

## **SPECIAL PERMITS IDENTIFIED FOR FURTHER ASSESSMENT REVIEW PLAN**

### **Background**

Federal hazardous materials transportation law (Federal hazmat law; 49 U.S.C. 5101 *et seq.*) authorizes the Department of Transportation to issue variances – termed special permits – from the Hazardous Materials Regulations (HMR) in a way that achieves a safety level at least equal to the safety level required under Federal hazmat law or consistent with the public interest and Federal hazmat law, if a required safety level does not exist. That authority is delegated to the Pipeline and Hazardous Materials Safety Administration (PHMSA).

PHMSA's procedures for applying for a special permit are set forth in 49 CFR, Part 107, Subpart B. An application must include the following information: (1) a citation of the specific regulation or regulations from which the applicant seeks relief; (2) the hazardous materials planned for transportation under the special permit; (3) the mode or modes of transportation that will be utilized; (4) a detailed description of the operation for which the special permit is requested (e.g., alternative ways to qualify packagings for hazardous materials transportation; alternative packagings; alternative hazard communication; alternative stowage or segregation plans; or other alternative procedures or activities) and written descriptions, drawings, flow charts, plans, and supporting documentation; (5) the time period for which the special permit is requested; (6) a statement outlining the reasons for requesting the special permit; and (7) a description of the packaging that will be used under the special permit.

In addition, the applicant must demonstrate that a special permit achieves a level of safety at least equal to that required by regulation or, if the required safety level does not exist, that the special permit is consistent with the public interest. At a minimum, the application must include information on shipping and incident history and experience relating to the application; identification of increased risks to safety or property that may result if the special permit is granted and a description of measures that will be taken to mitigate that risk; and analyses, data, or test results demonstrating that the level of safety expected under the special permit is equal to the level of safety achieved by the regulation from which the applicant seeks relief.

PHMSA independently verifies and evaluates the information provided in the special permit application to determine that the special permit will achieve an equivalent level of safety to that provided by the HMR or, if not, that the special permit is consistent with the public interest. This review includes a technical analysis of the alternative proposed in the application, an evaluation of the past compliance history of the applicant (including incident history, enforcement actions, and the like), and coordination with the Federal Motor Carrier Administration (FMCSA), Federal Railroad Administration (FRA), Federal Aviation Administration (FAA), and/or the U.S. Coast Guard to gather additional information relevant to the application and ensure the agencies' concurrence with PHMSA's conclusions. Before making a decision on a special permit, PHMSA also

publishes a notice of the application in the *Federal Register* and asks for comments from the public as to whether it should be granted or denied.

### **Equivalent Level of Safety**

Both the DOT Office of the Inspector General and the House Transportation and Infrastructure (T&I) Committee have suggested that PHMSA needs to strengthen its oversight of the Special Permits Program to ensure that special permits provide an equivalent level of safety to that provided under the HMR. The concerns stem from the OIG's review of four active special permits authorizing the transportation of explosives and other materials on "special use bulk explosives vehicles." The OIG and House T&I Committee criticized the process under which these special permits were evaluated, suggesting that PHMSA did not adequately evaluate whether the operations authorized under the special permits provide an equivalent level of safety to the HMR requirements. Both the OIG and the House T&I Committee noted that applications and supporting documentation for many special permits is missing or never existed and, thus, that there is no evidence of supporting documentation to indicate that the agency completed an independent evaluation of the information provided by special permits applicants.

As indicated above, PHMSA independently assesses the information provided by applicants to determine whether a special permit achieves an equivalent level of safety as required under the HMR. However, this internal evaluation was not standardized as to process or documentation. On September 4, 2009, PHMSA completed a review of the criteria, policy, and procedures used to make the statutorily mandated "equivalent level of safety" determinations and developed an enhanced safety evaluation form that clearly documents the justification for decisions to grant or deny applications.

