DEPARTMENT OF TRANSPORTATION
Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 171, 173, and 175
[Docket No. PHMSA–2006–25446 (HM–243)]
RIN 2137–AE19

Hazardous Materials: Fuel Cell Cartridges and Systems Transported on Board Passenger Aircraft in Carry-on Baggage

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: PHMSA is proposing to amend the Hazardous Materials Regulations (HMR) to permit certain fuel cell cartridges and fuel cell systems designed for portable electronic devices to be transported by passengers and crew in carry-on baggage on board passenger-carrying aircraft. The proposed rule would cover fuel cells containing certain hazardous materials (flammable liquids, including methanol; formic acid; certain borohydride materials; or butane) and meeting certain performance and consumer use standards, which we are proposing to incorporate by reference into the HMR. We have evaluated the possible transportation safety risks presented by these fuel cell cartridges and systems and have determined they may safely be transported in the cabin of a passenger-carrying aircraft.

DATES: Written comments should be submitted on or before November 19, 2007.

ADDRESSES: You may submit comments identified by the docket number (PHMSA–2006–25446 (HM–243)) by any of the following methods:

- Web site: Until September 27, 2007, electronic submissions to the DOT Docket Management System (DMS), located at http://dms.dot.gov. Starting on September 28, 2007, all electronic submissions must be made to the Federal Docket Management System’s (FDMS) eRulemaking Portal located at http://www.regulations.gov, and the information in the DOT DMS will be migrated to the FDMS. This work is being done as part of a larger project to consolidate the federal rulemaking docket systems. Please note the FDMS is significantly different from the DOT DMS and may assign a new docket number to each existing docket. Follow the instructions specific to each docket Web site for submitting comments. On December 31, 2007, the DOT DMS will be permanently decommissioned.
- Hand Delivery: To Docket Operations, Room W12–140 on the ground floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.
- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the online instructions for submitting comments.

Instructions: All submissions must include the agency name and docket number or Regulatory Identification Number (RIN) for this notice. For detailed instructions on submitting comments and additional information on the rulemaking process, see the Public Participation heading of the Supplementary Information section of this document. Note that all comments received will be posted without change to the docket management system, including any personal information provided. Please see the Privacy Act heading under Supplementary Information.

Docket: For access to the dockets to read background documents or comments received, go to http://dms.dot.gov, and after September 28, 2007, to http://www.regulations.gov at any time or to Docket Operations, U.S. Department of Transportation (see ADDRESSES).


SUPPLEMENTARY INFORMATION:

I. Background

Fuel cell cartridges and fuel cell systems are an emerging energy technology developed to provide a more efficient, longer-lasting, and renewable power source for electrically operated equipment. Fuel cells are designed to replace, augment, or recharge existing battery sources. Various types of fuels may be used in fuel cell systems, including but not limited to gases meeting the criteria for classification as Division 2.1 (flammable gases), solids meeting the criteria for classification as Division 4.3 (dangerous when wet), and liquids meeting the criteria for classification as Class 3 (flammable) or Class 8 (corrosive) material. Specific materials used in fuel cells include methanol and other types of flammable liquids, butane, hydrogen in metal hydride, borohydrides, and formic acid.

II. Current HMR Requirements Applicable to the Transportation of Fuel Cells

Under the Hazardous Materials Regulations (HMR; 49 CFR parts 171–180), fuel cells generally must be transported in accordance with requirements applicable to the material they contain. Thus, a fuel cell containing a corrosive material must conform to the packaging and hazard communication requirements applicable to that corrosive material when offered for transportation. After careful evaluation of possible transportation safety risks, PHMSA adopted packaging, testing, and hazard communication requirements for transporting fuel cell systems and fuel cell cartridges containing flammable liquids, including methanol or methanol and water solutions, as cargo by all modes (final rule published December 29, 2006; 71 FR 7896). The HMR requirements are consistent with international transportation standards applicable to the transportation of fuel cell cartridges and systems containing flammable liquids in the 14th Revised Edition of the UN Recommendations on the Transport of Dangerous Goods (UN Recommendations).

