters to be carried in carry-on baggage as well as on one's person. This is based on a recent RSPA clarification letter.

Section 175.10(a)(6) is clarified by including the North American term “curling iron” to describe hair curlers and by citing “butane” as an example of a hydrocarbon gas.

Section 175.10(a)(8) is modified to limit the amount of small arms ammunition allowed in checked baggage to 5 kg per person. Previously the only limiting term was “personal use”. This had the potential of allowing several hundred pounds of ammunition to be carried in checked baggage, which is an unreasonable risk. Based on comments from Southwest Airlines, this sub-paragraph is also clarified to indicate that ammunition clips and magazines must be securely boxed.

Section 175.10(a)(9) puts self-defense spray in its own sub-paragraph where it can be seen more easily. It had previously been included in the quantity limits for medicinal and toilet articles.

Section 175.10(a)(10) currently includes two different net quantities allowed for dry ice—2 kg (4.4 pounds) and 2.3 kg (5.0 pounds)—depending on how it was being carried. It has also been unclear if the marking requirements applied only to cargo or dry ice in checked baggage. This proposed new subparagraph allows 2 kg (4.4 pounds) to be carried in checked or carry-on baggage and clarifies that the marking requirements are for checked baggage only. The exception for dry ice used in food service by the operator is moved to § 175.8. The 2.3 kg (5.0 pounds) exception for dry ice transported as cargo is now incorporated in § 173.217.

Section 175.10(a)(11) is modified to provide that self-inflating life jackets may be carried with two cartridges of CO₂ (or other suitable div. 2.2 gas), as adopted in the HM–215E final rule (68 FR 44991).

Section 175.10(a)(15) is clarified by replacing the term “underwater torch” with the North American term “diving lamp”.

The current § 175.10(b) paragraph dealing with the stowage of oxygen cylinders is moved to the new section § 175.510.

New § 175.10(b) would include the provisions adopted in HM–215E authorizing the carriage of these excepted hazardous materials in passenger baggage that has unintentionally been separated from the

flight carrying the passenger (misrouted).

Section 175.20 Training

Section 175.20 requires aircraft operators to comply with all applicable requirements in parts 106, 171, 172, and 175. In addition, hazmat employees must ensure all hazmat employees receive training in accordance with part 172. Initial training under the HMR must be conducted within 90 days after employment begins or a change in the employee's job function. Recurrent training must be conducted at least every three years. Section 175.20 also refers to the training requirements of the FAA under 14 CFR 121.135, 121.401, 121.433a, 135.323, 135.327, and 135.333, which additionally address training for air carriers.

A “hazmat employee” is defined in § 171.8 to include “all persons who in the course of employment perform functions that directly affect hazardous materials transportation safety.” This does not include every person who works around an area where, for example, hazardous materials are loaded, unloaded, handled, and stored. The employee's functional relationship to hazardous materials transportation safety, rather than incidental contact with hazardous materials in the workplace, is the primary factor in determining whether an individual is a “hazmat employee.”

In its comments to the ANPRM, ALPA stated, "the requirements as outlined in part 172, subpart H are adequate. However, it would be helpful if the hazardous materials training requirements listed in parts 121 and 135 were reproduced in § 175.20." ALPA indicated that cargo departments of air carriers are often expected to provide hazardous materials training and do not normally have copies of parts 121 or 135.

ALPA also indicated that it should be clarified that persons responsible for screening for unacceptable hazardous materials must be trained. ALPA suggested that training be required for baggage handling, sorting, security, and other carrier personnel to enable them to identify undeclared hazardous materials in cargo. ALPA indicated that the air carriers they deal with do understand the applicability of training requirements to their personnel regarding 49 CFR versus 14 CFR.

Airborne Express stated, "We do not believe that further training on undeclared hazardous materials is necessary. Baggage handling, sorting, security, and other carrier personnel are already trained to recognize hazardous materials shipments in their job specific environment. We already have established procedures in place for specifically trained individuals to repackage or clean up leaking shipments. These procedures take the responsibility out of the hands of our sorter personnel." They also commented that aircraft carriers do understand what training requirements apply to their personnel (14 CFR versus HMR.).

FedEx commented that the training requirements applicable to aircraft operators and hazardous materials employees are clear and understandable as currently written.

ATA expressed satisfaction in understanding the training applicable to an aircraft operator. However, ATA indicated that § 175.1 is applicable only to aircraft operators, so it will be necessary to rewrite and clarify its application to entities that are not direct air carriers, but perform air carrier functions, *e.g.*, indirect air carriers.

ATA further stated, "there are other relationships, aside from indirect air carriers, that perform functions on behalf of a carrier, for instance, that of an air freight pick up and delivery contractor (trucker) or a handling agent which typically performs certain handling functions on behalf of an airline. DOT needs to clearly establish that the training liability and responsibility apply to these entities in the same manner as they apply to a direct air carrier."

ATA further stated, "Baggage and sorting personnel report to their supervisors when a bag or package is leaking, report the presence of an unfamiliar source of heat or report the omission of an unfamiliar and/or noxious odor. Other than warning signs such as these, how possibly could one be trained to question what is in a closed bag or package?"

ATA indicated that its member airlines understand how training requirements apply to their personnel (*e.g.*, 14 CFR versus 49 CFR) and that each individual air carrier's training program is approved by the airlines' Principal Operating Inspector (POI). ATA further stated, "the POI has, by necessity, been dependent on the Dangerous Goods/Cargo Security Coordinators, whose working knowledge of dangerous goods should qualify them to review and recommend approval of a carrier's Training Program. However, with the re-organization of the U.S. FAA regions, these approvals may now be the responsibility of headquarters TSA/FAA Dangerous Goods. A move to a central location for approval of training programs would provide assistance in the standardization of such programs."

Most commenters to the ANPRM indicated they understand the applicability of training under the HMR and 14 CFR. Some commenters expressed confusion regarding the definition of a "hazmat employee". We believe the revision of § 175.1 as proposed in this rulemaking will clarify that the HMR (including training) applies to any person who performs, attempts to perform, or is required to perform any function subject to this subchapter, including air carriers, indirect air carriers and freight forwarders and their flight and non-flight employees, agents, subsidiary and contract personnel.

However, these regulations are an integral part of the certification requirements and operating rules for part 121 and 135 certificate holders. Under DOT's regulations, training requirements are not placed upon employers or employees who are not "hazmat employers" or "hazmat employees". Under 14 CFR, the FAA requires even a will-not-carry certificate holder that does not handle or transport hazardous material to provide recognition training to specific employees. We are proposing to revise this section for clarity and to more specifically reference the training requirements of 14 CFR parts 121 and 135.

Sections 175.25 and 175.26 Notification at Air Passenger and Cargo Facilities of Hazardous Materials Restrictions

The HMR currently require notices to be posted at air passenger facilities and cargo facilities. The notices contain specific language warning passengers and offerors of cargo of the requirements applicable to carrying or offering hazardous materials and the penalties for failure to comply with those requirements. Section 175.25 requires aircraft operators to display notices warning passengers against carrying undeclared hazardous materials aboard aircraft in either their checked or carry-on luggage or on their persons, and prescribes the information to be contained in each notice. Section 175.26 requires each person who engages in the acceptance of, or the transportation of, cargo by aircraft, to display notices in prominent locations at each facility where cargo is accepted. These notices are intended to inform their customers of what a hazardous material is, the requirement to comply with the HMR, and the penalties for failure to comply with the HMR. Therefore, signs must be in prominent view of passengers and persons who accept or offer cargo. Sections 175.25 and 175.26 also list the minimum information that must be contained on the notice.

In some cases, cargo terminals are co-located with passenger terminals. To make it easier for the industry to comply with signage requirements, FAA and RSPA stated in a final rule published September 27, 1993 (58 FR 50496) that display of separate passenger and cargo notices is not required at these passenger terminals. Notices are not required to be displayed at unattended locations if there is a general notice prominently displayed advising customers that shipments of hazardous materials at that location are prohibited. In addition, notices are not required to be displayed at a shipper's facility where packages of hazardous materials are accepted. In a final rule published July 10, 1998 (63 FR 37454), we revised §§ 175.25 and 175.26 to reflect changes in the statutory citations and penalties, and to provide carriers greater flexibility.

Internationally, the ICAO TI require each operator to warn passengers of the types of goods they are prohibited from transporting aboard aircraft. Although the ICAO TI do not specify the wording or information to be provided in the warning, ICAO Technical Instruction Part 7/5.1 does require each operator to ensure the information is promulgated in such a manner to alert its passengers.

The information must accompany the passenger ticket and be "prominently displayed" in sufficient numbers at each of the places in an airport where tickets are issued, passengers and baggage check in, aircraft boarding areas are maintained, and at any other location where passengers may check in. In addition, the ICAO TI require operators to ensure that notices sufficient in number and prominence are displayed in baggage claim areas.

Commenters offered many suggestions for improving signage. ATA stated that inconsistencies and reluctance that exist among airport authorities throughout the country is one major reason the message is not effectively communicated to passengers. Most commenters believe that the term "prominently displayed" needs clarification. At some airports, signage has been noted as being wholly inadequate. For example, some carriers place signage required by the HMR in the baggage well where it would be difficult for a passenger to see. Most commenters agreed that simple, internationally recognized, pictorial designs would aid immensely in communicating to passengers what hazardous materials may be taken onboard or checked.

In this NPRM we are not proposing any amendments to the signage requirements in §§ 175.25 and 175.26. However, in an effort to further clarify these requirements and provide consistency with § 175.26, we are proposing that the terminology in § 175.25 refer to "each person" instead of "each aircraft operator." We will also continue to work with the airlines and the airports to ensure that the passengers and shippers of cargo aboard aircraft are aware of the dangers and the regulations for shipping hazardous materials.

Section 175.30 Accepting and Inspecting Shipments

Section 175.30, prohibits any person from carrying a hazardous material aboard an aircraft unless the package is inspected by the aircraft operator to ensure that the integrity of the package has not been compromised. In response to a request from an airline to clarify its hazardous material acceptance responsibility, we issued a formal interpretation on the acceptance of hazardous materials on June 4, 1998 (63 FR 30411). In that interpretation, we stated a carrier's acceptance and transportation of hazardous materials can involve several different situations. For example, a shipment may be "declared" by the shipper to contain hazardous materials by shipping

documentation, marking, labeling, or other means. In such cases, the shipment must comply with all applicable HMR requirements, including the use of an authorized packaging. Conversely, an "undeclared" or "hidden" shipment is a shipment of hazardous materials that, intentionally or unintentionally, is not declared by the offeror to contain hazardous materials, and there is no attempt to comply with the HMR.

The importance of rejecting any shipment of hazardous materials that does not comply with the HMR is highlighted by the mandate in 49 U.S.C. 5123 to assess a civil penalty against any person who "knowingly violates" any requirement in the HMR, including the provisions of § 175.30. Section 5123(a) provides that a person "acts knowingly" when: (A) The person has actual knowledge of the facts giving rise to the violation; or (B) a reasonable person acting in the circumstances and exercising reasonable care would have that knowledge. A carrier knowingly violates the HMR when the carrier accepts or transports a hazardous material with actual or constructive knowledge that a package contains a hazardous material not properly packaged, marked, labeled, or described on a shipping paper as required by the HMR. This means a carrier may not ignore readily apparent facts indicating that either: (1) A shipment declared to contain a hazardous material is not properly packaged, marked, labeled, placarded, or described on a shipping paper; or (2) a shipment actually contains a hazardous material governed by the HMR despite the fact it is not marked, labeled, placarded, or described on a shipping paper as containing a hazardous material.

Internationally, part 7 of the ICAO TI contains hazardous materials acceptance procedures for aircraft operators. ICAO part 7;1.3 requires operators to develop and use a checklist that includes all reasonable steps to assure packages are properly prepared for transportation by aircraft, and all regulatory requirements have been satisfied.

ALPA favors revising § 175.30 to include the formal interpretation language issued on June 4, 1998, while the ACC states that the requirements of § 175.30 should not apply to undeclared shipments.

One commenter stated that RSPA should mandate a checklist for acceptance of hazardous materials. However, UPS stated that RSPA needs to justify any checklist requirement. Fisher Scientific stated that any checklist adopted should allow a carrier

some degree of flexibility, while Airborne Express opposed a checklist requirement for pick-up and delivery drivers. Finally, both FedEx and the ATA suggested that any checklist adopted should mirror the current checklist suggested by ICAO and required by IATA.

Based on comments received from the ANPRM, we are not proposing to require a checklist suggested by ICAO and required by IATA. We believe that air carriers are familiar with the suggested ICAO and IATA checklist, and may or may not choose to use that checklist. We believe that requiring a checklist under the HMR would be duplicative, as well as burdensome.

We are proposing to remove the exception in § 175.30(d) for materials classed as ORM-D. Section 175.30(d) excepts materials classed as ORM-D from the inspection requirements in paragraphs (b) and (c) of this section. We believe that materials reclassified as ORM-D material should be subject to the inspection requirements of § 175.30(b) and (c) to insure all packages containing hazardous materials are in proper condition for transportation aboard aircraft.

Section 175.31 Reports of Discrepancies

Section 175.31 requires a person who discovers a discrepancy after acceptance of a package of hazardous materials (as defined by § 175.31(b)) to notify the nearest FAA Civil Aviation Security Field Office (CASFO) by telephone "as soon as practicable," and provide certain information. This requirement permits early investigation and intervention to determine the cause for failure to either properly declare or prepare a hazardous materials shipment. A May 27, 1980, final rule under Docket HM-168 (45 FR 35329), adopted requirements in 49 CFR 175.31 for reporting discrepancies. In the preamble to the final rule, we stated:

A shipment containing a hazardous material must be offered to the carrier in accordance with the regulations. An offering occurs when (1) the package is presented, (2) the shipping paper is presented, (3) the certification is executed, and (4) the transfer of the package and shipping paper is completed with no further exchange (written or verbal) between the shipper and aircraft operator, as usually evidenced by the departure of the shipper. At this point, it is clear that the operator has accepted the shipment and the shipper has removed himself from a final opportunity to take corrective action that would preclude a violation of the HMR relative to transportation of hazardous materials aboard aircraft * * * the requirement which has been adopted [in this final rule] limits

required reporting to shipment discrepancies which are discovered [subsequent to] acceptance of the shipment for transportation and limits 'reportable' discrepancies to those discrepancies which are not detectable as a result of proper examination by a person accepting shipment under the acceptance criteria of § 175.30. This notification requirement will facilitate the timely investigation by FAA personnel of shipment discrepancies involving situations where inside containers do not meet prescribed packaging or quantity limitation requirements and where packages or baggage are found to contain hazardous materials after having been offered and accepted as other than hazardous materials.

