

February 28, 2013



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue S.E.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 8554  
(TWENTY-FIFTH 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 certain Division 1.5D explosives, and/or Division 5.1 oxidizers in the bulk motor vehicles described in Paragraph 7. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in support of this special permit considered only the hazards and risks associated with transportation in commerce.
  - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Hazardous Material Table Column (8C) and § 173.62 in that Division 1.5D explosives may not be transported in bulk packagings, §§ 173.240 and 173.242 in that alternative packaging is authorized, §§ 176.83, 176.415 and 177.848(d) in that Division 1.5D may not be transported with Division 5.1 oxidizers and Class 8 liquids and § 177.835(a) in that the engine may remain running for certain operations.
5. BASIS: This special permit is based on the responses to the Pipeline and Hazardous Materials Safety Administration's (PHMSA) show cause letter issued under § 107.121 initiated on August 14, 2008 and information from the Institute of Makers of Explosives dated January 16, 2013.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Ammonium Nitrate-Fuel Oil Mixtures <i>containing only prilled ammonium nitrate and fuel oil.</i>	1.5D	NA0331	II
Ammonium Nitrate, <i>with not more than 0.2 percent of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance.</i>	5.1	UN1942	III
Explosive, Blasting, type B or Agent blasting, Type B	1.5D	UN0331	II
Explosive, blasting type E or Agent blasting, Type E	1.5D	UN0332	II
Hypochlorite solution	8	UN1791	II
Ammonium nitrate emulsion or Ammonium nitrate suspension or Ammonium nitrate gel, <i>intermediate for blasting explosives</i>	5.1	UN3375	II
Oxidizing liquid, n.o.s. *	5.1	UN3139	II
Oxidizing solid, n.o.s.*	5.1	UN1479	III

\* These oxidizing substances may not meet the definition for UN3375 Ammonium nitrate emulsion, suspension or gels as given in 49 CFR Section 172.102(c) Special Provision 147.

**NOTE:** Other products classed as Blasting explosives or oxidizing substance, liquid must be specifically identified to, and acknowledged in writing by, the Office of Hazardous Materials Special Permits and Approvals (OHMSPA) prior to the first shipment.

7. SAFETY CONTROL MEASURES:

- a. Pick-up tank truck shown on drawing D-10052 (5/3/73) and described on Specification Sheet dated 7/19/73.
- b. Pump truck shown on drawing SW 80 MC 17 (2/29/80).
- c. Pump truck shown on drawing PRDL-5-3424 (8/1/79).
- d. Tank trailer shown on drawing UND 173801 M-1 (10/12/64), UND 173801 M-3 (10/16/64) UND 173801 M-4 (10/16/64), and A 670 E3161 (11/29/55).
- e. DOT Specification 406, 407 and 412 cargo tanks and DOT Specification MC 306, MC 307 and MC 312 cargo tanks. These tanks are not required to have internal self-closing shut-off valves as required by §§ 178.341-5, 178.342-5 and 178.343-5.
- f. Cargo tanks identified in E. I. Dupont's letter dated August 21, 1984 shown on drawings PRDL-5-3764, PRDL-5-3745, PRDL-5-3748 and PRDL-5-3749.
- g. Non-DOT specification cargo tanks manufactured prior to May 11, 2004 with the following serial/vehicle numbers: TK900183-5016-1; IM2AA05YXLW004862; 1TK997339-1368; 1HTZR00076HA44348; TK900183-5016-2; YXD02114-517306; TK902063-6455; and 1TK997340-1370.
- h. Other motor vehicles specifically identified to, and acknowledged in writing by, the OHMSPA prior to the first shipment are also authorized.
- i. The following packagings are authorized for the Class 8 hazardous materials:
  - (i) Non-specification metal-plastic composite containers shown in ETI Drawing No. F-4752 (Revision 1) which is suitable for the transportation of UN1791, Packing Group II liquids. Drawing is on file with OHMSPA.
  - (ii) Non-specification metal containers of similar design which have been authorized in writing by the Associate Administrator for Hazardous Materials Safety prior to first shipment may also be used.

February 28, 2013

(iii) The containers must have a net volumetric capacity of not more than 430 liters (111 gallons) and must be permanently mounted in the motor vehicle cargo area. The container may not have a common wall with other compartments or tanks containing Division 1.5 explosive materials or Division 5.1 liquid oxidizing materials.

j. Driver Qualification and Training Program Audits. By July 1, 2010, and annually thereafter the special permit grantee must audit its program to validate the qualifications and training of the persons who operate the vehicles authorized under the terms of the special permit. The records of the audit must be maintained for one year or until the next annual audit. The audit must ensure:

(i) Each driver holds a Commercial Driver's License and appropriate endorsements, as required by 49 CFR Part 383, and meets the qualification requirements in 49 CFR Part 391.