III. International Standards Applicable to the Transportation of Fuel Cells

The International Civil Aviation Organization (ICAO) adopted provisions for transporting fuel cell systems and fuel cell cartridges containing flammable liquid as cargo on board aircraft in the 2007–2008 edition of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions). These provisions are consistent with those for fuel cell systems and cartridges in the UN Recommendations. At that time, ICAO also adopted Table 8.1.2(f) provisions for transporting fuel cell systems and cartridges containing...
flammable liquids (including methanol), formic acid, and butane, in carry-on baggage on board passenger-carrying aircraft under certain conditions. This passenger carry-on authorization applies to fuel cell cartridges with a maximum quantity of 200 ml (6.76 ounces) for liquids, 200 ml (6.76 ounces) for metal fuel cell cartridges containing butane, and 120 ml (4.1 ounces) for non-metallic fuel cell cartridges containing butane. No more than two spare fuel cell cartridges are allowed per passenger.

One of the conditions for the passenger authorization in the ICAO Technical Instructions is that the fuel cell systems and cartridges must conform to the industry technical specification governing the design and consumer use of fuel cell cartridges, power units, and power systems developed by the IEC. The IEC Specification No. IEC/PAS 62282–6–1 First Edition, with Technical Corrigendum 1, 2006, addresses fuel cell systems with outputs that do not exceed 60 volts and 240 watts. The IEC specification provides detailed manufacturing, safety, and testing requirements to address use, misuse, and consumer transportation. To ensure the capability of the fuel cell and cartridge to withstand normal conditions of consumer handling and transportation, the specification requires various design type tests such as pressure differential, vibration, temperature cycling, high temperature exposure, drop, compressive loading, connection cycling, external short circuit, and long-term storage.

Members of the fuel cell industry and the IEC prepared and submitted proposals (included in this docket) to the ICAO Dangerous Goods Panel that the Panel considered in making its decision to permit certain fuel cell systems and cartridges to be transported by passengers on board aircraft beginning on January 1, 2007. The proposals provide an assessment of the benefits and risks associated with transporting fuel cell systems and cartridges containing butane, formic acid, methanol, hydrogen stored in metal hydrides, and sodium borohydride-based and potassium borohydride-based fuels. PHMSA conducted its own independent technical assessment of the safety risks associated with each of the proposed fuel cell system and cartridge technologies; based on this evaluation, PHMSA supported the passenger provisions adopted in the ICAO Technical Instructions.

IV. Flammable Gas (Butane) and Leakage Criteria

In our technical evaluation for this NPRM, PHMSA, in coordination with the Federal Aviation Administration’s (FAA’s) William J. Hughes Technical Center (FAA Tech Center), conducted an additional examination specific to the design type testing criteria for fuel cell cartridges containing liquefied flammable gas (butane). This evaluation concluded that the industry technical specification developed to govern the design and use of fuel cell cartridges and systems, IEC/PAS 62282–6–1, required amendment to ensure fuel cells containing a flammable gas are designed and tested to a standard that is equivalent to the safety standard established for certain non-bulk gas packagings in the HMR. Based on the PHMSA and FAA evaluations, the ICAO Dangerous Goods Panel at its Working Group 2006 meeting (October 25–November 3, 2006) recommended that the IEC amend its fuel cell specification to mandate a zero-leak standard as a basis for successfully passing the design-type tests. This zero-leak standard would be demonstrated by subjecting the cartridge test sample to a water bath test (consistent with Section 6.2.4.1 of the UN Recommendations) after each design type test. The IEC revised its test protocols and acceptance criteria and issued an addendum (included in this docket) to the IEC PAS 62282–6–1 on April 18, 2007, published as “IEC/PAS 62282–6–1 First Edition, with Technical Corrigendum 1, 2006.”

The IEC plans to continue to review this standard for possible improvements. PHMSA will monitor further developments to the standard and, subject to technical review, may propose to adopt a later version in a subsequent rulemaking.