Internationally, ICAO TI part 7; 4.5 contains provisions under which operators must report undeclared or misdeclared dangerous goods found in cargo, or dangerous goods not permitted to be carried by passengers, found in baggage. This report must be given to the appropriate authorities in the country in which the incident occurs.

The Association of Hazmat Shippers (AHS) stated that, " * * * the Federal Aviation Administration has been using discrepancy reports under § 175.31 as a vehicle through which to impose civil penalties upon air carriers bringing the agency's attention to undeclared hazardous materials. We understand the serious risks associated with improperly declared hazardous cargo, but we do not think the practice of the FAA to penalize reporting parties, by construing 'knowledge' on their part and subjecting them to civil penalties, is either prudent or appropriate. Especially in the current security environment, all agencies in DOT have been and should continue to encourage full reporting of problem hazmat shipments. Punishing the reporting person for initially accepting inadequately declared hazardous materials chills the incentive to report, and is counterproductive." AHS recommends consideration to immunity for reports submitted under §§ 171.15, 171.16, 175.31, and any other hazmat reporting programs that might be developed.

Airborne Express (ABX Air, Inc.) also favors a formalized amnesty feature be considered for reporting discrepancies.

ACC stated that discrepancies involving a shipment of "declared" hazardous materials that has been accepted by an airline should be reported while the package is still in the airline's possession. ACC stated that " * * * airlines reporting a discrepancy (not caused by that airline) after the acceptance of a hazardous materials package should not be under threat of citation or prosecution if the non-compliance was not readily evident at the point of acceptance." ACC also

supports the idea of a "safe haven" for incident and discrepancy reporting and stated it will provide DOT with better data. ACC also indicated that they believe the regulations, including the ICAO Technical Instructions should clearly indicate that indirect air carriers are subject to the HMR and ICAO TI.

Southwest Airlines stated that the person discovering the discrepancy should be given sufficient time to investigate to verify the discrepancy. Southwest also supports an amnesty program and stated it will enhance safety.

UPS stated that RSPA should not revise or clarify when discrepancy reports are required, *e.g.*, "as soon as practicable" under § 175.31, since some flexibility in the reporting period is needed. UPS stated, "Rather than require 'immediate' reporting, § 175.31(a) tacitly acknowledges that inquiring into the circumstances surrounding a reportable discrepancy is necessarily a fact-specific determination that varies in each case." UPS indicated that, at times, "FAA has not consistently conducted inspections of packages that are located away from a major airport * * * FAA agents also have been too busy to inspect packages held even at airports. If RSPA considers the possible unavailability of packages for inspection an issue, then it must provide evidence of its concerns in any subsequent notice in this rulemaking and balance those concerns with the consequences for the carriers on whom they may impose any new requirements."

UPS indicated that RSPA should propose a formalized amnesty feature for persons who report discrepancies under § 175.31. It also stated, "A compliance and training program resulting in required or voluntary reporting to DOT is an appropriate standard of 'reasonable care.' For companies with effective compliance programs, the point in time that a noncompliance package is actually detected and reported by the carrier through these programs should be presumptively considered to be the point in time that it should have been detected 'by a reasonable person acting under the circumstances.'"

According to UPS, "RSPA has clarified that the requirement to report discrepancies does not apply to indirect air carriers and other shipping facilities after their acceptance of cargo, and there is no need for RSPA to clarify § 175.31. Nevertheless, if RSPA proposes to apply § 175.31 to indirect air carriers and other shipping facilities, RSPA must consider the resource issues associated with expanding the universe of persons reporting discrepancies to the FAA.

Consideration of such issues is especially critical given that any revisions to § 175.31 will affect FAA resources over which RSPA exercises no control. FAA may lack the personnel and other resources to address discrepancy reports from sources other than air carriers."

ALPA stated that, "ALPA believes that the wording 'as soon as possible' would be a better alternative to 'immediately' or the present wording, 'as soon as practicable.' The reason is that 'immediately' implies that an employee could not take the necessary time to properly neutralize a leaking package, but would have to 'immediately call the nearest FAA field office. On the other hand 'as soon as practicable' could have the opposite effect—an employee might wait until tomorrow as it wasn't 'practicable' to do it today."

ALPA indicated that amnesty encourages reporting, while no amnesty discourages it. ALPA stated that, "One comparison worth mentioning is the Aviation Safety Awareness Program (ASAP), which grants amnesty to pilots who self report certain situations. This program has greatly increased the number of reports, thereby allowing the FAA to establish a data bank to start to correct the situation that caused the discrepancy." Regarding the requirement to report discrepancies to apply to indirect air carriers and other shipping facilities after acceptance of cargo, ALPA indicated that the reporting program should apply to all facilities involved in transporting hazardous materials by air.

FedEx stated that the current discrepancy reporting process is sufficient. However, FedEx also suggested that a time limit requiring the carrier to hold the shipment should be established so that proper disposition takes place if an inspector cannot inspect the shipment in question. FedEx also indicated that couriers are not and should not be trained to the level of being qualified to determine whether a discrepancy has been made with the shipment.

FedEx does not support a time limit in hours for carriers reporting undeclared dangerous goods is advisable. According to FedEx, "we often conduct a preliminary investigation to verify whether a shipment actually contains dangerous goods. This investigation may take varying lengths of time, but it is necessary and useful to the FAA/TSA not to be bothered when an undeclared dangerous goods does not exist. We do not consider the dangerous goods shipment accepted until inspection by a

trained FedEx Express dangerous goods specialist. Hidden discrepancies are currently reported to the TSA/FAA. If additional discrepancies were required to be reported, it is reasonable to believe that TSA/FAA could not keep up with the reports and this would cause a significant burden on shippers, carriers, and regulatory inspectors."

FedEx indicated that it favors an amnesty program. FedEx stated, "Granting immunity to carriers that report any discrepancies to the inspectors is in the best interest of all involved and will improve the safe transportation of dangerous goods shipments by air." FedEx also suggested that reporting requirements should apply to indirect air carriers and other shipping facilities after acceptance of cargo.

The Conference on Safe Transportation of Hazardous Articles, Inc. (COSTHA) stated that an amnesty feature for those who report discrepancies has merit, and may enhance awareness and compliance with the HMR. COSTHA also stated "it would be inappropriate to include such a provision in part 175 that would only be applicable and available to air carriers." COSTHA stated, "if such an amnesty feature is established, COSTHA proposes that it should be equally applicable and available to offerors of hazardous materials for transport by air and other persons subject to the HMR."

Fisher Scientific indicated that the current system of reporting discrepancies as soon as practicable is sufficient, and a time period for reporting discrepancies would not improve safety. Fisher Scientific suggested that imposing a time frame would only lead to less compliance and reporting and lead to more enforcement actions against carriers. Fisher Scientific supports some form of penalty for non-reporting of discrepancies. However, Fisher Scientific suggested that proving that a party did not report a discrepancy might be difficult. Fisher Scientific suggested that rewarding compliance rather than punishing non-compliance would be more productive.

In addition, Fisher Scientific stated that there is some merit in a formal amnesty program for those who report discrepancies, if applied equally to all involved with air shipments, e.g., carriers, shippers, forwarders, non-air operations, etc. Fisher Scientific stated, "the main issue with amnesty is how to deal with repeat offenders. Perhaps a time limit for amnesty coupled with some form of three strikes and you are out policy would work. Once again, the issue is compliance and safety rather than punishment and incidents."

Regarding the applicability of reporting, Fisher Scientific stated, "Each person who discovers a discrepancy should be required to report, or no person should be required to report. * * * While carriers do have the requirement to ensure compliance when received, they should not bear the entire burden for compliance reporting, nor be the sole beneficiaries of any amnesty provisions."

ATA expressed concern regarding the requirement to report discrepancies "as soon as practicable" and the time period that carriers have to hold packages for inspection. ATA indicated that it often takes a significant amount of time to get a shipper to supply needed information about a particular shipment, and that air carriers are not in a position to store packages awaiting inspection. ATA stated, "good common sense is needed in the development of new requirements and a time limit or not more than three (3) business days needs to be established as the bounds of a carrier's responsibility for holding a shipment." ATA further stated that, "a delay in an inspection prolongs the exposure of our employees to potentially dangerous materials and opens the possibility of a conflict between DOT requirements and OSHA or local fire code requirements. We feel it necessary to make the point that if the TSA agent does not have time or resources in inspecting a shipment, this needs to be said to the air carrier so that the carrier can get on with the disposal."

Regarding an amnesty provision, ATA supports a "safe harbor" for those entities that report regulatory discrepancies and undeclared shipments to the government. ATA further stated, "We believe that the agency's current practice of aggressively prosecuting air carriers who bring shipper violations to the agency's attention, while at the same time not prosecuting the responsible shipper as vigorously is unfair and inappropriate."

In this NPRM, we are proposing the addition of § 175.31(a)(6) to require the address of the shipper or person responsible for the discrepancy, if known, by the air carrier. Currently, § 175.31(b)(2) requires air operators to notify FAA, in part, when baggage subsequent to its offering and acceptance, is found to contain undeclared hazardous materials. When security screeners suspect that checked baggage may contain an unauthorized hazardous material, they bring the item to the attention of the air carrier that accepted the baggage so the air carrier can make a determination if the item is authorized to be in the baggage. If the air carrier determines that the item

constitutes a discrepancy, it must notify the FAA. Since January, 2002, the FAA has received more than 9,000 discrepancy reports from air carriers in accordance with the § 175.31 reporting requirements.

FAA and RSPA have implemented numerous outreach initiatives intended to educate the public about the hazardous materials regulations. For example, RSPA and FAA have: (a) Issued safety notices in the **Federal Register**; (b) deployed informational kiosks at major airports to alert passengers about the types of items that may not be transported in luggage; and (c) conducted over 1,000 outreach presentations each year. Despite these outreach efforts, the number of hazmat discrepancies reported by air carriers from checked baggage continue to grow. Therefore, RSPA and FAA believe a more targeted outreach and education campaign is necessary. FAA has developed a Web site that air carriers could voluntarily choose to use to electronically report discrepancies. (FAA's Web site is <http://ash.faa.gov>.) The Web site will prioritize the types of hazardous materials into two categories: Those that FAA will individually investigate, and those for which an automated public outreach notice will be generated. RSPA and FAA anticipate that the vast majority of the discrepancies reported via the Web site will result in an automated public notice to the responsible party. While use of the Web site will be optional, RSPA and FAA anticipate a reduction in transaction cost as compared to the current telephonic reporting system. Under this proposal, air operators that choose to use FAA's electronic reporting Web-site or those who continue to report telephonically would also be required to provide the address of the shipper or passenger if it is known to the operator. FAA staff would key the reported information into the Web site when air operators choose to report discrepancies telephonically.

We agree with those commenters that stated that no amendments should be made to the requirement that discrepancy reports should be submitted "as soon as practicable." We are not proposing an amnesty provision for carriers that self-report. However, this topic may be addressed by the Department in a future action.

Sections 175.33 and 175.35 Shipping Papers and Notification of Pilot-in-Command

On March 25, 2003, we published a final rule that amended the HMR by requiring aircraft operators transporting hazardous material to: (1) Place a

telephone number on the notification of pilot-in-command or in the cockpit of the aircraft that can be contacted during an in-flight emergency to obtain information about any hazardous materials aboard the aircraft; (2) retain and provide upon request a copy of the notification of pilot-in-command, or the information contained in it, at the aircraft operator's principal place of business, or the airport of departure, for 90 days, and at the airport of departure until the flight leg is completed; and (3) make readily accessible, and provide upon request, a copy of the notification of pilot-in-command, or the information contained in it, at the planned airport of arrival until the flight leg is completed.

In this NPRM, we are proposing to consolidate all the requirements related to shipping papers (§ 175.35), their retention for 375 days (§ 175.30(a)(2)), and the notification to pilot-in-command into one section, § 175.33, entitled "Shipping papers and notification of pilot-in-command". Otherwise, we are not proposing any revision to the requirements related to shipping papers or the preparation and delivery of a notification to the pilot-in-command.

Section 175.40 Keeping and Replacement of Labels

This section requires aircraft operators to maintain an adequate supply of labels in case they become lost or destroyed. Consistent with the removal of this section from the other modal parts of the HMR, we are proposing to remove this section.

Sections 175.75 and 175.85 Quantity Limitations and Cargo Location

Sections 175.75 and 175.85 prescribe limitations on the quantity of hazardous materials that may be carried aboard passenger-carrying or cargo-only aircraft, and the location of those materials, respectively. The quantity limitations for hazardous materials permitted aboard passenger-carrying aircraft are specified in § 175.75(a)(2). This section states that no more than 25 kg of hazardous materials and, in addition, 75 kg net weight of Division 2.2 (non-flammable compressed gas) may be carried aboard a passenger-carrying or cargo-only aircraft:

- (1) In an accessible cargo compartment;
- (2) In any freight container within an accessible cargo compartment; or
- (3) In any accessible cargo compartment of a cargo-only aircraft if the hazardous materials are loaded as to be inaccessible unless in a freight container.

Class 9 materials and consumer commodities are excepted from the quantity limitations of § 175.75(a)(2). Section 175.85(b) requires hazardous materials packages acceptable for cargo-aircraft only to be loaded in a manner that allows access to the package by crew members.

Section 175.85(a) prohibits the carriage of a hazardous material in the passenger cabin or on the flight deck of any aircraft, and specifies conditions under which hazardous materials may be carried on main-deck cargo compartments. Section 175.85(c)(1)(i) through (v) provides exceptions for cargo-only operations from the quantity limitations of § 175.75(a)(2), and accessibility requirements of § 175.85(b) for those hazardous materials listed. Section 175.85(c)(2) provides exceptions, when other means of transportation are impracticable, to the accessibility requirement of § 175.85(b) and the quantity limitation requirements of § 175.75(a)(2) for hazardous materials acceptable by both cargo-only and passenger-carrying aircraft. These exceptions require that packages are carried in accordance with procedures approved in writing by the nearest FAA Civil Aviation Security Field Office (CASFO). Columns 9A and 9B of the § 172.101 Hazardous Materials Table (HMT) specify limitations on individual package quantities, or list packages that are forbidden from transportation by aircraft. Section 173.27 specifies inner receptacle limits for combination packages.

Sections 175.85(c)(3)(i) through (iii) provide exceptions for small, single-pilot cargo-only aircraft from the accessibility requirements of § 175.85(b) and the quantity limits of § 175.75. These exceptions apply when small aircraft are the only means of transporting hazardous materials to a particular destination. This applies to airports and locations incapable of supporting larger aircraft operations, where the only means of access is by smaller aircraft. The provisions of § 175.85(c)(3) do not require approval by the FAA.