To ensure that operations authorized under special permits provide an equivalent level of safety to that provided under the HMR, PHMSA is reviewing all currently active special permits. The focus of this review is to identify special permits that should be re-evaluated because of safety concerns and to identify those for which the prior safety justification requires further analysis and review.

Under this plan, teams of specialists from the PHMSA Offices of Hazardous Materials Technology (PHH-20) and Special Permits and Approvals (PHH-30) will review all currently active special permits and identify those that should be re-evaluated because of safety concerns. The review will focus on high-risk operations, based on the hazardous materials involved and/or the mode of transportation utilized.

### **Staffing**

For each project, PHH-20 will assign a senior subject matter expert to "mentor" the project and at least one additional staff member. PHH-30 will assign at least one special permits specialist to each project. As necessary, each project will also include staff from the Federal Aviation Administration, Federal Railroad Administration, and Federal Motor

Carrier Safety Administration. Additional staffing will be determined as the review progresses.

## **Review Plan**

### Stage 1

PHH-20 completed a preliminary review of all active special permits on January 15, 2010. The review identified the following types of special permits that would result in a high-consequence accident as a result of a packaging failure or material release:

- (1) Special permits authorizing the transportation of Class 1 materials.
- (2) Special permits authorizing the transportation of Class 7 materials.
- (3) Special permits authorizing the transportation of bulk packaging or cylinders containing poison-inhalation-hazard (PIH) materials (Division 2.3 and Division 6.1., PG I, Hazard Zone A or B).
- (4) Special permits for which the HMIS data includes incident reports involving special permit operations.

### Stage 2

PHH-20 established review teams for each special permit category identified in Stage 1. The review teams will examine and evaluate the safety evaluation conducted for each special permit. If the review team concurs in the original conclusion that the safety permit provides an equivalent level of safety as the HMR, no further action will be taken.

The review team evaluating the special permits that cover Class 7 materials has completed its work. The team concluded that the safety evaluations conducted at the time the special permits were issued accurately address the risks associated with the transportation of these materials and that the operations authorized under the special permits provide an equivalent level of safety as the HMR. (See Appendix A.)

The team evaluating special permit incident histories has completed its work. The team identified several special permits that need in-depth evaluation. These special permits involve transportation of hazardous materials in composite cargo tanks and intermediate bulk containers (IBCs); review and evaluation of these special permits is ongoing. The team will review all of the identified special permits by September 1, 2010. (See Appendix B.)

The Stage 2 review will proceed according to the following schedule:

Schedule

<b>Task</b>	<b>Due Date</b>	<b>Status</b>
Preliminary review of all active special permits	1/15/10	Completed
Review Class 7 special permits	1/11/10	Completed
Identify special permits with problematic safety histories	2/1/10	Completed
Review Class 1 special permits	3/1/10	Ongoing
Review PIH special permits	3/1/10	Ongoing
Review composite cargo tank special permits	5/1/10	Ongoing
Review IBC special permits	7/1/10	Ongoing
Review cylinder special permits	8/1/10	Ongoing
Review remaining special permits with problematic safety histories	9/1/10	Ongoing

Note that active special permits are also undergoing review to identify those that should be incorporated into the HMR. That review will include identification of special permits where the prior safety justification requires further analysis and review. In addition, as special permits come up for renewal, PHH-20 will evaluate the original safety evaluation to ensure that the special permit provides an equivalent level of safety as the HMR. Thus, all active special permits will undergo a safety review, either the priority reviews identified in this plan, during the renewal phase, or as part of the broader review to identify special permits for adoption into the HMR. See the schedule in the “Plan for Converting Special Permits into Regulations of General Applicability.”

Stage 3

This plan anticipates that the team will identify a small number of special permits for which its safety analysis will suggest that the special permit should be modified to ensure that it provides an equivalent level of safety as the HMR. The team will refer the special permits, with specific recommendations on necessary modifications, to PHH-30 and PHMSA’s Office of the Chief Counsel (PHC). For special permits with expiration dates in the 2010-2011 time period, necessary modifications will be handled as part of the renewal process. For special permits with expiration dates in 2012 or later, PHH-30, in consultation with PHC, will initiate action to effect the modifications recommended by the team. A specific schedule for modifying the special permits will be developed by PHH-30, in consultation with PHC, once the team completes its review and forwards its recommendations.