V. Petitions for Rulemaking

On March 2, 2006, the U.S. Fuel Cell Council petitioned PHMSA to permit airline passengers and crew to transport fuel cell systems and cartridges in carry-on baggage (Petition No. P–1475). In its petition, the U.S. Fuel Cell Council requests that PHMSA revise § 175.10 to permit portable electronic devices, such as cameras, laptop computers, and hand-held audio devices, powered by fuel cell systems and cartridges containing flammable liquid, formic acid, or butane to be transported by passengers and crew on passenger-carrying aircraft under the conditions adopted by ICAO. On August 23, 2006, Medis Technologies, Ltd., and Millennium Cell, Inc., petitioned PHMSA to permit fuel cell systems and cartridges containing Class 8 borohydride materials to be transported by passengers and crew in carry-on baggage on board passenger-carrying aircraft (Petition No. P–1483). Medis Technologies and Millennium Cell assert that Class 8 borohydride materials present the same risks in transportation as formic acid, also a Class 8 material. Both petitions may be viewed until September 27, 2007, in the DMS docket for this rulemaking at http://dms.dot.gov, and beginning on September 28, 2007, in the FDMS docket for this rulemaking at http://www.regulations.gov.

VI. Proposals in This NPRM

In this NPRM, we are proposing to permit the transportation in carry-on baggage on passenger-carrying aircraft of fuel cell cartridges and systems containing Class 3 flammable liquids, including methanol; formic acid and borohydride materials meeting the definition for a Class 8 material; and butane, a Division 2.1 gas. As proposed in this NPRM, the fuel cells must conform to certain performance criteria. The proposals in this NPRM are consistent with the passenger authorizations adopted for the 2007–2008 edition of the ICAO Technical Instructions.

Based on our assessment to date, we agree with the U.S. Fuel Cell Council that fuel cell cartridges and systems containing flammable liquids, formic acid, and butane do not pose an unreasonable safety risk when carried on board aircraft by passengers and crew members, provided they meet the specified performance standards. We also agree with Medis Technologies and Millennium Cell that fuel cell cartridges and systems containing borohydride materials pose similar safety risks and will operate in a similar manner as those containing formic acid.

It is important to note, however, that we are continuing to work with the FAA Tech Center to evaluate the safety risks posed by the air transportation of fuel cell cartridges and systems containing various types and classes of hazardous materials. We expect to conclude this evaluation prior to issuing a final rule under this docket; it will be placed in the docket for this rulemaking. As indicated above, we are proposing to require fuel cell cartridges and systems to meet rigorous performance criteria that are consistent with the conditions applicable to the passenger authorization in the ICAO Technical Instructions. First, we are proposing to incorporate into the HMR the industry technical specification and addendum developed by the IEC governing the
design and consumer use of fuel cell cartridges, power units, and power systems (IEC/PAS 62282–6–1 First Edition, with Technical Corrigendum 1, 2006). The IEC technical specification is a comprehensive standard that addresses design, manufacturing, testing, and transportation specific to micro-fuel cells. It prescribes requirements for valves, filling, packaging performance, failure mode analysis, consumer refilling, materials of construction, exterior and exhaust temperature limits, warnings, certification, markings, and manufacturers’ instructions. As revised by the recent addendum, the IEC specification mandates a zero-leak standard as a basis for successfully passing the design-type tests and, thus, is equivalent to the safety standard established for certain non-bulk gas packagings in the HMR. We also propose to limit fuel cell cartridges and systems carried by airline passengers and crew to those marked “APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY” by the manufacturer. This marking is the manufacturer’s certification that the fuel cell cartridges and systems conform to the performance standard established in the revised IEC technical specification.