Most commenters agree that §§ 175.75 and 175.85 can be confusing, but carriers stated that they fully understand the requirements as written. COSTHA stated, "COSTHA believes that many users of the HMR find §§ 175.75 and 175.85 quite difficult to understand and properly interpret, as currently written. Combining and streamlining the two sections would improve the ability of users to understand the requirements and would eliminate the need for cross referrals between the two sections, and in that

way improve compliance." Most commenters suggest that accessibility versus inaccessibility when assessing safety is an outdated concept. ALPA stated that "accessibility" should be further defined, e.g., number of crew members, walkways, positioning of shipments. However, AHS indicated that the requirements as written may be outdated and should be eliminated since the international regulations have no such limitations. AHS stated, "The quantity limitations of Secs. 175.75 and 175.85, to the extent that they are unique to the United States, should be examined critically. It is our understanding that these limits entered the aviation regulations in the 1940s, when it was deemed practical to open a flying aircraft door to eject freight. Hence the concern with having the cargo accessible to a crewmember in flight." AHS further stated, "We are aware of no technical basis for the adoption of this requirement at the time, or any technical basis for having maintained it in the U.S. rules. It does not exist in the ICAO Technical Instructions nor, to our knowledge, in any nation but the U.S. We are unaware of it having been a problem in other nations, and we think DOT should carry the burden of maintaining it uniquely in our airspace and aboard U.S.-registered aircraft in any airspace. We urge the agency to give more substantial weight to the practical experience and recommendations of international carriers and shippers familiar with operations under the ICAO TI, that do not include such restrictions." ALPA stated, "* * * the current regulatory differences between inaccessible and accessible cargo compartments are appropriate, but that the accessibility of cargo compartments should be addressed. Factors such as the number of crewmembers, type of walkways, and positioning of shipments should all be included in the determination of whether a compartment is truly accessible." All but one commenter, ALPA, stated that there should be no reduction in the unlimited quantity exception for consumer commodities and Class 9 materials. ALPA stated "ALPA firmly believes that consumer commodities and Class 9 substances do pose a significant risk and should be limited to 25 kgs. in any inaccessible compartment." AHS stated, "We do not support the current restrictions of the U.S. in Secs. 175.75 and 175.85. In particular, we recommend that no additional consideration be given to expanding these restrictions to encompass consumer commodities and Class 9 materials. We are unaware of

anything in the experience with consumer commodities, since the inception of the concept in the mid-1970s, to warrant changing the rules to regulate them more severely in any mode of transportation.”

Most commenters agree that the term “impracticable” should be better defined. FedEx stated, “Yes, with the addition of specific guidelines and examples. Without a definition, this term is vague and subject to varying interpretations. Additional examples should be added as they come to light. Any definition should be a “living” definition.” Commenters generally agree that cross referencing relevant sections (e.g., footnotes) would be of some value to shippers. ALPA stated, “ALPA also believes that this would help eliminate errors.” Most commenters believe that DOT-E11110, which exempts certain classes of materials from the limitations in § 175.75 should be incorporated into the HMR, and also be expanded to include other hazardous materials.

To make these requirements easier to understand, we are proposing to merge the requirements of §§ 175.75 and 175.85 into one section and remove any unnecessary paragraphs. We are also proposing to eliminate the 25 kg cargo compartment restriction from cargo aircraft. We believe that such a restriction, which, for cargo aircraft, only applies to those materials authorized aboard a passenger-carrying aircraft, is unnecessary for transportation aboard cargo aircraft. We believe that the limitations for passenger aircraft reduce the overall risks in the use of passenger aircraft. Therefore, we have not proposed to increase or eliminate the limitation on the amount of hazardous materials that may be transported in an inaccessible cargo compartment of a passenger aircraft. Consistent with the proposal to eliminate the cargo compartment limitation on cargo aircraft shipments, we are also proposing to eliminate from § 175.85(c)(3) the requirement that shipment by other means of transportation is impractical. We have not proposed to eliminate or modify the exception from the 25 kilogram limitation that is currently afforded Class 9 and ORM-D materials. The following table identifies the existing paragraphs in §§ 175.75 and 175.85 and where we are proposing to move them:

Current section and paragraph	Proposed new section and paragraph
175.75(a)(1)	Removed as unnecessary.
175.75(a)(2)	175.75(b).
175.75(a)(3)	175.700.

Current section and paragraph	Proposed new section and paragraph
175.75(b)	175.75(b).
175.85(a)	175.75(a).
175.85(b)	175.75(c).
175.85(c)(1)	175.75(c)(1).
175.85(c)(2)	175.75(c)(2).
175.85(c)(3)	175.75(c)(3).
175.85(d)	Removed as unnecessary.
175.85(e)	175.75(a).
175.85(f)	175.310.
175.85(g)	Removed as unnecessary.
175.85(h)	175.501.
175.85(i)	175.501.

In an effort to enhance compliance and further clarify the cargo loading requirements, we are proposing to add a chart at the end of § 175.75 to summarize these requirements.

Section 175.78 Stowage Compatibility of Cargo

For stowage of hazardous materials on an aircraft, in a cargo facility, or in any other area at an airport designated for the stowage of hazardous materials, packages containing hazardous materials which might react dangerously with one another may not be placed next to each other in a position that would allow a dangerous interaction in the event of leakage. At a minimum, segregation instructions prescribed in the segregation table in § 175.78 must be followed to maintain acceptable segregation between packages containing hazardous materials with different hazards.

ALPA commented that there are some areas of the regulations (both in part 175 and ICAO TI) that pose serious safety concerns for any aircraft involved in the transport of hazardous materials by air. One of these areas is the segregation requirements on board aircraft as regulated by § 175.78 and the ICAO TI concerning Class 8 materials in particular, segregation of acids and bases. According to ALPA, “these two commodities require segregation under virtually all regulations except the air mode.” ALPA stated that its research indicates that an inadvertent commingling of these two commodities could be extremely thermal, up to explosive, resulting in a total loss of controlled flight and a subsequent hull loss. ALPA suggests that a change in the regulations requiring segregation of these Class 8 commodities could avert a potential disaster. According to ALPA, the UN has ignored this warning, stating on numerous occasions that the more stringent packaging requirements of the air mode would prevent commodities from leaking. According to ALPA, this

position has been proven wrong, “particularly since the inception of performance oriented packaging (POP).”

We understand the concern expressed by ALPA regarding the possible commingling of strong acids and strong bases on aircraft due to lack of proper segregation. However, this issue would require extensive rulemaking changes regarding hazard classification and hazard communication requirements. In addition, this issue relates to storage issues in all modes of transport, not just aviation. Therefore, we are not proposing any revisions or changes based on these recommendations.

Sections 175.79, 175.81; and 175.88 Inspection, Orientation and Securing of Packages of Hazardous Materials

We are proposing to merge the requirements of §§ 175.79 (Orientation of cargo); 175.81 (Securing of packages containing hazardous materials); and 175.88 (Inspection of unit load devices) into one section, 175.88, entitled “Inspection, orientation and securing of packages of hazardous materials.” This is solely an editorial proposal.

Section 175.90 Damaged Shipments

No amendments are proposed for this section.

Section 175.305 Self Propelled Vehicles

We are proposing to move the requirements of this section to § 173.220.

Sections 175.310 and 175.320 Transportation of Flammable Liquid Fuel Within Alaska or Into Other Remote Locations and Cargo Aircraft, Only Means of Transportation

Section 175.310, Transportation of flammable liquid fuel within Alaska or into other remote locations, provides exceptions for the shipment of flammable liquid fuels in the State of Alaska and other remote locations. Section 175.320 provides an exception from the quantity limitations in §§ 175.75 and 172.101, when certain conditions are met. Section 175.320 authorizes the transportation of certain hazardous materials by cargo-only aircraft in inaccessible cargo locations when means of transportation other than air are impracticable or not available (i.e., air transport is the only means of transportation), subject to the conditions specified in § 175.320.

In this NPRM, we are proposing to remove the authorization to transport Class 1 (explosive) materials in accordance with § 175.320. In our view, because of security concerns and requirements, the carriage of explosives

outside of the normal requirements of the HMR should be handled by exemption. The removal of the authorization to transport Class 1 materials also allows the deletion of some of the operator restrictions dealing with advance notices, airports, loading areas, etc. under the provisions. We are interested in comments regarding our proposal to remove the authorization to transport Class 1 materials in accordance with § 175.320 without an exemption. In particular, is the normal time frame to obtain an exemption too burdensome, and, if so, why?

We are also proposing to remove the reference to flammable liquids mentioned by name and proposing a new combined section that is limited to fuels, similar to existing § 175.310. Oil, toluene, and methyl alcohol would no longer be covered under this section unless they are being used as a fuel. We are proposing to remove the chart since there is only one commodity being covered (combustible liquids are mentioned in the paragraph covering bulk tanks). Fuels permitted would also now be limited to those in Packing Group II or III (Packing Group I fuels, which have a boiling point of 35C/95F or higher, would be allowed in aircraft tanks designed to hold such liquids).

We are proposing that the passenger-carrying aircraft operations of the current § 175.310 and the cargo aircraft operations of the current § 175.320 be merged into one section. However, similar loading and operating requirements have been broken out of each and combined into paragraphs that will apply to both types of operations. This results in some additional operator requirements for the passenger-aircraft operations (the 14 CFR references to operating manuals and FAA approval) that do not exist in the current § 175.310. However these requirements always applied to the operator via 14 CFR even though they were not specifically mentioned in the HMR. References to a FAA Civil Aviation Security Field Office have been changed to the FAA Principal Operations Inspector as this is more appropriate.

Section 175.501 Special Requirements for Oxidizers and Compressed Oxygen

We are proposing to move the stowage requirements applicable to the transportation of compressed oxygen that are currently found in §§ 175.10(b), and 175.85(h) and (l), to a new section, § 175.501, entitled "Special requirements for oxidizers and compressed oxygen". However, we are not proposing any amendments to the requirements for the stowage of oxygen aboard aircraft.

Section 175.630 Special Requirements for Division 6.1 and Division 6.2 Material

No amendments are proposed for this section.

Sections 175.700; 175.701; 175.702; 175.703; 175.704; 175.705

Transportation of Radioactive Materials Aboard Aircraft

Sections 175.700, 175.701, 175.702, 175.703, 175.704, and 175.705 of part 175 contain numerous provisions related to the transportation of radioactive materials aboard aircraft. In this NPRM, we have attempted to rewrite many of these provisions to facilitate understanding of these requirements. We are also proposing to remove requirements related to the carriage of radioactive materials with undeveloped film from these sections. However, except in the case of shipments with undeveloped film and separation distances for cargo aircraft, is not our intent to make any substantive revisions to §§ 175.700, 175.701, 175.702, 175.703, 175.704, or 175.705. With regard to the separation distances from undeveloped film, we are proposing to remove them from the HMR. It is RSPA's belief that such requirements should not be part of a Federal regulations, but instead should be addressed by part contractual agreement between the shipper and the airline. We are also proposing to adopt the separation distances in the ICAO TI for shipments aboard cargo aircraft of greater than 50 TI. The following table identifies the existing requirements and where we are proposing to move them:

Existing requirement	Proposed new section
175.75(a)(3)	175.700(b).
175.700(a)	175.700(b) and (c).
175.700(b)	175.705(b) and (c).
175.700(c)	175.700(a).
175.700(d)	175.700(a).
175.701(a)	Removed, unnecessary.
175.701(b)(1)	175.701(c).
175.701(b)(2)	175.701(a).
175.701(b)(3)	175.701(b).
175.701(c)	175.701(d).
175.702(a)	175.702(b).
175.702(b) and (b)(1)	175.702(a).
175.702(b)(2)(i)	175.702(a).
175.702(b)(2)(ii)	175.702(b).
175.702(b)(2)(iii)	175.702(c).
175.702(b)(2)(iv)	175.700(b)(2).
175.703(a)	Removed.
175.703(b)	175.703(a).
175.703(c)	175.703(b).
175.703(d)	175.700(a).
175.703(e)	Removed, already covered by § 173.441.

Existing requirement	Proposed new section
175.704	Only editorial changes made to this section.
175.705(a)	175.705(a).
175.705(b)	175.705(a).

The Federal hazardous materials transportation law addresses ionizing radiation material transportation. (49 U.S.C. 5114.) That section states that the material may be transported on a passenger-carrying aircraft in air commerce only if the material is intended for use in, or incident to, research or medical diagnosis or treatment; and does not present an unreasonable hazard to health and safety when being prepared for, and during, transportation. Section 175.700 prohibits, in addition to other requirements, any person from carrying in a passenger-carrying aircraft any package required to be labeled in accordance with § 172.403 with a Radioactive Yellow II or III label, unless certain provisions are met. In addition, § 175.700 (c) states that (except for limited quantities) no person shall carry any class 7 material aboard a passenger-carrying aircraft unless that material is intended for use in research, medical diagnosis, or treatment.

In its comments to the ANPRM, ALPA indicated that the term "research" as used in § 175.700 should be clarified and stated, "ALPA strongly agrees with RSPA that 'research' should be clarified to exclude 'application of existing technology.'" However, Airborne Express, ATA, and FedEx informed RSPA that they had no problems understanding or interpreting the term "research" as currently used in § 175.700.

It appears some persons have misused the definition of "research" to avoid the restrictions in § 175.700. We do not consider research to include the application of existing technology to industrial endeavors. For example, the use of radioactive material (e.g., iridium-192) to detect cracks in oil field pipelines is not research, but the application of existing scientific knowledge. Therefore, we are proposing to revise the definition of research in § 171.8 to clearly indicate that it does not include the application of existing technology to industrial endeavors.

III. Miscellaneous Proposals to the HMR

1. Quantity Limits in Column (9) of the Hazardous Materials Table (HMT)

Columns 9A and 9B of the § 172.101 Hazardous Materials Table (HMT)

specify limitations on individual package quantities, or list packages that are forbidden from transportation by aircraft. Section 173.27 specifies inner receptacle limits for combination packages. In an effort to enhance compliance, we are proposing to amend the heading for column 9 of the HMT to reference §§ 173.27 and 175.75 as a reminder to comply with both section requirements for quantity limitations for transportation by aircraft.