**Appendix A**  
**Safety Evaluation of Special Permits for Class 7 Materials**

SP	Cargo Air	Hwy	Pass Air	Rail	Cargo	Ferry	Comments	Hwy Trans	Regs Affected
12401							Clerical error - Not Class 7		
9649	N	Y	N	Y	Y	N	<p>Department of Defense Depleted Uranium Munitions. Just completed multi-year renewal, reconsideration, appeal process. Doubtful any changes could be made in next decade due to vast quantities, long lead times, and world-wide placement of munitions. SP and CAA needed for international transport as Class 1 vice Class 7.</p> <p>Documented, current safety evaluation. This is likely a very long time permit (too specific/complicated for incorporation into the regulations and long term need)</p>		173.421(a)(2) 173.421(a)(4) 173.422(a) 173.426(b) 173.426(c) 173.426(d) 172.203(d)(3) 172.203(d)(5) 172.300(a) 172.301(d) 172.310(a) 172.310(b) 172.310(c) 172.403(a) 172.403(b) 172.403(c) 172.403(f) 172.403(g)(2) 172.403(g)(3) 172.406(e)
12469	N	Y	N	N	N	N	<p>Alternative testing for seven cargo tank motor vehicles.</p> <p>Engineering (Phil Olson) did safety evaluation. Permit will be needed for as long as cargo tanks are in service. Revision 5 of permit issued in 2006 and is valid through 2010.</p>		180.407(c) 180.407(d)(ix) 180.407(e)

14455	N	Y	N	Y	Y	N	Permits transport of nuclear power plant steam generators. Seldom used. Expires 12/31/12. Regulation wording drafted for HM-250, Proposal submitted to IAEA.  Documented, current safety evaluation. Permit for general transport of large objects issued in 2007 and will expire in 2012. Seldom used and is being incorporated into the regulations.	173.403, 173.427(b)(1) 173.465(c) 173.465(d)
13958	N	Y	N	Y	N	N	Permits LSA-II material to be transported in non-specification packaging (wrapped up like a burrito or in covered dump trucks).  Documented, current safety case. Revision 1 of permit issued in 2007 and valid until 2012. Permit will be needed until DOE site is completed cleaned up (long term but not forever).	173.427(b)(1)
14589	N	Y	N	Y	N	N	One-way, one-way transport of 3 nuclear power plant large components from Florida to Memphis. Transport complete. Expires 1/31/10.	173.403, 173.427(b)(1) 173.465(c) 173.465(d)
14589							Repeat of above	
7060	Y	N	N	N	N	N	Institutes a radiation protection program when aircraft exceeds Transport Index of 200 or separation distance cannot be achieved. Used exclusively for air transport of radiopharmaceuticals.  Documented, current safety evaluation. This is likely a very long time permit (too specific/complicated for incorporation into the regulations and long term need)	172.203(a) 175.700(b)(2)(ii) 175.702(b)
8308	N	Y	N	N	N	N	Institutes a radiation protection program when vehicle exceeds Transport Index of 50 or separation distance cannot be achieved. Used exclusively by companies other than FedEx for highway transport of radiopharmaceuticals.  Documented, current safety evaluation. This is likely a very long time permit (too specific/complicated for incorporation into the regulations and long term need)	172.203(a) 177.842(a) 177.842(b)