In addition, in this NPRM, we are proposing to limit the amount of hazardous material that may be contained in each individual fuel cell authorized for transportation in carry-on baggage on board passenger-carrying aircraft. Consistent with the standard adopted for the ICAO Technical Instructions, we propose to limit fuel cells containing liquid fuels to 200 mL (6.76 ounces) of fuel per cartridge, fuel cells containing liquefied gases to 200 mL (6.76 ounces) of fuel per metal cartridge and 120 mL (4 fluid ounces) of fuel per non-metallic fuel cell cartridge, and fuel cells containing solid materials to 200 g (7 ounces) of fuel per cartridge. Also consistent with the ICAO Technical Instructions, each passenger or crew member would be permitted to carry up to two spare cartridges.

To reduce possible releases, we propose to prohibit passengers and crew members from refilling fuel cell cartridges and systems, except to install a spare cartridge. In addition, we propose to limit fuel cell cartridges and systems carried by passengers and crew members to a type and design that will not continue to charge batteries when the device being powered is not in use. Again, these prohibitions are consistent with the specification authorizations for fuel cells adopted under the ICAO Technical Instructions.

VII. Transportation Security Administration

The Department of Homeland Security’s Transportation Security Administration (TSA) is authorized to prescribe security standards for all modes of transportation, including aviation (49 U.S.C. 114(d)). Under this authority, TSA prohibits airline passengers from carrying weapons, explosives, or incendiary devices and has published several interpretative rules to provide guidance on the types of property TSA considers subject to the prohibition (68 FR 7444; 68 FR 9902; 70 FR 9677).

As PHMSA developed this NPRM, we consulted with TSA concerning current security limitations applicable to the carriage of fuel cells by aircraft passengers and crew members and shared with TSA our technical analysis supporting this rulemaking. We understand that TSA is considering whether any additional security measures for fuel cells or fuel cell systems may be appropriate. In any case, this rulemaking would not limit TSA’s authority to address security concerns related to the transportation of fuel cells or fuel cell systems.

On September 26, 2006, TSA imposed a strict limit on liquids, gels, and aerosols an aircraft passenger is permitted to take through a security checkpoint in carry-on baggage. TSA limits these materials to 3-ounce (100 mL) or smaller containers placed in a clear quart-size, zip-top plastic bag. Fuel cell cartridges and systems would be subject to this limitation, notwithstanding any rule adopted in this proceeding.

VIII. Rulemaking Analyses and Notices

A. Statutory/Legal Authority for This Rulemaking

This notice of proposed rulemaking is published under the following statutory authorities:

1. 49 U.S.C. 5103(b) authorizes the Secretary of Transportation to prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce. This NPRM proposes regulations to promote the safe transportation of fuel cells carried by airline passengers and crew members. To this end, as detailed above, PHMSA proposes to limit the types and quantities of fuel cell cartridges and fuel cell systems permitted on passenger aircraft, prescribe specific performance-based design and packaging criteria for these cartridges, and limit the manner in which they may be used during air transportation.

2. Section 5120 of Federal hazardous materials transportation law (49 U.S.C. 5120), authorizes the Secretary of Transportation to participate in the development of international standards for the transportation of hazardous materials and grants the Secretary broad discretion to harmonize the HMR with international standards. Section 5120(c) permits the Secretary to establish more stringent standards for transportation in the United States as necessary in the public interest. The proposals in this NPRM would harmonize the HMR with international requirements for fuel cell systems and cartridges to the extent these are consistent with PHMSA’s safety objectives.

B. Executive Order 12866 and DOT Regulatory Policies and Procedures

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866 and was not reviewed by the Office of Management and Budget. This NPRM is a non-significant rule under the Regulatory Policies and Procedures of the Department of Transportation [44 FR 11034].

Fuel cells are an emerging technology designed to meet the growing demand for alternative energy sources. Fuel cell technology has not yet achieved widespread commercialization, but is being developed for use in mobile phones, laptop computers, and, to a lesser extent, camcorders, digital cameras, and personal digital assistants (“PDAs”). The U.S. Fuel Cell Council found, as a result of its 2006 survey of 181 industry respondents, that sales from 2005 to 2006 of all fuel cell and fuel cell-based systems, of which those designed for portable electronic devices are currently a small part, increased by 7 percent to $353 million, and research and development expenditures and industry employment over the same period increased by 11 and 12 percent to $796 million and 7,074 employees, respectively. The industry projects fuel cells for portable electronic devices will achieve significant market penetration by 2009.