2. Small Quantities, Limited Quantities and Consumer Commodities

The HMR contain hazardous materials exceptions for small quantities, limited quantities, and consumer commodities. These exceptions allow materials to be transported at reduced levels of regulation. Small quantities of hazardous materials are excepted from all other requirements of the HMR, provided certain criteria in § 173.4 are met. Limited quantity exceptions in the HMR are based on the class of the hazardous material, and contain additional requirements for air transportation. Materials that meet the limited quantity exception and also meet the definition of a consumer commodity as provided by § 171.8, may be renamed "Consumer Commodity" and reclassified as ORM-D. Consumer commodities are excepted from specification packaging, labeling, placarding and quantity limitations applicable to air transportation. As currently written, these exceptions allow small quantities and consumer commodities to be transported by aircraft even though they may contain hazardous materials otherwise forbidden aboard aircraft. These exceptions are inconsistent with the ICAO TI, which require that, before a hazardous material may be transported as an excepted quantity (*i.e.*, small quantity or a limited quantity), it must be suitable for transportation aboard passenger aircraft. The ICAO TI also forbid the transportation of small quantities in checked and carry-on luggage.

Based on the lack of supporting incident data, most commenters opposed the harmonization of the small quantity, limited quantity, and consumer commodity exceptions of the HMR with the much more stringent exceptions in ICAO. Three commenters support across-the-board harmonization of the HMR with ICAO. ATA stated while a majority of their members support harmonization with ICAO, some want dual authority for domestic shipments. The Dangerous Goods Advisory Council (DGAC) and Fisher Scientific stated that they would like to

see RSPA petition ICAO to harmonize with the HMR.

Fisher Scientific expressed concern regarding the possibility of changing the small quantity exception in the HMR to align it with the ICAO TI. According to Fisher Scientific, it has made substantial investments to upgrade its computer classification program for shipment of hazardous materials using this small quantity exception. Fisher Scientific stated, " * * * to arbitrarily change the regulations merely to perform some form of 'alignment' with another organization's regulations, even the ICAO TI, when such an alignment will neither improve safety nor facilitate commerce, we find unacceptable."

We concur with those commenters who stated that the limited quantity authorizations in the HMR should not be revised across-the-board to be consistent with the ICAO TI. However, we are proposing to eliminate an inadvertent provision of the HMR that allows the transportation of hazardous materials forbidden aboard aircraft to be transported aboard aircraft as either ORM-D material or small quantity material. In addition, we are proposing, for transportation by aircraft only, to adopt the ICAO TI provision that requires shipments of limited quantities to comply with the passenger aircraft net quantity limitation in the HMT. In this rulemaking we are proposing to amend all of the limited quantity sections of the HMR (*e.g.*, § 173.150) by stating that, for transportation by aircraft, only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, we are proposing to amend § 173.4 (small quantities) to limit those small quantity materials that can be transported aboard aircraft to those that are allowed aboard passenger-carrying aircraft. We are also proposing, consistent with the ICAO Technical Instructions, to forbid the transportation of small quantities of hazardous materials in carry-on or checked baggage.

3. Section 173.7

We are proposing to move the exception that currently appears in § 175.5(a)(2), related to an aircraft under the exclusive direction and control of a government, and move it to § 173.7. We are also proposing to modify the exception by making it an exception from the "subchapter" and not solely an exception from part 175.

4. Section 173.217

In the proposed revision of § 175.10, we would maintain the exception for dry ice in checked and carry-on baggage

and move into the new proposed § 175.8 the exception for dry ice in airline food service. However, in order to retain the 2.3 kg (5.0 pounds) exception for the shipment of dry ice as cargo/freight, we are proposing to move this exception from § 175.10 to a new paragraph (f) in § 173.217.

IV. Rulemaking Analysis and Notices

A. Executive Order 12866 and DOT Regulatory Policies and Procedures

This proposed rule, if adopted, would not be considered a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, was not subject to formal review by the Office of Management and Budget. This proposed rule is not considered significant under the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034). Due to the minimal economic impact of this proposed rulemaking, preparation of a regulatory evaluation is not warranted.

B. Executive Order 13132

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 ("Federalism"). This proposed rule would preempt State, local, and Indian tribe requirements but does not propose any regulation that has substantial direct effects on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

The Federal hazardous materials transportation law, 49 U.S.C. 5101–5127, contains an express preemption provision (49 U.S.C. 5125(b)) that preempts State, local, and Indian tribe requirements on the following subjects:

- (1) The designation, description, and classification of hazardous materials;
- (2) The packing, repacking, handling, labeling, marking, and placarding of hazardous materials;
- (3) The preparation, execution, and use of shipping documents related to hazardous materials and requirements related to the number, contents, and placement of those documents;
- (4) The written notification, recording, and reporting of the unintentional release in transportation of hazardous material; or
- (5) The design, manufacture, fabrication, marking, maintenance, recondition, repair, or testing of a packaging or container represented, marked, certified, or sold as qualified for use in transporting hazardous material.

This proposed rule addresses subject areas 2, 3, and 4 above. If adopted as final, this rule would preempt any state, local, or Indian tribe requirements concerning these subjects unless the non-Federal requirements are "substantively the same" as the Federal requirements. This rule is necessary to update and clarify the hazardous materials transportation requirements by aircraft which will enhance future compliance.

Federal hazardous materials transportation law provides at § 5125(b)(2) that, if DOT issues a regulation concerning any of the covered subjects, DOT must determine and publish in the **Federal Register** the effective date of Federal preemption. The 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 will be 90 days from publication of a final rule in this matter in the **Federal Register**.

C. Executive Order 13175

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13175 ("Consultation and Coordination with Indian Tribal Governments"). Because this proposed rule does not have tribal implications and does not impose direct compliance costs, the funding and consultation requirements of Executive Order 13175 do not apply.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601–611) requires each agency to analyze proposed regulations and assess their impact on small businesses and other small entities to determine whether the proposed rule is expected to have a significant impact on a substantial number of small entities. The provisions of this proposal would apply to aircraft operators. The Small Business Administration criterion specifies an aircraft operator/carrier is "small" if it has 1,500 or fewer employees. For this rule, small entities are part 121 and part 135 aircraft operators/carriers approved to carry hazardous materials, with 1,500 or fewer employees. We identified 729 aircraft operators/carriers meeting this standard. We estimated that the cost to the airline industry under this rule will be nominal. While maintaining safety, this proposed rule would relax certain requirements applicable to aircraft operators and would clarify existing provisions. Therefore, RSPA certifies that this proposed rule would not have

a significant economic impact on a substantial number of small entities.

E. Unfunded Mandates Reform Act of 1995

This proposed rule would not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It would not, if adopted, result in costs of \$120.7 million or more, in the aggregate, to any of the following: State, local, or Native American tribal governments, or the private sector.

F. Paperwork Reduction Act

RSPA believes that this proposed rule will not impose any new information collection burden. Section 1320.8(d), Title 5, Code of Federal Regulations requires that RSPA provide interested members of the public and affected agencies an opportunity to comment on information collection and recordkeeping requests. We currently have approved information collections under OMB No. 2137–0034, "Hazardous Materials Shipping Papers and Emergency Response Information" which expires April 30, 2006, and OMB No. 2137–0557, "Approvals for Hazardous Materials" which expires December 31, 2005. This notice identifies only editorial revisions proposed as section designation changes, to these approved information collections. RSPA will submit the revised information collection requests for editorial revisions as proposed changes in section designations to OMB for approval based on the requirements in this proposed rule.

RSPA specifically requests comments on the information collection and recordkeeping burdens associated with developing, implementing, and maintaining these requirements for approval under this proposed rule.

Requests for a copy of the information collection should be directed to Deborah Boothe or T. Glenn Foster, Office of Hazardous Materials Standards (DHM–10), Research and Special Programs Administration, Room 8102, 400 Seventh Street, SW., Washington, DC 20590–0001, Telephone (202) 366–8553.

Written comments should be addressed to the Docket Management System as identified in the **ADDRESSES** section of this rulemaking. Comments should be received prior to the close of the comment period identified in the **DATES** section of this rulemaking. In addition, you may submit comments specifically related to the information collection burden to the RSPA Desk Officer, Office of management and Budget (OMB) at fax number, (202) 395–6974. Under the Paperwork Reduction Act of 1995, no person is required to

respond to or comply with an information collection requirement unless it displays a valid OMB control number.

G. 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 may be used to cross-reference this action with the Unified Agenda.

H. Environmental Assessment

The National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321–4347), requires Federal agencies to consider the consequences of major Federal actions and prepare a detailed statement on actions significantly affecting the quality of the human environment. There are no significant environmental impacts associated with this proposed rule. RSPA proposes changes to the requirements in the HMR on the transportation of hazardous materials by aircraft. The purpose of this rulemaking is to modify or clarify requirements to promote safer transportation practices; promote compliance and enforcement; eliminate unnecessary regulatory requirements; convert certain exemptions into regulations of general applicability; finalize outstanding petitions for rulemaking; facilitate international commerce; and make these requirements easier to understand. Interested parties are invited to review the Preliminary Environmental Assessment available in the docket and to comment on what environmental impact, if any, the proposed regulatory changes would have.

I. Privacy Act

Anyone is able to search the electronic form all comments received into any of our dockets by the name of the individual submitting the comments (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78) or you may visit <http://dms.dot.gov>.

List of Subjects

49 CFR Part 171

Exports, Hazardous materials transportation, Hazardous waste, Imports, Incorporation by reference,

Reporting and recordkeeping requirements.

49 CFR Part 172

Education, Hazardous materials transportation, Hazardous waste, Labeling, 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 175

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

In consideration of the foregoing, 49 CFR chapter I would be amended as follows:

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

1. The authority citation for part 171 continues to read as follows:

Authority: 49 U.S.C. 5101–5127, 44701; 49 CFR 1.45 and 1.53; Pub. L. 101–410 section 4 (28 U.S.C. 2641 note); Pub. L. 104–134, section 31001.

2. In § 171.8, the definition of “research” is revised to read as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

Research means investigation or experimentation aimed at the discovery of new theories or laws and the discovery and interpretation of facts or revision of accepted theories or laws in the light of new facts. Research does not include the application of existing technology to industrial endeavors.

* * * * *

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

3. The authority citation for part 172 continues to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 172.101 [Amended]

4. In § 172.101, in the Hazardous Materials Table, the heading for column (9) is revised to read “(9) Quantity limitations (see §§ 173.27 and 175.75)”.

5. In § 172.101, the Hazardous Materials Table, the entry in column (7) for Air, compressed is revised by adding

“A59”, and, the entry in column (8A) is revised by adding “307”.

6. In § 172.101, the Hazardous Materials Table, the entry in column (7) for Nitrogen, compressed is revised by adding “A59”, and, the entry in column (8A) is revised by adding “307”.

7. In § 172.101, the Hazardous Materials Table, the column (2) is revised by adding the entry “Tires and tire assemblies, see Air, compressed or Nitrogen, compressed”.

8. In § 172.102, in paragraph (c)(2), special provision “A59” is added to read as follows:

§ 172.102 Special Provisions

* * * * *

(c) * * *

(2) * * *

Code/Special Provisions

* * * * *

A59 A tire assembly with a serviceable tire is not subject to the requirements of this subchapter provided the tire is not inflated to a gauge pressure exceeding the maximum rated pressure for that tire, and the tire (including valve assemblies) is protected from damage during transport. A tire or tire assembly which is unserviceable or damaged is forbidden from air transport; however, a damaged tire is not subject to the requirements of this subchapter if it is completely deflated.

* * * * *

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

9. The authority citation for part 173 continues to read as follows:

Authority: 49 U.S.C. 5101–5127, 44701; 49 CFR 1.45, 1.53.

10. In § 173.4, paragraph (a)(9) and (a)(10) are redesignated as paragraphs (a)(10) and (a)(11) respectively and new paragraph (a)(9) is added to read as follows:

§ 173.4 Small quantity exceptions.

(a) * * *

(9) For transportation by aircraft:

(i) The hazardous material must be authorized to be carried aboard passenger-carrying aircraft;

(ii) The hazardous material is not authorized to be carried in checked or carry-on baggage.

* * * * *

11. In § 173.7, the section heading is revised and a new paragraph (f) is added to read as follows:

§ 173.7 Government operations and materials.

* * * * *

(f) The requirements of this subchapter do not apply to shipments of hazardous materials carried aboard an aircraft that is not owned by a government or engaged in carrying persons or property for commercial purposes, but is under the exclusive direction and control of the government for a period of not less than 90 days as specified in a written contract or lease. An aircraft is under the exclusive direction and control of a government when the government exercises responsibility for:

(i) Approving crew members and determining that they are qualified to operate the aircraft;

(ii) Determining the airworthiness and directing maintenance of the aircraft; and

(iii) Dispatching the aircraft, including the times of departure, airports to be used, and type and amount of cargo to be carried.

12. In § 173.27, in paragraph (a), the second sentence is revised to read as follows:

§ 173.27 General requirements for transportation by aircraft.

(a) * * * Unless the material is otherwise excepted from the performance packaging requirements in subpart E of this part, a packaging containing a Packing Group III material that has a subsidiary risk of Division 4.1, 4.2, 4.3, 5.1 or Class 8 must meet the Packing Group II performance level when offered or intended for transportation by aircraft.

* * * * *

13. In § 173.63, the introductory text in paragraph (b)(1), is revised to read as follows:

§ 173.63 Packaging exceptions.

* * * * *

(b) * * *

(1) Cartridges, small arms, and cartridges power devices (which are used to project fastening devices) which have been classed as a Division 1.4S explosive may be reclassified, offered for transportation, and transported as ORM-D material when packaged in accordance with paragraph (b)(2) of this section. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter. Such transportation is excepted from the requirements of subparts E (Labeling) and F (Placarding) of part 172 of this subchapter. Cartridges, small arms, and cartridges

power devices that may be shipped as ORM-D material is limited to:

* * * * *

14. In § 173.150, the introductory text in paragraph (b) is revised to read as follows:

§ 173.150 Exceptions for Class 3 (flammable) and combustible liquids.

* * * * *

(b) *Limited quantities.* Limited quantities of flammable liquids (Class 3) and combustible liquids are excepted from labeling requirements, unless offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

* * * * *

15. In § 173.151, the introductory text in paragraphs (b) and (d) is revised to read as follows:

§ 173.151 Exceptions for Class 4.

* * * * *

(b) *Limited quantities of Division 4.1 flammable solids.* Limited quantities of flammable solids (Division 4.1) in Packing Groups II and III are excepted from labeling, unless offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this

subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

(d) *Limited quantities of Division 4.3 (dangerous when wet) material.* Limited quantities of Division 4.3 (dangerous when wet) solids in Packing Groups II and III are excepted from labeling, unless offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

* * * * *

16. In § 173.152, the introductory text in paragraph (b) is revised to read as follows:

§ 173.152 Exceptions for Division 5.1 (oxidizers) and Division 5.2 (organic peroxides).