10045	N	Y	N	N	N	N	<p>Institutes a radiation protection program when vehicle exceeds Transport Index of 50 or separation distance cannot be achieved. Used exclusively by FedEx for highway transport of radiopharmaceuticals.</p> <p>Documented, current safety evaluation. This is likely a very long time permit (too specific/complicated for incorporation into the regulations and long term need)</p>	<p>172.203(a) 173.447(a) 177.842(a) 177.842(b)</p>
10656	N	Y	N	Y	N	N	<p>Conference of Radiation Control Program Directors SP for transportation of scrap metal exhibiting radioactivity. Used when a bulk shipment of scrap metal triggers radiation alarm at steel or metal plant. Expires 12/10.</p> <p>Documented, current safety evaluation. This is likely a very long time permit (too specific/complicated for incorporation into the regulations and long term need)</p>	<p>Part 172 Subparts C, D, E, F, G, H Part 173 Subparts B, I 173.22(a)(1) Part 174 Subpart K 177.842</p>
11075	N	N	N	Y	N	N	<p>Rail transport of low level contaminated soil from Chicago to Clive, Utah (Kerr McGee permit).</p> <p>Documented, current safety evaluation. This is permit needed until site is cleaned up (too specific/complicated for incorporation into the regulations and long term need).</p>	<p>171.15(b)(2) 171.16 172.202 172.203(d) 172.602 174.24 Part 172 Subparts D, F 174.59 173.22(a)(1) 173.427 173.443(d) 174.715 174.750</p>
11406	N	Y	N	Y	N	N	<p>Conference of Radiation Control Program Directors SP for transportation of landfill material exhibiting radioactivity. Used when a bulk shipment of trash triggers radiation alarm at landfill. Expires 4/10.</p> <p>Documented, current safety evaluation. This is likely a very long time permit (too specific/complicated for incorporation into the regulations and long term need).</p>	<p>Part 172 Subparts C, D, E, F, G, H Part 173 Subparts B, I 173.22(a)(1) Part 174 Subpart K 177.842</p>



12800	N	N	N	Y	N	N	<p>Transport of LSA material in closed top gondola rail cars from Fernald site in Ohio to Clive, UT. Expires 5/10</p> <p>Documented, current safety evaluation. Permit needed until site is completely cleaned up (too specific/complicated for incorporation into the regulations).</p>	<p>172.302(a)(1) 172.310(a) 172.310(b) 172.310(c) 173.411(b)(2)</p>
13963	N	Y	N	Y	Y	N	<p>Permits transport of nuclear power plant reactor vessel heads.</p> <p>Documented, current safety evaluation. Permit for general transport of large objects issued in 2007 and will expire in 2010. Seldom used and is being incorporated into the regulations.</p>	<p>173.403, 173.427(b)(1) 173.465(c) 173.465(d)</p>
14096	N	Y	N	N	N	N	<p>SP for transport of uranium hexafluoride contaminated with technetium from one USEC plant to another.</p> <p>Documented, current safety evaluation. Do not see need for another renewal period (cylinders should have been moved, emptied by then).</p>	<p>173.420</p>
14283	N	Y	N	Y	N	N	<p>Authorizes uranium mill tailing relocation. Transport from Moab, UT to Crescent Junction, UT. DOE program.</p> <p>Documented, current safety evaluation. Permit needed until site is completely cleaned up (too specific/complicated for incorporation into the regulations).</p>	<p>172.302(a) 172.310(b) 172.310(c) 172.331 172.332 172.403 173.427(b) 173.443(c) 173.443(d) 174.59 174.715(a) 177.843(a) 177.843(b)</p>
14287	Y	Y	N	N	Y	N	<p>One time disposal of Troxler gauges with uncertified capsules. Four organizations have party status. Expire 1/10-5/12</p> <p>Documented, current safety evaluation. Do not expect renewal of permit.</p>	<p>173.469 173.476(a)</p>