By proposing to authorize their carriage by airline passengers and crew, the regulatory changes addressed in this rulemaking will lift barriers to the commercialization and distribution of fuel cell cartridges for use in personal electronic equipment. The costs associated with this rulemaking proposal primarily relate to the costs for testing fuel cell designs in accordance with the IEC consensus standard. We expect most fuel cell manufacturers will voluntarily comply with the IEC standard as a positive marketing tool.
have tribal implications and does not impose substantial direct compliance costs, the funding and consultation requirements of Executive Order 13175 do not apply.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires an agency to review regulations to assess their impact on small entities, unless the agency determines the rule is not expected to have a significant impact on a substantial number of small entities. The proposed rule will relax regulatory barriers to the transportation of fuel cells used in personal electronic devices and, accordingly, is expected to have a positive impact on small businesses that manufacture, distribute, transport, or use such items. As indicated above, we expect the incremental costs imposed by this NPRM to be minimal. Therefore, I certify that, if adopted, the proposals in this NPRM will not have a significant impact on a substantial number of small entities.

This proposed rule has been developed in accordance with Executive Order 13272 (“Proper Consideration of Small Entities in Agency Rulemaking”) and DOT’s procedures and policies to promote compliance with the Regulatory Flexibility Act to ensure that potential impacts of draft rules on small entities are properly considered.

F. Paperwork Reduction Act

Section 1320.8(d), Title 5, Code of Federal Regulations, requires PHMSA to provide interested members of the public and affected agencies an opportunity to comment on information collection or recordkeeping requirements. This NPRM does not include new information collection or recordkeeping requirements.

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 contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

H. Unfunded Mandates Reform Act

This proposed rule does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of $120.7 million or more to either State, local or tribal governments, in the aggregate, or to the private sector, and is the least burdensome alternative that achieves the objective of the rule.

I. Environmental Assessment

The National Environmental Policy Act (NEPA), §§4321–4375, requires that federal agencies analyze proposed actions to determine whether the action will have a significant impact on the human environment. The Council on Environmental Quality (CEQ) regulations order federal agencies to conduct an environmental review considering (1) the need for the proposed action, (2) alternatives to the proposed action, (3) probable environmental impacts of the proposed action and alternatives, and (4) the agencies and persons consulted during the consideration process. 40 CFR 1508.9(b).

Purpose and Need

Fuel cells are an emerging energy technology designed to replace, augment, or recharge existing battery sources. The fuel cell designs currently under development are powered by one of a variety of hazardous materials fuels, including methanol and other types of flammable liquids, butane flammable gas, dangerous when wet hydrogen in metal hydride, and corrosive liquids containing formic acid or borohydride materials.

The HMR and the ICAO Technical Instructions already include provisions for transporting fuel cell systems and fuel cell cartridges containing flammable liquid as cargo on board aircraft. See 49 CFR 173.230, and Special Provision 146 of the HMR, and Packing Instruction 313 of the 2007–2008 edition of the ICAO Technical Instructions. In addition, the ICAO also adopted (in Section 8.1.1.2(e)) provisions that will permit these devices to be fueled by formic acid or butane, and transported in carry-on baggage on board passenger-carrying aircraft under certain conditions. This rulemaking proposes to harmonize the HMR with these additional ICAO requirements. To limit both the safety and environmental consequences should an incident occur, this rulemaking also proposes restrictions on the fuel cell system configurations and limits on the amount of hazardous material contained in each fuel cell cartridge. There are no significant environmental impacts associated with this NPRM.

Alternatives

The alternatives PHMSA is considering are as follows:

No action—If no action is taken, passengers would not be permitted to
transport personal electronic devices powered by fuel cell technology in carry-on baggage on domestic flights. The industry views such authorization as key to continued development and use of this technology. Without explicit action to permit airline passengers to carry fuel cell powered devices, technological development could well be delayed. This action is not recommended.