* * * * *

(b) *Limited quantities.* Limited quantities of oxidizers (Division 5.1) in Packing Groups II and III and organic peroxides (Division 5.2) are excepted from labeling, unless offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments of these limited quantities are not subject to subpart F of part 172 (Placarding) of this subchapter. Each package must conform

to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized.

17. In § 173.153, the introductory text in paragraph (b) is revised to read as follows:

§ 173.153 Exceptions for Division Class 6.1 (poisonous materials).

* * * * *

(b) *Limited quantities of Division 6.1 materials.* The exceptions in this paragraph do not apply to poison-by-inhalation materials limited quantities of poisonous materials (Division 6.1) in Packing Group III are excepted from the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments of these limited quantities are not subject to subpart F of part 172 (Placarding) of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

* * * * *

18. In § 173.154, the introductory text in paragraph (b) is revised to read as follows:

§ 173.154 Exceptions for Class 8 (corrosive materials).

* * * * *

(b) *Limited quantities.* Limited quantities of corrosive materials (Class 8) in Packing Groups II and III are excepted from labeling, unless offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments of these limited quantities are not subject to

subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

* * * * *

19. In § 173.155, the introductory text in paragraph (b) is revised to read as follows:

§ 173.155 Exceptions for Class 9 (miscellaneous hazardous materials).

* * * * *

(b) *Limited quantities.* Limited quantities of miscellaneous hazardous materials (Class 9) are excepted from labeling, unless offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also comply with the applicable requirements of § 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments of these limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

* * * * *

20. In § 173.217, a new paragraph (f) is added to read as follows:

§ 173.217 Carbon dioxide, solid (dry ice).

* * * * *

(f) Carbon dioxide, solid (dry ice), when offered or transported by aircraft, in quantities not exceeding 2.3 kg (5.07 pounds) per package and used as a refrigerant for the contents of the package is excepted from all other requirements of this subchapter if the requirements of paragraphs (a) and (d) of this section are complied with and the package is marked "Carbon dioxide, sold" or "Dry ice", marked with the name of the contents being cooled, and marked with the net weight of the dry ice or an indication that the net weight is 2.3 kg (5.0 pounds) or less.

21. In § 173.220, paragraph (b)(4)(iii) is revised to read as follows:

§ 173.220 Internal combustion engines, self-propelled vehicles, mechanical equipment containing internal combustion engines, and battery powered vehicles or equipment.

* * * * *

(b) * * *

(4) * * *

(iii) For transportation by aircraft, when carried in aircraft designed or modified for vehicle ferry operations and when all of the following conditions are met:

(A) Authorization for this type of operation has been given by the appropriate authority in the government of the country in which the aircraft is registered;

(B) Each vehicle is secured in an upright position;

(C) Each fuel tank is filled in a manner and only to a degree that will preclude spillage of fuel during loading, unloading, and transportation; and

(D) Each area or compartment in which a self-propelled vehicle is being transported is suitably ventilated to prevent the accumulation of fuel vapors.

22. In § 173.306, the introductory text in paragraphs (a), (b), and (h) is revised to read as follows:

§ 173.306 Limited quantities of compressed gases.

* * * * *

(a) Limited quantities of compressed gases for which exceptions are permitted as noted by reference to this section in § 172.101 of this subchapter are excepted from labeling, except when offered for transportation or transported by air, and, unless required as a condition of the exception, and specification packaging requirements of this subchapter when packaged in accordance with the following paragraphs. For transportation by aircraft, the package must also comply with the applicable requirements of §§ 172.402(c) and 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments are not subject to subpart F (Placarding) of part 172 of this subchapter, to part 174 of this subchapter except § 174.24 and to part 177 of this subchapter except § 177.817. Each package may not exceed 30 kg (66 pounds) gross weight.

The following is authorized:

* * * * *

(b) *Exceptions for foodstuffs, soap, biologicals, electronic tubes, and audible fire alarm systems.* Limited

quantities of compressed gases, (except Division 2.3 gases) for which exceptions are provided as indicated by reference to this section in § 172.101 of this subchapter, when accordance with one of the following paragraphs are excepted from labeling, except when offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter. For transportation by aircraft, the package must comply with the applicable requirements of §§ 172.402(c) and 173.27 of this subchapter; the net quantity per package may not exceed the quantity specified in column (9A) of the Hazardous Materials Table in § 172.101 of this subchapter; and only hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments are not subject to subpart F (Placarding) of part 172 of this subchapter, to part 174 of this subchapter, except § 174.24 and to part 177 of this subchapter, except § 177.817. Special exceptions for shipment of certain compressed gases in the ORM-D class are provided in paragraph (h) of this section.

The following are authorized:

* * * * *

(h) A limited quantity which conforms to the provisions of paragraphs (a)(1), (a)(3), or (b) of this section and is a "Consumer Commodity" as defined in § 171.8 of this subchapter, may be renamed "Consumer Commodity" and reclassified as "ORM-D" material. For transportation by aircraft, only hazardous materials authorized aboard passenger-carrying aircraft may be renamed "Consumer Commodity" and reclassified "ORM-D." Each package may not exceed 30 kg (66 pounds) gross weight. In addition to the exceptions provided by paragraphs (a) and (b) of this section:

23. In § 173.307, paragraph (a)(2) is revised to read as follows:

§ 173.307 Exceptions for compressed gases.

* * * * *

(a) * * *

(2) Tires when inflated to pressures not greater than their rated inflation pressures. For transportation by air, tires and tire assemblies must meet the conditions in special provision A59 of § 172.102 of this subchapter.

PART 175—CARRIAGE BY AIRCRAFT

24. Part 175 is revised to read as follows:

PART 175—CARRIAGE BY AIRCRAFT**Subpart A—General Information and Regulations**

Sec.

- 175.1 Purpose, scope and applicability.
- 175.3 Unacceptable hazardous materials shipments.
- 175.8 Exceptions for operator equipment and supplies.
- 175.9 Exceptions for special aircraft operations.
- 175.10 Exceptions for passengers and crewmembers.
- 175.20 Compliance and training.
- 175.25 Notification at air passenger facilities of hazardous materials restrictions.
- 175.26 Notification at cargo facilities of hazardous materials requirements.
- 175.30 Inspecting shipments.
- 175.31 Reports of discrepancies.
- 175.33 Shipping paper and notification of pilot-in-command.

Subpart B—Loading, Unloading and Handling

- 175.75 Quantity limitations and cargo location.
- 175.78 Stowage compatibility of cargo.
- 175.88 Inspection, orientation and securing of packages of hazardous materials.
- 175.90 Damaged shipments.

Subpart C—Specific Regulations Applicable According to Classification of Material

- 175.310 Transportation of flammable liquid fuel; aircraft only means of transportation.
- 175.501 Special requirements for oxidizers and compressed oxygen.
- 175.630 Special requirements for Division 6.1 and Division 6.2 material.
- 175.700 Special limitations and requirements for Class 7 materials.
- 175.701 Separation distance requirements for packages containing Class 7 (radioactive) materials in passenger-carrying aircraft.
- 175.702 Separation distance requirements for packages containing Class 7 (radioactive) materials in cargo aircraft.
- 175.703 Other special requirements for the acceptance and carriage of packages containing Class 7 materials.
- 175.704 Plutonium shipments.
- 175.705 Inspecting for radioactive contamination and incidents involving radioactive contamination.

Authority: 49 U.S.C. 5101–5127, 44701; 49 CFR 1.45 and 1.53.

Subpart A—General Information and Regulations**§ 175.1 Purpose, scope and applicability.**

(a) This part prescribes requirements that apply to the transportation of hazardous materials in commerce aboard (including attached to or suspended from) aircraft. The requirements in this part are in addition to other requirements contained in parts 171, 172, 173, 178, and 180 of this subchapter.

(b) This part applies to the offering, acceptance, and transportation of hazardous materials in commerce by aircraft to, from, or within the United States, and to any aircraft of United States registry anywhere in air commerce. This subchapter applies to any person who performs, attempts to perform, or is required to perform any function subject to this subchapter, including—

(1) Air carriers, indirect air carriers, and freight forwarders and their flight and non-flight employees, agents, subsidiary and contract personnel (including cargo, passenger and baggage acceptance, handling, loading and unloading personnel); and

(2) Air passengers that carry any hazardous material on their person or in their carry-on or checked baggage.

(c) The requirements of this subchapter do not apply to shipments of hazardous materials carried aboard an aircraft that is not owned by a government or engaged in carrying persons or property for commercial purposes, but is under the exclusive direction and control of the government for a period of not less than 90 days as specified in a written contract or lease. An aircraft is under the exclusive direction and control of a government when the government exercises responsibility for:

- (i) Approving crew members and determining that they are qualified to operate the aircraft;
- (ii) Determining the airworthiness and directing maintenance of the aircraft; and
- (iii) Dispatching the aircraft, including the times of departure, airports to be used, and type and amount of cargo to be carried.

§ 175.3 Unacceptable hazardous materials shipments.

A hazardous material that is not prepared for shipment in accordance with this subchapter may not be offered or accepted for transportation or transported aboard an aircraft.

§ 175.8 Exceptions for operator equipment and supplies.

(a) This subchapter does not apply to hazardous materials that are required for the propulsion of the aircraft, required for the operation of aircraft equipment, or required aboard an aircraft in accordance with the applicable airworthiness requirements and operating regulations.

(b) Items of replacement (spares, company material (COMAT) for hazardous materials described in paragraph (a) of this section must be transported in accordance with this

subchapter. When an operator transports its own replacement items, the following exceptions apply:

(1) In place of required packagings, packagings specifically designed for the transport of aircraft spares and supplies may be used, provided such packagings provide at least an equivalent level of protection to those that would be required by this subchapter.

(2) Aircraft batteries are not subject to quantity limitations such as those provided in § 172.101 or § 175.75(a) of this subchapter.

(c) This subchapter does not apply to oxygen, or any hazardous material used for the generation of oxygen, for medical use by a passenger, which is furnished by the aircraft operator in accordance with 14 CFR 121.574 or 135.91. For the purposes of this paragraph, an aircraft operator that does not hold a certificate under 14 CFR parts 121 or 135 may apply this exception in conformance with 14 CFR 121.574 or 135.91 in the same manner as required for a certificate holder.

(d) This subchapter does not apply to dry ice (carbon dioxide, solid) intended for use by the operator in food and beverage service aboard the aircraft.

(e) This subchapter does not apply to alcoholic beverages, perfumes, colognes, and liquefied gas lighters carried aboard a passenger-carrying aircraft by the operator for use or sale on the aircraft. Liquefied gas lighters must be examined by the Bureau of Explosives and approved by the Associate Administrator.

§ 175.9 Exceptions for special aircraft operations.

This subchapter does not apply to the following materials used for special aircraft operations when applicable FAA operator requirements have been met, including training operator personnel on the proper handling and stowage of the hazardous materials carried:

(a) Hazardous materials loaded and carried in hoppers or tanks of aircraft certificated for use in aerial seeding, dusting spraying, fertilizing, crop improvement, or pest control, to be dispensed during such an operation.

(b) Parachute activation devices, lighting equipment, oxygen cylinders, flotation devices, smoke grenades, flares, or similar devices carried during a parachute operation.

(c) Smoke grenades, flares, and pyrotechnic devices affixed to aircraft during any flight conducted as part of a scheduled air show or exhibition of aeronautical skill. The aircraft may not carry any persons other than required flight crewmembers. The affixed

installation accommodating the smoke grenades, flares, or pyrotechnic devices on the aircraft must be approved for its intended use by the FAA Flight Standards District Office having responsibility for that aircraft.

(d) Hazardous materials that are carried and used during dedicated air ambulance, fire fighting, or search and rescue operations.

(e) A transport incubator unit necessary to protect life or an organ preservation unit necessary to protect human organs, carried in the aircraft cabin, provided:

(i) The compressed gas used to operate the unit is in an authorized DOT specification cylinder and is marked, labeled, filled, and maintained as prescribed by this subchapter;

(ii) Each battery used is of the nonspillable type;

(iii) The unit is constructed so that valves, fittings, and gauges are protected from damage;

(iv) The pilot-in-command is advised when the unit is on board, and when it is intended for use;

(v) The unit is accompanied by a person qualified to operate it;

(vi) The unit is secured in the aircraft in a manner that does not restrict access to or use of any required emergency or regular exit or of the aisle in the passenger compartment; and,

(vii) Smoking within 3 m (10 feet) of the unit is prohibited.

(f) Hazardous materials which are loaded and carried on or in cargo only aircraft, and which are to be dispensed or expended during flight for weather control, environmental restoration or protection, forest preservation and protection, fire fighting and prevention, flood control, or avalanche control purposes, when the following requirements are met:

(1) Operations may not be conducted over densely populated areas, in a congested airway, or near any airport where carrier passenger operations are conducted.

(2) Each operator shall prepare and keep current a manual containing operational guidelines and handling procedures, for the use and guidance of flight, maintenance, and ground personnel concerned in the dispensing or expending of hazardous materials. The manual must be approved by the FAA Principal Operations Inspector assigned to the operator.

(3) No person other than a required flight crewmember, FAA inspector, or person necessary for handling or dispensing the hazardous material may be carried on the aircraft.

(4) The operator of the aircraft must have advance permission from the

owner of any airport to be used for the dispensing or expending operation.

(5) When dynamite and blasting caps are carried for avalanche control flights, the explosives must be handled by, and at all times be under the control of, a qualified blaster. When required by a State or local authority, the blaster must be licensed and the State or local authority must be identified in writing to the FAA Principal Operations Inspector assigned to the operator.

§ 175.10 Exceptions for passengers and crewmembers.

(a) This subchapter does not apply to the following hazardous materials when carried by aircraft passengers or crewmembers provided the requirements of this section are met:

(1)(i) Non-radioactive medicinal and toilet articles for personal use (including aerosols) carried in carry-on and checked baggage;

(ii) Other aerosols in Div. 2.2 (nonflammable gas) with no subsidiary risk carried in checked baggage only; and

(iii) The aggregate quantity of these hazardous materials carried by each person may not exceed 2 kg (70 ounces) by mass or 2 L (68 fluid ounces) by volume and the capacity of each container may not exceed 0.5 kg (18 ounces) by mass or 500 ml (17 fluid ounces) by volume.

(2) Safety matches or a lighter intended for use by an individual when carried on one's person or in carry-on baggage only. Lighter fuel, lighter refills, and lighters containing unabsorbed liquid fuel (other than liquefied gas) are not permitted on one's person or in carry-on or checked baggage.

(3) Implanted medical devices in humans or animals that contain hazardous materials, such as a heart pacemaker containing Class 7 (radioactive) material or lithium batteries; and radiopharmaceuticals that have been injected or ingested.