14329	Y	Y	N	N	N	N	One time disposal of CPN gauges with uncertified capsules. Three organizations have party status. Expire 1/10-12/11.  Documented, current safety evaluation. Do not expect renewal of permit.	173.469 173.476(a)
14568	Y	Y	N	N	Y	N	DOD CPN Gauges. Expires 1/10. Renewal recently denied.	173.469 173.476(a)
14657	Y	Y	N	N	N	N	SP for transition from Specification Package to Performance Package. Expires 8/10. Applicant has stated they will need renewal to 4/11.  Documented, current safety evaluation. Terminate as soon as transitioned to new package design.	173.416(c)
14663	N	Y	N	N	N	N	SP for transition from Specification Package to Performance Package. Transport completed and termination requested.  Documented, current safety evaluation available.	173.417(c)
14728	N	Y	N	N	N	N	SP for transition from Specification Package to Performance Package. Expires 9/10.  Documented, current safety evaluation. Terminate as soon as transitioned to new package design.	173.416(c)
14766	N	Y	N	N	N	N	SP for transition from Specification Package to Performance Package. Expires 6/10. Applicant has stated they will need renewal to 4/13.  Documented, current safety evaluation. Terminate as soon as transitioned to new package design.	173.416(c)
14767	N	Y	N	N	N	N	Documented, current safety evaluation. Terminate as soon as transitioned to new package design.  No renewal – one time shipment	173.420(a) 173.420(b) 173.420(c)
14772	N	Y	N	N	N	N	SP for transition from older NRC certified packages to current NRC certified packages. Five organizations have party status. Expire 10/10-12/10.  Documented, current safety evaluation. Terminate as soon as transitioned to new package design.	173.416(c) 173.417(c)

14773	N	Y	N	N	N	N	<p>SP for transition from Specification Package to Performance Package. Expires 3/10. Applicant has stated they will need renewal to 6/10.</p> <p>Documented, current safety evaluation. Terminate as soon as transitioned to new package design.</p>	173.416(c) 173.417(c)
14797	N	Y	N	N	N	N	<p>SP for transition from Specification Package to Performance Package. Expires 2/10. Applicant has requested renewal to 5/10.</p> <p>Documented, current safety evaluation. Terminate as soon as transitioned to new package design.</p>	173.416(c) 173.417(c)
14096	N	Y	N	N	N	N	<p>SP for transport of uranium hexafluoride contaminated with technetium from one USEC plant to another.</p> <p>Documented, current safety evaluation. Do not see need for another renewal period (cylinders should have been moved, emptied by then).</p>	173.420

**APPENDIX B**  
**IDENTIFICATION OF SPECIAL PERMITS**  
**REQUIRING FURTHER ASSESSMENT**

A review of the HMIS incident data base for the last 10 years found the following special permits listed identified multiple times on the DOT 5800 form. The highlighted special permits are currently under review to determine whether they should be modified or terminated; the remaining special permits listed below will be evaluated by September 1, 2010.

<b>SP Number</b>	<b>Number of Incidents</b>	<b>Summary of Special Permit</b>
7616	<b>56</b>	<b>Authorizes the carrier to accept shipping paper information via telephone (voice communications) and authorizes a variance in the certification requirement, when transmitted via telephonically or through electronic data interchange.</b>
8249	7	
8308	8	
8723	9	
9168	5	
9275	<b>14</b>	<b>Authorizes the transportation in commerce of certain limited quantities of liquids and solids containing ethyl alcohol and exempts these shipments from certain provisions of 49 CFR.</b>
9408	8	
10239	7	
10517	<b>57</b>	<b>Authorizes the transportation in commerce of those materials authorized for transportation in DOT Specification 57 portable tanks and UN31A Intermediate Bulk Containers (IBCs) which are retested at least once every five years.</b>
10878	8	
10915	7	
11156	7	
11537	5	
11624	6	
11903	<b>19</b>	<b>Authorizes the manufacture, marking, sale, and use of non-DOT specification cargo tank motor vehicles constructed from glass fiber reinforced plastics (GFRP).</b>
12412	<b>14</b>	<b>Authorizes the discharge of liquid hazardous materials from certain UN Intermediate Bulk Containers (IBCs) and DOT Specification 57 portable tanks with out removing them from the vehicles on which they are transported.</b>