Actions Proposed in this NPRM—The actions proposed in this NPRM would harmonize the HMR requirements for fuel cells with those prescribed in the international regulations. These proposed amendments are intended to update, clarify, and provide relief from certain existing regulatory requirements to promote safer transportation practices, finalize outstanding petitions for rulemaking, facilitate international commerce, and make the regulations easier to understand. This action is recommended.

To Regulate All Fuel Cells in the Manner Prescribed in the IEC Standard—In addition to the materials covered by the proposed rule, the IEC standard covers fuel cells containing solid Division 4.3 (dangerous when wet) materials. As explained above, this design was not included in the ICAO standard to which we are proposing to harmonize in this rulemaking. PHMSA believes those fuel cell designs that have not been included in the ICAO standards warrant further safety review and that adopting a standard inconsistent with the international standard cannot be justified at this time.

Analysis of Environmental Impacts

We regulate hazardous materials transported by aircraft, vessel, rail, and highway. The potential for environmental damage or contamination exists when packages of hazardous materials are involved in accidents or en route incidents resulting from cargo shifts, valve failures, package failures, or loading, unloading, or handling problems. The ecosystems that could be affected by a release include air, water, soil, and ecological resources (for example, wildlife habitats). The adverse environmental impacts associated with releases of most hazardous materials are short-term impacts that can be greatly reduced or eliminated through prompt clean up of the accident scene. Most hazardous materials are not transported in quantities sufficient to cause significant, long-term environmental damage if they are released.

The hazardous material regulatory system is a management system that is prevention oriented and focused on identifying a hazard and reducing the probability and quantity of a hazardous material release. Hazardous materials are categorized by hazard analysis and experience into hazard classes and packing groups. The regulations require each shipper to classify a material in accordance with these hazard classes and packing groups; the process of classifying a hazardous material is itself a form of hazard analysis. Further, the regulations require the shipper to communicate the material’s hazards through use of the hazard class, packing group, and proper shipping name on the shipping paper, labels and markings on packages, and placards on transport vehicles. Thus the shipping paper, labels, markings, and placards communicate the most significant findings of the shipper’s hazard analysis. Excluding compressed gases, radioactive materials, and explosives, which all have their own packaging strength criteria, a hazardous material is assigned to one of three packing groups based upon its degree of hazard—from a high hazard, Packing Group I, to a low hazard, Packing Group III material—except gases and certain other materials with high integrity packagings. The HMR are designed to ensure the quality, damage resistance, and performance standards of the packaging for each hazardous material are appropriate for the hazards of the material transported.

We have reviewed the risks associated with transporting fuel cell systems and cartridges. The amount of hazardous material contained within the fuel cells or cartridges to which this NPRM applies is limited to 200 mL or 200 g by this proposal. Even if a large number of these devices were compromised and their hazardous materials contents released, the environmental impact of the release would not be significant. We have determined there will be no significant environmental impacts associated with this proposed rule.

Consultation and Public Comment

As discussed above, PHMSA consulted with the IEC and many companies representing the fuel cell industry here and abroad to prepare for U.N. Dangerous Goods Council meetings on these devices. PHMSA also participated in the technical review of papers prepared by these companies explaining the potential risks and measures taken in the IEC standard to reduce risks for each fuel the IEC standard states may be present in a fuel cell. In addition, also as discussed earlier, PHMSA has consulted extensively with the U.S. Fuel Council, Medis Technologies, Ltd., and Millenium Cell, Inc., in response to their petitions for rulemaking, numbered P–1475 and P–1483, to permit passengers and crew to transport in carry-on baggage on board passenger aircraft fuel cells containing flammable liquid, formic acid, butane, and Class 8 borohydride materials for use in portable electronic devices. PHMSA has also received a letter signed by approximately 18 companies supporting the proposed regulation of fuel cells in the HMR.