(4) Alcoholic beverages containing:

(i) Not more than 24% alcohol by volume; or

(ii) More than 24% and not more than 70% alcohol by volume when in unopened retail packagings not exceeding 5 liters (1.3 gallons) carried in carry-on or checked baggage, with a total net quantity per person of 5 liters (1.3) gallons for such beverages.

(5) Perfumes and colognes purchased through duty-free sales and carried in carry-on baggage.

(6) Hair curlers (curling irons) containing a hydrocarbon gas such as butane, no more than one per person, in carry-on or checked baggage. The safety cover must be securely fitted over the

heating element. Gas refills for such curlers are not permitted in carry-on or checked baggage.

(7) A small medical or clinical mercury thermometer for personal use, when carried in a protective case in carry-on or checked baggage.

(8) Small arms ammunition for personal use, up to 5 kg (11 pounds) per person in checked baggage only, if securely packed in boxes or other packagings specifically designed to carry small amounts of ammunition. Ammunition clips and magazines must also be securely boxed. This paragraph does not apply to persons traveling under the provisions of 49 CFR 1544.219.

(9) One self-defense spray (see § 171.8 of this subchapter), not exceeding 118 mL (4 fluid ounces) by volume, that incorporates a positive means to prevent accidental discharge may be carried in checked baggage only.

(10) Dry ice (carbon dioxide, solid), not to exceed 2 kg (4.4 pounds) per person, in carry-on or checked baggage, when used to protect perishables. The packaging must permit the release of carbon dioxide gas. For checked baggage, the package must be marked "DRY ICE" or "CARBON DIOXIDE, SOLID" and must be marked with the net weight of dry ice or an indication that the net weight is 2 kg (4.4 pounds) or less.

(11) A self-inflating life jacket fitted with no more than two small gas cartridges (containing no hazardous material other than a Div. 2.2 gas) for inflation purposes plus no more than two spare cartridges. The lifejacket and spare cartridges may be carried in carry-on or checked baggage, with the approval of the aircraft operator.

(12) Small gas cylinders (containing no hazardous material other than a Div. 2.2 gas) worn for the operation of mechanical limbs and, in carry-on and checked baggage, spare cylinders of a similar size for the same purpose in sufficient quantities to ensure an adequate supply for the duration of the journey.

(13) A mercury barometer or thermometer carried as carry-on baggage, by a representative of a government weather bureau or similar official agency, provided that individual advises the operator of the presence of the barometer or thermometer in his baggage. The barometer or thermometer must be packaged in a strong packaging having a sealed inner liner or bag of strong, leak proof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package in any position.

(14) Electrically powered heat-producing articles (*e.g.*, battery-operated equipment such as diving lamps and soldering equipment), which, if accidentally activated, will generate extreme heat and can cause fire, as carry-on baggage only and with the approval of the operator of the aircraft. The heat-producing component, or the energy source, must be removed to prevent unintentional functioning during transport.

(15) A wheelchair or other battery-powered mobility aid equipped with a nonspillable battery, when carried as checked baggage, provided that—

(i) The battery meets the provisions of § 173.159(d) for nonspillable batteries;

(ii) Visual inspection including removal of the battery, where necessary, reveals no obvious defects (removal of the battery from the housing should be performed by qualified airline personnel only);

(iii) The battery is disconnected and terminals are insulated to prevent short circuits; and

(iv) The battery is securely attached to the wheelchair or mobility aid, is removed and placed in a strong, rigid packaging that is marked "NONSPILLABLE BATTERY" (unless fully enclosed in a rigid housing that is properly marked), or is handled in accordance with paragraph (a)(17)(iv) of this section.

(16) A wheelchair or other battery-powered mobility aid equipped with a spillable battery, when carried as checked baggage, provided that—

(i) Visual inspection including removal of the battery, where necessary, reveals no obvious defects (however, removal of the battery from the housing should be performed by qualified airline personnel only);

(ii) The battery is disconnected and terminals are insulated to prevent short circuits;

(iii) The pilot-in-command is advised, either orally or in writing, prior to departure, as to the location of the battery aboard the aircraft; and

(iv) The wheelchair or mobility aid is loaded, stowed, secured and unloaded in an upright position or the battery is removed, the wheelchair or mobility aid is carried as checked baggage without further restriction, and the removed battery is carried in a strong, rigid packaging under the following conditions:

(A) The packaging must be leak-tight and impervious to battery fluid. An inner liner may be used to satisfy this requirement if there is absorbent material placed inside of the liner and the liner has a leakproof closure;

(B) The battery must be protected against short circuits, secured upright in the packaging, and be packaged with enough compatible absorbent material to completely absorb liquid contents in the event of rupture of the battery; and

(C) The packaging must be labeled with a CORROSIVE label, marked to indicate proper orientation, and marked with the words "Battery, wet, with wheelchair."

(b) The exceptions provided in paragraph (a) of this section also apply to aircraft operators when transporting passenger or crewmember baggage that has been separated from the passenger or crewmember, including transfer to another carrier for transport to its final destination.

§ 175.20 Compliance and training.

An air carrier may not transport a hazardous material by aircraft unless each of its hazmat employees involved in that transportation is trained as required by subpart H of part 172 of this subchapter. In addition, air carriers must comply with all applicable requirements in 14 CFR part 121 and 135.

§ 175.25 Notification at air passenger facilities of hazardous materials restrictions.

Each person who engages in for-hire transportation of passengers shall display notices of the requirements applicable to the carriage of hazardous materials aboard aircraft, and the penalties for failure to comply with those requirements. Each notice must be legible, and be prominently displayed so that it can be seen by passengers in locations where the aircraft operator issues tickets, checks baggage, and maintains aircraft boarding areas.

(a) At a minimum, each notice must communicate the following information:

(1) Federal law forbids the carriage of hazardous materials aboard aircraft in your luggage or on your person. A violation can result in five years' imprisonment and penalties of \$250,000 or more (49 U.S.C. 5124). Hazardous materials include explosives, compressed gases, flammable liquids and solids, oxidizers, poisons, corrosives and radioactive materials. Examples: Paints, lighter fluid, fireworks, tear gases, oxygen bottles, and radio-pharmaceuticals.

(2) There are special exceptions for small quantities (up to 70 ounces total) of medicinal and toilet articles carried in your luggage and certain smoking materials carried on your person. For further information contact your airline representative.

(b) The information contained in paragraph (a)(1) of this section must be printed:

(1) In legible English and may, in addition to English, be displayed in other languages;

(2) In lettering of at least 1 cm (0.4 inch) in height for the first paragraph and 4.0 mm (0.16 inch) in height for the other paragraphs; and

(3) On a background of contrasting color.

(c) Size and color of the notice are optional. Additional information, examples, or illustrations, if not inconsistent with the required information, may be included.

§ 175.26 Notification at cargo facilities of hazardous materials requirements.

(a) Each person who engages in the acceptance or transport of cargo for transportation by aircraft shall display notices to persons offering such cargo of the requirements applicable to the carriage of hazardous materials aboard aircraft, and the penalties for failure to comply with those requirements, at each facility where cargo is accepted. Each notice must be legible, and be prominently displayed so that it can be seen. At a minimum, each notice must communicate the following information:

(1) Cargo containing hazardous materials for transportation by aircraft must be offered in accordance with the Federal Hazardous Materials Regulations (49 CFR parts 171–180).

(2) A violation can result in five years' imprisonment and penalties of \$250,000 or more (49 U.S.C. 5124).

(3) Hazardous materials (dangerous goods) include explosives, compressed gases, flammable liquids and solids, oxidizers, poisons, corrosives and radioactive materials.

(b) The information contained in paragraph (a) of this section must be printed:

(1) Legibly in English, and, where cargo is accepted outside of the United States, in the language of the host country; and

(2) On a background of contrasting color.

(c) Size and color of the notice are optional. Additional information, examples, or illustrations, if not inconsistent with required information, may be included.

(d) Exceptions: Display of a notice required by paragraph (a) of this section is not required at:

(1) An unattended location (*e.g.*, a drop box) provided a general notice advising customers of a prohibition on shipments of hazardous materials through that location is prominently displayed; or

(2) A customer's facility where hazardous materials packages are accepted by a carrier.

§ 175.30 Inspecting shipments.

(a) No person may accept a hazardous material for transportation aboard an aircraft unless the aircraft operator ensures that the hazardous material is:

(1) Authorized, and is within the quantity limitations specified for carriage aboard aircraft according to § 172.101 of this subchapter or as otherwise specifically provided by this subchapter.

(2) Described and certified on a shipping paper prepared in duplicate in accordance with subpart C of part 172 or as authorized by § 171.11 of this subchapter. *See* § 175.33 for shipping paper retention requirements;

(3) Labeled and marked in accordance with subparts D and E of part 172 or as authorized in § 171.11 of this subchapter, and placarded (when required) in accordance with subpart F of part 172 of this subchapter; and,

(4) Labeled with a "CARGO AIRCRAFT ONLY" label (*see* § 172.448 of this subchapter) if the material as presented is not permitted aboard passenger-carrying aircraft.

(b) Except as provided in paragraph (d) of this section, no person may carry a hazardous material in a package, outside container, or overpack aboard an aircraft unless the package, outside container, or overpack is inspected by the operator of the aircraft immediately before placing it:

(1) Aboard the aircraft; or

(2) In a unit load device or on a pallet prior to loading aboard the aircraft.

(c) A hazardous material may be carried aboard an aircraft only if, based on the inspection by the operator, the package, outside container, or overpack containing the hazardous material:

(1) Has no holes, leakage or other indication that its integrity has been compromised; and

(2) For Class 7 (radioactive) materials, does not have a broken seal, except that packages contained in overpacks need not be inspected for seal integrity.

(d) The requirements of paragraphs (b) and (c) of this section do not apply to Dry ice (carbon dioxide, solid).

(e) An overpack containing packages of hazardous materials may be accepted only if the operator has taken all reasonable steps to establish that:

(1) The overpack does not contain a package bearing the "CARGO AIRCRAFT ONLY" label unless—

(i) The overpack affords clear visibility of and easy access to the package; or

(ii) Not more than one package is overpacked.

(2) The proper shipping names, identification numbers, labels and special handling instructions appearing on the inside packages are clearly visible or reproduced on the outside of the overpack, and

(3) Has determined that a statement to the effect that the inside packages comply with the prescribed specifications appears on the outside of the overpack, when specification packagings are prescribed.

§ 175.31 Reports of discrepancies.

(a) Each person who discovers a discrepancy, as defined in paragraph (b) of this section, relative to the shipment of a hazardous material following its acceptance for transportation aboard an aircraft shall, as soon as practicable, notify the nearest FAA Regional or Field Security Office by telephone or electronically and shall provide the following information:

(1) Name and telephone number of the person reporting the discrepancy.

(2) Name of the aircraft operator.

(3) Specific location of the shipment concerned.

(4) Name of the shipper.

(5) Nature of discrepancy.

(6) Address of the shipper or person responsible for the discrepancy, if known, by the air carrier.

(b) Discrepancies which must be reported under paragraph (a) of this section are those involving hazardous materials which are improperly described, certified, labeled, marked, or packaged, in a manner not ascertainable when accepted under the provisions of § 175.30(a) of this subchapter including packages or baggage which are found to contain hazardous materials subsequent to their being offered and accepted as other than hazardous materials.

§ 175.33 Shipping paper and notification of pilot-in-command.

(a) A copy of the shipping paper required by § 175.30(a)(2) must accompany the shipment it covers during transportation aboard an aircraft.

(b) When a hazardous material subject to the provisions of this subchapter is carried in an aircraft, the operator of the aircraft must provide the pilot-in-command with accurate and legible written information as early as practicable before departure of the aircraft, which specifies at least the following:

(1) The proper shipping name, hazard class and identification number of the material, including any remaining aboard from prior stops, as specified in § 172.101 of this subchapter or the ICAO Technical Instructions. In the case of Class 1 materials, the compatibility

group letter also must be shown. If a hazardous material is described by the proper shipping name, hazard class, and identification number appearing in:

(i) Section 172.101 of this subchapter, any additional description requirements provided in §§ 172.202 and 172.203 of this subchapter must also be shown in the notification.

(ii) The ICAO Technical Instructions, any additional information required to be shown on shipping papers by § 171.11 of this subchapter must also be shown in the notification.

(2) The total number of packages;

(3) The net quantity or gross weight, as applicable, for each package except those containing Class 7 (radioactive) materials. For a shipment consisting of multiple packages containing hazardous materials bearing the same proper shipping name and identification number, only the total quantity and an indication of the quantity of the largest and smallest package at each loading location need to be provided;

(4) The location of the packages aboard the aircraft;

(5) Confirmation that no damaged or leaking packages have been loaded on the aircraft;

(6) For Class 7 (radioactive) materials, the number of packages, overpacks or freight containers their category, transport index (if applicable), and their location aboard the aircraft;

(7) The date of the flight;

(8) The telephone number of a person not aboard the aircraft from whom the information contained in the notification of pilot-in-command can be obtained. The aircraft operator must ensure the telephone number is monitored at all times the aircraft is in flight. The telephone number is not required to be placed on the notification of pilot-in-command if the phone number is in a location in the cockpit available and known to the flight crew.

(9) Confirmation that the package must be carried only on cargo aircraft if its transportation aboard passenger-carrying aircraft is forbidden; and

(10) An indication, when applicable, that a hazardous material is being carried under terms of an exemption.

(c) A copy of the written notification to pilot-in-command shall be readily available to the pilot-in-command during flight. Emergency response information required by subpart G of part 172 of this subchapter must be maintained in the same manner as the written notification to pilot-in-command during transport of the hazardous material aboard the aircraft.

(d) Each person receiving a shipping paper required by this section must retain a copy or an electronic image

thereof that is accessible at or through its principal place of business and must make the shipping paper available, upon request, to an authorized official of a federal, state, or local government agency at reasonable times and locations. For a hazardous waste, each shipping paper copy must be retained for three years after the material is accepted by the initial carrier. For all other hazardous materials, each shipping paper copy must be retained for 375 days after the material is accepted by the carrier. Each shipping paper copy must include the date of acceptance by the carrier. The date on the shipping paper may be the date a shipper notifies the air carrier that a shipment is ready for transportation, as indicated on the air bill or bill of lading, as an alternative to the date the shipment is picked up or accepted by the carrier. Only an initial carrier must receive and retain a copy of the shipper's certification, as required by § 172.204 of this subchapter.

(e) The aircraft operator must retain at the airport of departure or the operator's principal place of business a copy of each notification of pilot-in-command, an electronic image thereof, or the information contained therein for 90 days. Except as provided in paragraph (f) of this section, the aircraft operator must make this information available, upon request, to an authorized official of a Federal, State, or local government agency at reasonable times and locations.

