

October 26, 2005



U.S. Department
of Transportation

400 Seventh Street, S.W.
Washington, D.C. 20590

**Pipeline and
Hazardous Materials
Safety Administration**

DOT-SP 8451
(THIRTY-FIRST REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of not more than 25 grams of solid explosive or pyrotechnic material, including waste containing explosives that has energy density not significantly greater than that of pentaerythritol tetranitrate, classed as Division 1.4E, when packed in a special shipping container. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.320 in that the EX number need not be marked on the package, §§ 173.54(a), 173.56(b), 173.57, and 173.58 in that a new explosive need not be examined and tested in accordance with the requirements of these sections, and § 173.60 in that standard explosive packagings are not authorized.
5. BASIS: This special permit is based on the application of Department of Energy's application dated February 6, 2004, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Articles, explosive, n.o.s. (*) ¹	1.4E	UN0471	II

* Technical name of material being shipped

1 - Only solid explosives are authorized.

7. SAFETY CONTROL MEASURES:

a. Inside packaging must be:

(1) A 4-inch X 14-inch Schedule 80 seamless steel pipe nipple closed at both ends with 4-inch diameter forged steel end caps, 3,000 psi per ASTM 105, or other caps which have been shown by test to contain the explosive effect of 25 grams of PETN, or

(2) A 6-inch X 12 to 14-inch Schedule 80 seamless steel pipe nipple closed at both ends with 6-inch diameter malleable iron end caps with a minimum strength of 250 psi, or other caps which have been shown by test to contain the explosive effect of 25 grams of PETN.

For pipe nipples described in paragraphs a.(1) and (2), the threads must be cut so that the end caps can be screwed on a minimum of 5 threads by hand, but the caps must be tightened with a wrench.

(3) The device described in "Handling Procedure and Design of a Shipping Container for Transporting Small Samples of Dry Primary Explosives" by Harold K.H. Bartles, presented at the 12th Symposium of Explosives and Pyrotechnics on March 13, 1984 in San Diego, California, USA, which is attached to Schlumberger's application to modify the special permit dated July 7, 1988 and supplemental letter dated July 2, 1992.

(4) The packaging identified as "Model LD-2250" described in "Shipping Containers for Small Samples of High Explosives" by Richard A. Hildner and Manual J. Urizar, Los Alamos National Laboratory Report No. LA-9107-MS/UC-71, Hercules Incorporated's application dated January 14, 1993. The packaging identified as

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"Model LD-1000" in this same Laboratory Report may only be used if the net mass of explosives contained within does not exceed 15 grams.

b. The energetic materials must be sealed in a leak-proof receptacle centered internally in the pipe or wrapped with cushioning material to keep the energetic material away from the side walls and ends of the capped pipe container. The devices described in paragraph 7.a. must be in:

(1) A cushioned UN 4G fiberboard box, 4C wooden box, 4D plywood box;

(2) A 4A steel box, 4B aluminum box, 4N metal (other than steel or aluminum) box;

(3) A 1A2 removable head steel drum, 1B2 removable head aluminum drum, or 1N2 removable head metal (other than steel or aluminum) drum; or

(4) A container that meets the requirements of the Institute of Makers of Explosives' Safety Library Publication No. 22.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. For purposes of domestic transportation by air in accordance with § 171.11, this document also constitutes an special permit to the International Civil Aviation Organization's Technical Instructions for the Safe Transportation of Dangerous Goods in accordance with Part 1;1.1.1. This does not constitute authority to offer hazardous materials for international transportation.

d. Packagings permanently marked 'DOT-E 8451', prior to October 1, 2006 may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packagings marked on or after October 1, 2006 must be marked 'DOT-SP 8451'.

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- e. Shipping papers displaying 'DOT-E 8451' may continue to be used until October 1, 2006, provided the special permit remains valid.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo only aircraft.
10. MODAL REQUIREMENTS: A current copy of the special permit must be carried aboard each aircraft or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by 49 CFR 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8 who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

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Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term 'exemption' to 'special permit' and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: sln