(ii) Each driver has received current training as required by 49 CFR part 172, subpart H, and 49 CFR §§ 177.800 and 177.816. This training must specifically include the terms and conditions of the special permit(s); design and operational characteristics of the vehicles authorized under these special permits; methods of defensive driving and vehicle control to avoid accidents (including roll-overs) and how to recover control in the event the wheels leave the paved surface of the road; successful road tests in a vehicle similar to the one they will operate prior to being authorized to operate a vehicle under the terms of this special permit and emergency response procedures including information necessary to communicate to responders in the event of an incident. Training records must be maintained as required by 49 CFR part 172, Subpart H.

k. Training after an accident. Beginning July 1, 2010, a driver of a vehicle operated under the terms of this special permit that is involved in a "preventable" accident, as described in 49 CFR Part 385, Appendix A, must be retrained in accordance with the applicable provisions of paragraph 7.j.(ii) above prior to resuming operations of a vehicle operated under the terms of this special permit. Note that if the vehicle is not disabled as a result of the preventable accident, the driver may complete the assigned movement for the vehicle.

1. Vehicle Inspections.

(i) By July 1, 2010, and annually thereafter the special permit grantee must perform an audit of its program for vehicle inspections to ensure that the requirements for daily and periodic inspections set forth in 49 CFR Part 396 are properly performed and recorded. A record of the audit must be maintained for a minimum of one year or until the next annual audit.

## (ii) Tire Inspections

(A) The grantee must ensure that tires installed on a vehicle authorized under the terms of this special permit are rated and sized according to the tire manufacturer's recommendations for size and gross vehicle weight rating, as displayed on the sidewall of the tire.

(B) Tires that are more than six years old, based on the manufacture date marked on the sidewall of the tire, may not be used on vehicles authorized under this special permit.

(C) Tires on the steering axle must have a minimum tread depth of 8/32 inch and may not be retreaded tires. All other tires on the vehicle must have a minimum tread depth of 4/32 inch.

(D) Tire Pressure. When vehicles authorized under this special permit are in use, tire pressure must be monitored using one of the following methods:

(1) Tire pressure must be measured and recorded as a minimum on a daily basis and additionally each time the vehicle begins a trip on a public roadway. Tire pressure must be adjusted if it is more than 25% below the recommended inflation pressure. The results must be recorded in the vehicle inspection report as required in 49 CFR 396.11, or

(2) Tire pressure must be physically measured and recorded at least once in each consecutive seven-day period, and electronic or mechanical pressure monitoring systems must be installed and functional on all wheels. Tire pressure must be adjusted if it is more than 25% below the recommended inflation pressure. The results must be

February 28, 2013

recorded in the driver vehicle inspection report as required in 49 CFR 396.11.

(3) Flat, leaking, or improperly inflated tires must be repaired, replaced, or properly inflated before the vehicle is driven or at the nearest safe location.

(E) Prior to traveling on a public roadway, tires must be inspected to ensure they conform to requirements in the North American Standards of the Commercial Vehicle Safety Alliance. However, tread depth must meet the minimum requirements of paragraph 7.1.(ii)(C). Tires that meet the out-of-service criteria must be replaced prior to the vehicle being used on a public roadway.

m. Vehicle Batteries.

(i) Emergency Disconnect Standards

By July 1, 2011, except for cargo tank motor vehicles and tractor trailer combinations transporting a single hazardous material, each vehicle operating under the terms of this special permit must be equipped with system meeting one of the requirements below.

A. A redundant (two or more independently operating systems) system capable of interrupting all electrical current flow from the battery and of powering down all mechanical and electrical systems in the event of a rollover incident or incident when the vehicle is in an upright position. (Example: a battery disconnect device located in the vehicle cab and another on the exterior of the vehicle.) The activation device for each system must be clearly marked in a manner that identifies it as the emergency shutdown. Each device shall be tested once per calendar month and in the event of malfunction or failure, be repaired or replaced prior to placing the vehicle back in service.

B. Emergency Battery Disconnect and Emergency Engine Shut Off

a. An emergency battery disconnect switch that can isolate the battery from the vehicle electrical system.

1) The switch shall be located no more than 60 cm (24 inches) from the battery terminal.

2) Each switch shall be tested once per calendar month and, in the event of malfunction or failure, be repaired or replaced prior to placing the vehicle back in service.

3) The switch shall be clearly marked, "Emergency Battery Disconnect."

b. Emergency engine shutoff. The device used to shut off the cargo tank motor vehicle engine may be the same device as the emergency battery disconnect switch above or it may be a separate device, such as the ignition switch or a fuel cut-off valve that, when actuated, will stop the cargo tank motor vehicle engine.

1) Each emergency engine shutoff device shall be tested once per calendar month and, in the event of malfunction or failure, be repaired or replaced prior to placing the cargo tank motor vehicle back in service.

2) The emergency engine shutoff shall be clearly marked, "Emergency Engine Shutoff."