(f) The aircraft operator must have the information required to be retained under paragraph (e) readily accessible at the airport of departure and the intended airport of arrival for the duration of the flight leg and, upon request, must make the information immediately available, in an accurate

and legible format, to any representative of a Federal, State, or local government agency (including an emergency responder) who is responding to an incident involving the flight.

(g) The documents required by paragraphs (a) and (b) this section may be combined into one document if it is given to the pilot-in-command before departure of the aircraft.

Subpart B—Loading, Unloading and Handling

§ 175.75 Quantity limitations and cargo location.

(a) Except as otherwise provided in this subchapter, no person may carry a hazardous material in the cabin of a passenger-carrying aircraft or on the flight deck of any aircraft, and the hazardous material must be located in a place that is inaccessible to persons other than crew-members. Hazardous materials may be carried in a main deck cargo compartment of a passenger aircraft provided that the compartment is inaccessible to passengers and that it meets all certification requirements for a Class B aircraft cargo compartment in 14 CFR 25.857(b) or for a Class C aircraft cargo compartment in 14 CFR 25.857(c).

(b) Except for ORM-D and Class 9 materials and as otherwise provided in this subchapter, no person may carry on a passenger-carrying aircraft more than 25 kg (55 pounds) net weight of hazardous material (and in addition thereto, 75 kg (165 pounds) net weight of Division 2.2) in an inaccessible cargo compartment or in any accessible cargo compartment when the hazardous material is loaded in a manner that makes it inaccessible to flight crew.

(c) Each package containing a hazardous material acceptable only for cargo aircraft must be loaded in such a

manner that a crew member or other authorized person can see, handle and when size and weight permit, separate such packages from other cargo during flight. The requirements of this paragraph (c) do not apply to the following hazardous materials:

(1) Class 7, Division 6.1 (except those labeled FLAMMABLE), Division 6.2, Class 3, Packing Group III, that do not meet the definition of another hazard class), Class 9 or ORM-D;

(2) Packages of hazardous materials transported aboard a cargo aircraft, when other means of transportation are impracticable or not available, in accordance with procedures approved in writing by the *FAA Regional or Field Security Office* in the region where the operator is located; or

(3) Packages of hazardous materials carried on small, single pilot, cargo aircraft if:

(i) No person other than the pilot, an FAA inspector, the shipper or consignee of the material or a representative of the shipper or consignee so designated in writing, or a person necessary for handling the material is carried on the aircraft;

(ii) The pilot is provided with written instructions on the characteristics and proper handling of the materials; and

(iii) Whenever a change of pilots occurs while the material is on board, the new pilot is briefed under a hand-to-hand signature service provided by the operator of the aircraft.

(4) As a minimum, quantity limits and loading instructions in the following Quantity and Loading Tables must be followed to maintain acceptable quantity and loading between packages containing hazardous materials. The Quantity and Loading Tables are as follows:

SECTION 175.75 QUANTITY AND LOADING TABLES¹

	Accessible compartment ²		Inaccessible compartment ²
	Packages accessible	Packages inaccessible	Regardless of whether or not in a freight container
Passenger Aircraft:			
Net weight of hazardous materials allowed	No limit	25 kg per compartment ³ ...	25 kg per compartment. ³
Cargo Aircraft:			
Net weight of hazardous materials packages in manner authorized for passenger aircraft.	No limit	No limit	No limit.
Net weight of hazardous materials that are authorized for cargo aircraft only.	No limit	Forbidden ⁴	Forbidden. ⁴

¹ Class 9 and ORM-D materials are excepted from the limits in these tables. Further limits for packages of Class 7 materials are found in § 175.700.

² A compartment means a space formed by solid walls or bulkheads with a solid floor and ceiling.

³ An additional 75 kg net weight of Division 2.2 material is allowed.

⁴ The following materials may be carried in an inaccessible location on cargo-only aircraft:

—Class 3, PG III (except those that meet the definition of another hazard class).

—Class 6 (except those that are labeled "Flammable Liquid").

—Class 7 (except those that meet another hazard class).

—Class 9.

—ORM—D.

§ 175.78 Stowage compatibility of cargo.

(a) For stowage on an aircraft, in a cargo facility, or in any other area at an airport designated for the stowage of hazardous materials, packages containing hazardous materials which might react dangerously with one

another may not be placed next to each other or in a position that would allow a dangerous interaction in the event of leakage.

(b) As a minimum, the segregation instructions prescribed in the following Segregation Table must be followed to

maintain acceptable segregation between packages containing hazardous materials with different hazards. The Segregation Table instructions apply whether or not the class or division is the primary or subsidiary risk. The Segregation Table follows:

SEGREGATION TABLE

Hazard label	Class or division							
	1	2	3	4.2	4.3	5.1	5.2	8
1	Note 1	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2
2	Note 2	.....	.....	.....	.....	.....	.....	.....
3	Note 2	.....	.....	.....	.....	X	.....	.....
4.2	Note 2	.....	.....	.....	.....	X	.....	.....
4.3	Note 2	.....	.....	.....	.....	.....	.....	X
5.1	Note 2	.....	X	X	.....	.....	.....	.....
5.2	Note 2	.....	.....	.....	.....	.....	.....	.....
8	Note 2	.....	.....	.....	X	.....	.....	.....

(c) Instructions for using the Segregation Table are as follows:

(1) Hazard labels, classes or divisions not shown in the table are not subject to segregation requirements.

(2) Dots at the intersection of a row and column indicate that no restrictions apply.

(3) The letter “X” at the intersection of a row and column indicates that packages containing these classes of hazardous materials may not be stowed next to or in contact with each other, or in a position which would allow interaction in the event of leakage of the contents.

(4) Note 1. “Note 1” at the intersection of a row and column means the following:

(i) For explosives in compatibility groups A through K and N—

(A) Packages bearing the same compatibility group letter and the same division number may be stowed together.

(B) Explosives of the same compatibility group, but different divisions may be stowed together provided the whole shipment is treated as belonging to the division having the smaller number. However, when explosives of Division 1.5 Compatibility Group D are stowed together with explosives of Division 1.2 Compatibility Group D, the whole shipment must be treated as Division 1.1, Compatibility Group D.

(C) Packages bearing different compatibility group letters may not be stowed together whether or not they belong to the same division, except as provided in paragraphs (c)(3)(ii) and (iii) of this section.

(ii) Explosives in Compatibility Group L may not be stowed with explosives in other compatibility groups. They may only be stowed with the same type of explosives in Compatibility Group L.

(iii) Explosives of Division 1.4, Compatibility Group S, may be stowed with explosives of all compatibility groups except for Compatibility Groups A and L.

(iv) Other than explosives of Division 1.4, Compatibility Group S (see paragraph (c)(3)(iii) of this section), and Compatibility Groups C, D and E that may be stowed together, explosives that do not belong in the same compatibility group may not be stowed together.

(A) Any combination of substances in Compatibility Groups C and D must be assigned to the most appropriate compatibility group shown in the § 172.101 Table of this subchapter.

(B) Explosives in Compatibility Group N may be stowed together with explosives in Compatibility Groups C, D or E when the combination is assigned Compatibility Group D.

(5) Note 2. “Note 2” at the intersection of a row and column means that other than explosives of Division 1.4, Compatibility Group S, explosives may not be stowed together with that class.

(6) Packages containing hazardous materials with multiple hazards in the class or divisions, which require segregation in accordance with the Segregation Table, need not be segregated from other packages bearing the same UN number.

(7) A package labeled “BLASTING AGENT” may not be stowed next to or in a position that will allow contact

with a package of special fireworks or railway torpedoes.

§ 175.88 Inspection, orientation and securing packages of hazardous materials.

(a) A unit load device may not be loaded on an aircraft unless the device has been inspected and found to be free from any evidence of leakage from, or damage to, any package containing hazardous materials.

(b) A package containing hazardous materials marked “THIS SIDE UP” or “THIS END UP”, or with arrows to indicate the proper orientation of the package, must be stored and loaded aboard an aircraft in accordance with such markings. A package without orientation markings containing liquid hazardous materials must be stored and loaded with closures up (other than side closures in addition to top closures).

(c) Packages containing hazardous materials must be secured in an aircraft in a manner that will prevent any movement in flight which would result in damage to or change in the orientation of the packages. Packages containing Class 7 (radioactive) materials must be secured in a manner that ensures that the separation requirements of §§ 175.701 and 175.702 will be maintained at all times during flight.

§ 175.90 Damaged shipments.

(a) Packages or overpacks containing hazardous materials must be inspected for damage or leakage after being unloaded from an aircraft. When packages or overpacks containing hazardous materials are carried in a unit load device, the area where the unit load device was stowed must be

inspected for evidence of leakage or contamination immediately upon removal of the unit load device from the aircraft, and the packages or overpacks inspected for evidence of damage or leakage when the unit load device is unloaded. In the event of leakage or suspected leakage, the compartment in which the package, overpack, or unit load device was carried must be inspected for contamination and decontaminated, if applicable.

(b) Except as provided in § 175.700, the operator of an aircraft must remove from the aircraft any package, baggage or cargo that appears to be leaking or contaminated by a hazardous material. In the case of a package, baggage or cargo that appears to be leaking, the operator must ensure that other packages, baggage or cargo in the same shipment are in proper condition for transport aboard the aircraft and that no other package, baggage or cargo has been contaminated or is leaking. If an operator becomes aware that a package, baggage or cargo not identified as containing a hazardous material has been contaminated, or the operator has cause to believe that a hazardous material maybe the cause of the contamination, the operator must take reasonable steps to identify the nature and source of contamination before proceeding with the loading of the contaminated baggage or cargo. If the contaminating substance is found or suspected to be hazardous material, the operator must isolate the package, baggage or cargo and take appropriate steps to eliminate any identified hazard before continuing the transportation of the item by aircraft.

(c) No person may place aboard an aircraft a package, baggage or cargo that is contaminated with a hazardous material or appears to be leaking.

(d) If a package containing a material in Division 6.2 (infectious substance) is found to be damaged or leaking, the person finding the package must:

- (1) Avoid handling the package or keep handling to a minimum;
- (2) Inspect packages adjacent to the leaking package for contamination and withhold from further transportation any contaminated packages until it is ascertained that they can be safely transported;
- (3) Comply with the reporting requirement of § 171.15 of this subchapter; and
- (4) Notify the consignor or consignee.

Subpart C—Specific Regulations Applicable According to Classification of Material

§ 175.310 Transportation of flammable liquid fuel; aircraft only means of transportation.

(a) When other means of transportation are impracticable, flammable liquid fuels may be carried on certain passenger and cargo aircraft as provided in this section, without regard to the packaging references and quantity limits listed in Columns 7, 8 and 9 of the § 172.101 Hazardous Materials Table. All requirements of this subchapter that are not specifically covered in this section continue to apply to shipments made under the provisions of this section. For purposes of this section “impracticable” means transportation is not physically possible or cannot be performed by routine and frequent means of other transportation, due to extenuating circumstances. Extenuating circumstances include: conditions precluding highway or water transportation, such as a frozen vessel route; road closures due to catastrophic weather or volcanic activity; or a declared state of emergency. The desire for expedience of a shipper, carrier, or consignor, is not relevant in determining whether other means of transportation are impracticable. The stowage requirements of § 175.75(a) do not apply to a person operating an aircraft under the provisions of this section which, because of its size and configuration, makes it impossible to comply.

(b) A small passenger-carrying aircraft operated entirely within the State of Alaska or into a remote area, in other than scheduled passenger operations, may carry up to 76 L (20 gallons) of flammable liquid fuel (in Packing Group II or Packing Group III), when:

- (1) The flight is necessary to meet the needs of a passenger; and
- (2) The fuel is carried in one of the following types of containers:
 - (i) Strong tight metal containers of not more than 20 L (5.3 gallons) capacity, each packed inside a UN 4G fiberboard box, at the Packing Group II performance level, or each packed inside a UN 4C1 wooden box, at the Packing Group II performance level;
 - (ii) Airtight, leakproof, inside containers of not more than 40 L (11 gallons) capacity and of at least 28-gauge metal, each packed inside a UN 4C1 wooden box, at the Packing Group II performance level;
 - (iii) UN 1A1 steel drums, at the Packing Group I or II performance level, of not more than 20 L (5.3 gallons) capacity; or

(iv) In fuel tanks attached to flammable liquid fuel powered equipment under the following conditions:

- (A) Each piece of equipment is secured in an upright position;
 - (B) Each fuel tank is filled in a manner that will preclude spillage of fuel during loading, unloading, and transportation; and
 - (C) Fueling and refueling of the equipment is prohibited in or on the aircraft.
- (3) In the case of a passenger-carrying helicopter, the fuel or fueled equipment must be carried on external cargo racks or slings.
- (c) Flammable liquid fuels may be carried on a cargo aircraft, subject to the following conditions:
- (1)(i) The flammable liquid fuel is in Packing Group II or Packing Group III except as indicated in paragraph (c)(1)(iv) of this section;
 - (ii) The fuel is carried in packagings authorized in paragraph (b) of this section;
 - (iii) The fuel is carried in metal drums (UN 1A1, 1B1, 1N1) authorized for Packing Group I or Packing Group II liquid hazardous materials and having rated capacities of 220 L (58 gallons) or less. These single packagings may not be transported in the same aircraft with Class 1, Class 5, or Class 8 materials.
 - (iv) Combustible and flammable liquid fuels (including those in Packing Group I) may be carried in installed aircraft tanks each having a capacity of more than 450 L (118.9 gallons), subject to the following additional conditions:
 - (A) The tanks and their associated piping and equipment and the installation thereof must have been approved for the material to be transported by the appropriate FAA Flight Standards District Office.
 - (B) In the case of an aircraft being operated by a certificate holder, the operator shall list the aircraft and the approval information in its operating specifications. If the aircraft is being operated by other than a certificate holder, a copy of the FAA Flight Standards District Office approval required by this section must be carried on the aircraft.
 - (C) The crew of the aircraft must be thoroughly briefed on the operation of the particular bulk tank system being used.
 - (D) During loading and unloading and thereafter until any remaining fumes within the aircraft are dissipated:
 - (1) Only those electrically operated bulk tank shutoff valves that have been approved under a supplemental type certificate may be electrically operated.

(2) No engine or electrical equipment, avionic equipment, or auxiliary power units may be operated, except position lights in the steady position and equipment required by approved loading or unloading procedures, as set forth in the operator's operations manual, or for operators that are not certificate holders, as set forth in a written statement.