We invite interested persons to submit comments on the potential environmental, safety, and other impacts of the proposals subject to federal regulation in this NPRM.

J. Privacy Act

Anyone is able to search the electronic form of any written communications and comments received into any of our dockets by the name of the individual submitting the document (or signing the document, 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), which may also be found at http://dms.dot.gov, and on and after September 28, 2007, may be found at http://www.regulations.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 173

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

49 CFR Part 175

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

In consideration of the foregoing, we propose to amend 49 CFR Chapter I as follows:

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

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

2. In § 171.7, in paragraph (a)(3), in
the Table, an entry for the International
Electrotechnical Commission is added
in appropriate alphabetical order to read
as follows:

<table>
<thead>
<tr>
<th>Source and name of material</th>
<th>49 CFR reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Electrotechnical Commission (IEC) 3, rue de Varembe, P.O. Box 131, CH—1211, GENEVA 20, Switzerland: Fuel cell technologies—Part 6–1: Micro fuel cell power systems—Safety, IEC/PAS 62282–6–1 First Edition, with Technical Corrigendum 1, 2006</td>
<td>§ 175.10</td>
</tr>
</tbody>
</table>

PART 175—CARRIAGE BY AIRCRAFT

5. The authority citation for part 175 continues to read as follows:


6. In § 175.10, paragraph (a)(18) is added to read as follows:

§ 175.10 Exceptions for passengers, crew members, and air operators.

(a) * * *

(18) Portable electronic devices (for example, cameras, cellular phones, laptop computers, and camcorders) powered by fuel cell systems, and not more than two spare fuel cartridges per passenger or crew member, when transported in carry-on baggage by aircraft under the following conditions:

(i) Fuel cell cartridges may contain only Class 3 flammable liquids (including methanol), Class 8 formic acid, Class 8 borohydride materials, or Division 2.1 butane;

(ii) The maximum quantity of fuel in any fuel cell cartridge may not exceed:

(A) 200 mL (6.76 ounces) for liquids,

(B) 120 mL (4 fluid ounces) for liquefied gases in non-metallic fuel cell cartridges, or 200 mL for metal fuel cell cartridges;

(C) 200 g (7 ounces) for solids;

(iii) No more than two spare fuel cell cartridges may be carried by a passenger;

(iv) Fuel cell systems containing fuel and fuel cell cartridges including spare cartridges are permitted in carry-on baggage only;

(v) Fuel cell cartridges may not be refillable by the user. Refueling of fuel cell systems is not permitted except that the installation of a spare cartridge is allowed. Fuel cell cartridges that are used to refill fuel cell systems but that are not designed or intended to remain installed (fuel cell refills) in a portable electronic device are not permitted;

(vi) Fuel cell systems and fuel cell cartridges must conform to IEC/PAS 62282–6–1 (IBR; see § 171.7 of this subchapter);

(vii) Interaction between fuel cells and integrated batteries in a device must conform to IEC/PAS 62282–6–1. Fuel cell systems for which the sole function is to charge a battery in the device are not permitted;

(viii) Fuel cell systems must be of a type that will not charge batteries when the portable electronic device is not in use; and

(ix) Each fuel cell cartridge and system that conforms to the requirements in this paragraph (a)(18) must be durably marked by the manufacturer with the wording: “APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY” to certify that the fuel cell cartridge or system meets the specifications in IEC/PAS 62282–6–1 and with the maximum quantity and type of fuel contained in the cartridge or system.

* * * * *

Issued in Washington, DC, on September 14, 2007, under the authority delegated in 49 CFR part 106.

Theodore L. Willke,
Associate Administrator for Hazardous Materials Safety.
[FR Doc. E7–18532 Filed 9–19–07; 8:45 am]
BILLING CODE 4910–60–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AV19

Endangered and Threatened Wildlife and Plants; 12-Month Petition Finding and Proposed Rule To List the Polar Bear (Ursus Maritimus) as Threatened Throughout Its Range

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Reopening of comment period; notice of availability of new information.