(ii) By January 1, 2011, batteries and housings must be located towards the front of the vehicle, within the profile of the vehicle, and marked in such a way as to be easily identified to emergency responders. The battery housing must be designed to meet the requirements of 49 CFR 393.30 with the additional requirement that all cables, not just those leading to the starter motor, must be protected and that the positive (+) battery terminal must be covered to prevent the possibility of short circuit.

n. Emergency Response.

(i) By July 1, 2010, the grantee must develop, maintain, and implement an emergency response action plan that at a minimum describes the risks associated with the transportation of the materials listed in paragraph 6 of this special permit on the same transport vehicle, including risks resulting from the accidental mixing of these materials as a result of a breach or breaches in the containment systems on the transport vehicles, especially when a fire is involved, and the actions to be taken to minimize such risks.

February 28, 2013

The emergency response action plan must include guidance for first responders concerning actions to be taken in the event of an accident involving the transport vehicle both in the absence of a fire and if a fire results from the accident.

(ii) The emergency response guidance developed as part of the action plan must be maintained on each vehicle operating under the special permit in the manner set forth in 49 CFR § 172.602(c).

8. SPECIAL PROVISIONS:

a. Each cargo tank used under this special permit is authorized only when it is used in dedicated service for the materials listed in paragraph 6.

b. Each cargo tank must be reinspected and retested in accordance with § 180.407. Pneumatic testing is authorized in place of the required hydrostatic test.

c. 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 modification or change is made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.

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

e. MARKING - Each cargo tank must be plainly marked on the right side near the front, in letters at least two inches high on a contrasting background, "DOT-SP 8554".

f. In the event of an accident for which an incident report is required under 49 CFR §§ 171.15 or 171.16 that results in an overturn of a vehicle operated under the terms of this special permit, the special permit grantee must:

(1) Conduct an in-depth investigation to determine the cause of the cause(s) of the accident and provide a report of the investigation's findings, conclusions, and recommendations to prevent future accidents or incidents. The report must be completed within 30 days after the accident or incident and forwarded to OHMSPA within 15 days.



(2) Provide a copy of the insurance company investigation report, if available, and the police report to OHMSPA within 15 days of the date the special permit grantee receives them. If the insurance company investigation report is not available, the special permit grantee must arrange for an independent accident reconstruction investigation to determine the root cause of the incident and any other factors that might be relevant to prevent similar accidents from occurring in the future. The report from the reconstruction and the police report must be provided to OHMSPA within 15 days of the date the special permit grantee receives them.

(3) If requested by PHMSA, the grantee must arrange for an independent accident reconstruction investigation to determine the root cause of the incident and any other factors that might be relevant to prevent similar accidents from occurring in the future. The report from the reconstruction must be provided to OHMSPA within 60 days of the PHMSA request to conduct the investigation.

g. The requirements of § 177.835(a) are waived when the engine of a cargo tank motor vehicle is necessary for the operation of a pump, auger, or other equipment needed to load or unload materials from the vehicle.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo vessel.

10. MODAL REQUIREMENTS:

a. Only DOT specification cargo tanks described in paragraph 7.e. are authorized for shipment by cargo vessel.

b. Shipment by highway is limited to transportation by private carriage only, or to common or contract carriers specifically identified to, and acknowledged in writing by the OHMSPA prior to the first shipment.

c. For transportation of Division 1.5D and/or Division 5.1 in cargo tanks by cargo vessel, the following apply:

(i) The cargo tank must be stowed "on deck" only.

(ii) They must be separated from other hazardous materials in accordance with the requirements for Division 1.1D explosives. In addition, they must be

February 28, 2013

stowed "separate from" non-regulated readily combustible materials, as defined in § 176.83(d).

(iii) They must be stowed in a readily accessible location which can be reached by at least two streams of water from separate fire hydrants, or if carried on an unmanned barge, by an effective stream of water from a vessel alongside.

(iv) Before the cargo tanks are loaded on or discharged from a vessel at any point in the United States, the carrier must obtain a permit from the Coast Guard Captain of the Port. A current copy of this special permit must be provided to the Captain of the Port when requesting a permit.

d. A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.

e. Drivers must have been instructed as to the necessary safeguards and proper procedures in the event of an unusual transportation delay, fire, explosion or accident involving the hazardous materials covered by this special permit.

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 § 107.601 et seq., when applicable.
- o All applicable requirements in the Federal Motor Carrier Safety Regulations (49 CFR Parts 390-397).

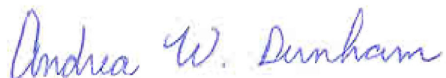
Each "Hazmat employee", as defined in § 171.8 who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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.

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 (49 U.S.C. 5101 *et seq.*) to change the term "exemption" to "special permit" and authorize 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 Dr. Magdy El-Sibaie  
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](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.

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