(3) Static ground wires must be connected between the storage tank or fueler and the aircraft, and between the aircraft and a positive ground device.

(d) The following restrictions apply to loading, handling, or carrying fuel under the provisions of this section:

(1) During loading and unloading, no person may smoke, carry a lighted cigarette, cigar, or pipe, or operate any device capable of causing an open flame or spark within 15 m (50 feet) of the aircraft.

(2) No person may fill a container, other than an approved bulk tank, with a Class 3 material or combustible liquid or discharge a Class 3 material or combustible liquid from a container, other than an approved bulk tank, while that container is inside or within 15 m (50 feet) of the aircraft.

(3) When filling an approved bulk tank by hose from inside the aircraft, the doors and hatches of the aircraft must be fully open to insure proper ventilation.

(4) Each area or compartment in which the fuel is loaded is suitably ventilated to prevent the accumulation of fuel vapors.

(5) Fuel is transferred to the aircraft fuel tanks only while the aircraft is on the ground.

(6) Before each flight, the pilot-in-command:

(i) Prohibits smoking, lighting matches, the carrying of any lighted cigar, pipe, cigarette or flame, and the use of anything that might cause an open flame or spark, while in flight; and

(ii) For passenger aircraft, informs each passenger of the location of the fuel and the hazards involved.

(e) Operators must comply with the following:

(1) If the aircraft is being operated by a holder of a certificate issued under 14 CFR part 121, part 127 or part 133, operations must be conducted in accordance with conditions and limitations specified in the certificate holder's operations specifications or operations manual accepted by the FAA. If the aircraft is being operated under 14 CFR part 91, operations must be conducted in accordance with an operations plan accepted and acknowledged in writing by the FAA Principal Operations Inspector assigned to the operator.

(2) The aircraft and the loading arrangement to be used must be approved for the safe carriage of the particular materials concerned by the FAA Principal Operations Inspector assigned to the operator.

§ 175.501 Special requirements for oxidizers and compressed oxygen.

(a) Compressed oxygen, when properly labeled Oxidizer or Oxygen, may be loaded and transported as provided in paragraph (b) of this section. No person may load or transport any other package containing a hazardous material for which an OXIDIZER label is required under this subchapter in an inaccessible cargo compartment that does not have a fire or smoke detection system and a fire suppression system.

(b) In addition to the quantity limitations prescribed in § 175.75, cylinders of compressed oxygen must be stowed in accordance with the following:

(1) No more than a combined total of six cylinders of compressed oxygen may be stowed on an aircraft in the inaccessible aircraft cargo compartment(s) that do not have fire or smoke detection systems and fire suppression systems.

(2) When loaded into a passenger-carrying aircraft or in an inaccessible cargo location on a cargo-only aircraft, cylinders of compressed oxygen must be stowed horizontally on the floor or as close as practicable to the floor of the cargo compartment or unit load device. This provision does not apply to cylinders stowed in the cabin of the aircraft in accordance with paragraph (c) of this section.

(3) When transported in a Class B aircraft cargo compartment (*see* 14 CFR 25.857(b)) or its equivalent (*i.e.*, an accessible cargo compartment equipped with a fire or smoke detection system but not a fire suppression system), cylinders of compressed oxygen must be loaded in a manner that a crew member can see, handle and, when size and weight permit, separate the cylinders from other cargo during flight. No more than six cylinders of compressed oxygen and, in addition, one cylinder of medical-use compressed oxygen per passenger needing oxygen at destination—with a rated capacity of 850 L (30 cubic feet) or less of oxygen—may be carried in a Class B aircraft cargo compartment or its equivalent.

(c) A cylinder containing medical-use compressed oxygen, owned or leased by an aircraft operator or offered for transportation by a passenger needing it for personal medical use at destination, may be carried in the cabin of a

passenger-carrying aircraft in accordance with the following provisions:

(1) No more than six cylinders belonging to the aircraft operator and, in addition, no more than one cylinder per passenger needing the oxygen at destination, may be transported in the cabin of the aircraft under the provisions of this paragraph (c);

(2) The rated capacity of each cylinder may not exceed 850 L (30 cubic feet);

(3) Each cylinder and its overpack or outer packaging must conform to the provisions of this subchapter (*see* Special Provision A52 in § 172.102 of this subchapter);

(4) The aircraft operator shall securely stow the cylinder in its overpack or outer packaging in the cabin of the aircraft and shall notify the pilot-in-command as specified in § 175.33 of this part; and

(5) Shipments under this paragraph

(c) are not subject to—

(i) Subpart C and, for passengers only, subpart H of part 172 of this subchapter;

(ii) Section 173.25(a)(4) of this subchapter; and

(iii) Paragraph (b) of this section.

§ 175.630 Special requirements for Division 6.1 and Division 6.2 material.

(a) A package required to bear a POISON, POISON INHALATION HAZARD, 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:

(1) the Division 6.1 or Division 6.2 material 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

(2) the Division 6.1 or Division 6.2 material 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 required to bear 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 materials is considered to be the carriage of poisonous materials under paragraph (a) of this section.

§ 175.700 Special limitations and requirements for Class 7 materials.

(a) Except as provided in §§ 173.4, 173.422 and 173.423 of this subchapter, no person may carry any Class 7 materials aboard a passenger-carrying aircraft unless that material is intended for use in, or incident to research (See § 171.8 of this subchapter), medical diagnosis or treatment. Regardless of its intended use, no person may carry a Type B(M) package aboard a passenger-carrying aircraft, a vented Type B(M) package aboard any aircraft, or a liquid pyrophoric Class 7 material aboard any aircraft.

(b) No person may carry aboard an aircraft a combined transport index (determined by adding together the transport index numbers shown on the labels of the individual packages and/or overpacks) or a single package with a transport index greater than:

(1) On a passenger-carrying aircraft, a combined transport index of 50 or a single package with a transport index greater than 3.0.

(2) On a cargo aircraft, a combined transport index of 200, or a single package with a transport index greater than 10.0.

(c) No person may carry aboard an aircraft a combined criticality safety index or a single package with a criticality safety index greater than:

(1) On a passenger-carrying aircraft, a combined criticality safety index of 50 or a single package with a criticality safety index greater than 3.0.

(2) On a cargo aircraft, a combined criticality safety index of 50, or a single package with a criticality safety index greater than 10.0. A cargo aircraft which has been assigned for the exclusive use of the shipper for the specific shipment of fissile Class 7 material may transport a combined criticality safety index of

100. Instructions for the exclusive use must be developed by the shipper and carrier, and the instructions must be issued with the shipping papers.

(d) No person may carry in a passenger-carrying aircraft any package required to be labeled RADIOACTIVE YELLOW-II or RADIOACTIVE YELLOW-III label unless the package is carried on the floor of the cargo compartment or freight container.

§ 175.701 Separation distance requirements for packages containing Class 7 (radioactive) materials in passenger-carrying aircraft.

(a) The following table prescribes the minimum separation distances that must be maintained in a passenger-carrying aircraft between Class 7 (radioactive) materials labeled RADIOACTIVE YELLOW-II or RADIOACTIVE YELLOW-III and passengers and crew:

Transport index or sum of transport indexes of all packages in the aircraft or distances predesignated area	Minimum separation distances	
	Centimeters	Inches
0.1 to 1.0	30	12
1.1 to 2.0	50	20
2.1 to 3.0	70	28
3.1 to 4.0	85	34
4.1 to 5.0	100	40
5.1 to 6.0	115	46
6.1 to 7.0	130	52
7.1 to 8.0	145	57
8.1 to 9.0	155	61
9.1 to 10.0	165	65
10.1 to 11.0	175	69
11.1 to 12.0	185	73
12.1 to 13.0	195	77
13.1 to 14.0	205	81
14.1 to 15.0	215	85
15.1 to 16.0	225	89
16.1 to 17.0	235	93
17.1 to 18.0	245	97
18.1 to 20.0	260	102
20.1 to 25.0	290	114
25.1 to 30.0	320	126
30.1 to 35.0	350	138
35.1 to 40.0	375	148
40.1 to 45.0	400	157
45.1 to 50.0	425	167

(b) When transported aboard passenger-carrying aircraft packages, overpacks or freight containers labeled Radioactive Yellow-II or Radioactive Yellow-III must be separated from live animals by a distance of at least 0.5 m (20 inches) for journeys not exceeding 24 hours, and by a distance of at least 1.0 m (39 inches) for journeys longer than 24 hours.

(c) Except as provided in paragraph (d) of this section, the minimum separation distances prescribed in paragraphs (a) and (b) of this section are determined by measuring the shortest

distance between the surfaces of the Class 7 (radioactive) materials package and the surfaces bounding the space occupied by passengers or animals. If more than one package of Class 7 (radioactive) materials is placed in a passenger-carrying aircraft, the minimum separation distance for these packages shall be determined in accordance with paragraphs (a) and (b) of this section on the basis of the sum of the transport index numbers of the individual packages or overpacks.

(d) *Predesignated areas.* A package labeled RADIOACTIVE YELLOW-II or

RADIOACTIVE YELLOW-III may be carried in a passenger-carrying aircraft in accordance with a system of predesignated areas established by the aircraft operator. Each aircraft operator that elects to use a system of predesignated areas shall submit a detailed description of the proposed system to the Associate Administrator for approval prior to implementation of the system. A proposed system of predesignated areas is approved if the Associate Administrator determines that it is designed to assure that:

(1) The packages can be placed in each predesignated area in accordance with the minimum separation distances prescribed in paragraph (a) of this section; and

(2) The predesignated areas are separated from each other by minimum distance equal to at least four times the distances required by paragraphs (a) and (b) of this section for the predesignated area containing packages with the largest sum of transport indexes.

§ 175.702 Separation distance requirements for packages containing Class 7 (radioactive) materials in cargo aircraft.

(a) No person may carry in a cargo aircraft any package required by § 172.403 of this subchapter to be labeled Radioactive Yellow-II or Radioactive Yellow-III unless:

(1) The total transport index does not exceed 50.0 and the packages are carried in accordance with § 175.701(a); or

(2) The total transport index for all packages exceeds 50.0; and

(i) The separation distance between the surfaces of the radioactive materials packages, overpacks or freight containers and any space occupied by live animals is at least 0.5 m (20 inches) for journeys not exceeding 24 hours and at least 1.0 m (39 inches) for journeys longer than 24 hours; and

(ii) The minimum separation distances between the radioactive material and any areas occupied by persons that are specified in the following table are maintained:

Transport Index or sum of transport indexes of all packages in the aircraft or predesignated area	Minimum separation distances	
	Centimeters	Inches
50.1 to 60.0	465	183
60.1 to 70.0	505	199
70.1 to 80.0	545	215
80.1 to 90.0	580	228
90.1 to 100.0	610	240
100.1 to 110.0	645	254
110.1 to 120.0	670	264
120.1 to 130.0	700	276
131.1 to 140.0	730	287
140.1 to 150.0	755	297
151.1 to 160.0	780	307
160.1 to 170.0	805	317
170.1 to 180.0	830	327
180.1 to 190.0	855	337
190.1 to 200.0	875	344
200.1 to 210.0	900	354
210.1 to 220.0	920	362
220.1 to 230.0	940	370
230.1 to 240.0	965	380
240.1 to 250.0	985	388
250.1 to 260.0	1005	396
260.1 to 270.0	1025	404
270.1 to 280.0	1040	409
280.1 to 290.0	1060	417
290.1 to 300.0	1080	425

(b) The transport index and the criticality safety index of any single group of packages must not exceed 50.0 (as used in this section, the term "group of packages" means packages that are separated from each other in an aircraft by a distance of 6 m (20 feet) or less); and

(c) Each group of packages must be separated from every other group in the aircraft by not less than 6 m (20 feet), measured from the outer surface of each group.

§ 175.703 Other special requirements for the acceptance and carriage of packages containing Class 7 materials.

(a) No person may accept for carriage in an aircraft packages of Class 7 materials, other than limited quantities, contained in a rigid or non-rigid overpack, including a fiberboard box or plastic bag, unless they have been prepared for shipment in accordance with § 172.403(h) of this subchapter.

§ 175.704 Plutonium shipments.

Shipments of plutonium which are subject to 10 CFR 71.88(a)(4) must comply with the following:

(a) Each package containing plutonium must be secured and restrained to prevent shifting under normal conditions.

(b) A package of plutonium having a gross mass less than 40 kg (88 pounds) and both its height and diameter less than 50 cm (19.7 inches)—

(1) May not be transported aboard an aircraft carrying other cargo required to bear a Division 1.1 label; and

(2) Must be stowed aboard the aircraft on the main deck or the lower cargo compartment in the aft-most location that is possible for cargo of its size and weight, and no other cargo may be stowed aft of packages containing plutonium.

(c) A package of plutonium exceeding the size and weight limitations in paragraph (b)—

(1) May not be transported aboard an aircraft carrying other cargo required to bear any of the following labels: Class 1 (all Divisions), Class 2 (all Divisions), Class 3, Class 4 (all Divisions), Class 5 (all Divisions), or Class 8; and

(2) Must be securely cradled and tied down to the main deck of the aircraft in a manner that restrains the package against the following internal forces acting separately relative to the deck of the aircraft; Upward, 2g; Forward, 9g; Sideward, 1.5g; Downward, 4.5g.

§ 175.705 Radioactive contamination.

(a) A carrier shall take care to avoid possible inhalation, ingestion, or contact by any person with Class 7 (radioactive) materials that may have been released from their packagings.

(b) When contamination is present or suspected, the package containing a Class 7 material, any loose Class 7 material, associated packaging material, and any other materials that have been contaminated must be segregated as far

as practicable from personnel contact until radiological advice or assistance is obtained from the U.S. Department of Energy or appropriate State or local radiological authorities.

(c) An aircraft in which Class 7 material has been released must be taken out of service and may not be returned to service or routinely occupied until the aircraft is checked for radioactive contamination and it is determined in accordance with § 173.443 of this subchapter that the dose rate at every accessible surface is less than 0.005 mSv per hour (0.5 mrem

per hour) and there is no significant removable surface contamination.

(d) Each aircraft used routinely for transporting Class 7 materials shall be periodically checked for radioactive contamination, and an aircraft must be taken out of service if contamination exceeds the level specified in paragraph (c) of this section. The frequency of these checks shall be related to the likelihood of contamination and the extent to which Class 7 materials are transported.

(e) In addition to the reporting requirements of §§ 171.15 and 171.16 of this subchapter, an aircraft operator

shall notify the offeror at the earliest practicable moment following any incident in which there has been breakage, spillage, or suspected radioactive contamination involving Class 7 (radioactive) materials shipments.

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Frits Wybenga,

*Deputy Associate Administrator for
Hazardous Materials Safety.*

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