

February 28, 2013



U.S. Department  
of Transportation

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

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 11579  
(TWENTY-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 certain Division 1.1B, 1.1D, 1.4B, 1.4D, 1.4S and 1.5D explosives, Division 5.1 oxidizers, Class 8 materials and combustible liquids in separate containers secured on the same vehicle frame structure. 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 development of this special permit only considered 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 § 177.835(c)(3) in that Division 1.1 explosives may not be loaded into or carried on any vehicle in a combination with a cargo tank containing material required to be placarded under § 177.823 (i.e., Combustible liquid, n.o.s.), § 177.848(e)(2) in that transportation of Division 1.1B, 1.1D, 1.4B, 1.4D, 1.4S and 1.5D explosives with Division 5.1 and/or Class 8 materials on the same motor vehicle is not authorized, § 177.848(g)(3) in that detonators and detonator assemblies are not authorized to be transported on the same motor vehicle with other Class 1 explosives, except as specified herein and § 177.835(a) in that the engine may remain running for certain operations.

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5. 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 additional information of June 20, 2011 and February 8, 2012 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>
Acetic acid solution, <i>not less than 50 percent but not more than 80 percent, by mass</i>	8	UN2790	II
Acetic acid solution <i>not less than 10 percent but not more than 50 percent, by mass</i>	8	UN2790	III
Ammonium nitrate	5.1	UN1942	III
Ammonium nitrate based fertilizer	5.1	UN2067	III
Ammonium nitrate emulsion or Ammonium nitrate suspension or Ammonium nitrate gel, <i>intermediate for blasting explosives</i>	5.1	UN3375	II
Ammonium nitrate-fuel oil mixture <i>containing only prilled ammonium nitrate and fuel oil</i>	1.5D	NA0331	II
Articles, explosive, n.o.s.	1.4S	UN0349	II
Boosters, <i>without detonator</i>	1.1D	UN0042	II
Combustible liquid, n.o.s.	Combustible	NA1993	III
Cord, detonating, <i>flexible</i>	1.1D	UN0065	II

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Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Cord, detonating, flexible	1.4D	UN0289	II
Corrosive liquid, acidic, organic, n.o.s.	8	UN3265	II
Detonator assemblies, non-electric, for blasting	1.1B 1.4B	UN0360 UN0361	II II
Detonators, electric, for blasting	1.1B 1.4B	UN0030 UN0255	II II
Explosive, blasting, type A	1.1D	UN0081	II
Explosive, blasting, Type B or Agent Blasting, Type B	1.5D	UN0331	II
Explosive, blasting, Type E or Agent Blasting, Type E	1.1D 1.5D	UN0241 UN0332	II
Ammonium nitrate, liquid (hot concentrated solution)	5.1	UN2426	II
Oxidizing liquid, n.o.s.*	5.1	UN3139	III
Oxidizing solid, n.o.s.*	5.1	UN1479	
Nitrites, inorganic, aqueous solution, n.o.s.	5.1	UN3219	II

\* These oxidizing substances may not meet the definition for UN3375 Ammonium nitrate emulsions, suspension or gels as given in 49 CFR Section 172.101(c) Special Provision 147.

NOTE: Other blasting explosives and oxidizers 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.

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7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are as follows:

(1) The following packagings are authorized for the Class 8 and UN3219 hazardous materials:

(i) Non-DOT specification metal containers shown in Dyno Nobel's Drawing Nos. YAT12005B, 321298, 321299 and AYC691 appended to the October 25, 1995 application and Dyno Nobel's Drawing Nos. 310082, 310083 and 310084 appended to the March 20, 2001 application, Tread Corporation Drawing No. P1338T, Rev. B dated December 2, 1996 appended to the March 2001 application for DOT-E 12677, and Tread UniBody Series 3216-US06, Drawing No. UU1001A02 dated August 22, 2003 appended to this application all of which are suitable for the transportation of UN3265 and UN3219, Packing Group II liquids. Drawings are on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA).

(ii) Non-DOT 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.

The metal containers must have a net volumetric capacity of not more than 450 liters (119 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 Class 1 explosive materials, combustible liquids, or solid or liquid Division 5.1 oxidizers.

(2) The following packagings are authorized for the Division 1.5D explosive materials and those Division 5.1 ammonium nitrate emulsions, suspensions or gels which have been specifically authorized by OHMSPA for shipment in bulk under this special permit:

(i) DOT 406, DOT 407, DOT 412, MC 306, MC 307 and MC 312 cargo tank motor vehicles.

(ii) UN31A, UN31B or UN31H intermediate bulk containers.

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(iii) DOT Specification IM-102 portable tanks and DOT Specification IM 101 portable tanks equipped with relief devices specified for IM-102 portable tanks so that the effective maximum allowable working pressure of the tank will not exceed 1.75 bars (25.4 psig).

(iv) Non-DOT specification compartmented cargo tanks suitable for transportation of UN0332 liquid blasting explosives and UN3139 and UN3375 liquid oxidizers. All non-DOT specification cargo tanks must be equipped with pressure relief systems meeting the requirements of §§ 178.346-3 or 178.347-4.

(3) Combustible liquids (NA1993) must be packaged in DOT Specification cargo tanks, non-DOT specification cargo tanks, or non-pressure capable tanks suitable for liquids (fuel oil) having a capacity not to exceed 350 gallons.

(4) The Division 1.1D and 1.4D, 1.5D, and 1.4S explosives must be packaged as prescribed in the § 173.62(c) Table according to their UN number and overpacked in an IME Safety Library Publication 22 (IME-22) container or compartment.

(5) The Division 1.1B and 1.4B electric detonators and non-electric detonator assemblies must be packaged according to § 173.63(f) or (g) in a separate IME-22 container or compartment.

(6) Division 1.5D Ammonium nitrate-fuel oil mixture (NA0331) as well as Division 5.1 Ammonium nitrate (UN1942), Ammonium nitrate based fertilizer (UN2067) and Oxidizing solid, n.o.s. (UN1479) shall be packaged in sift-proof, non-pressure capable cargo bins suitable for transport of Packing Group II solids.

b. TESTING -

(1) All DOT specification bulk packages must be tested and inspected as specified in 49 CFR part 180, Subparts D, E or G as appropriate.

(2) All non-DOT specification cargo tanks must be tested and inspected in accordance with the requirements for MC 306 cargo tanks in 49 CFR part

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180, Subpart E. A copy of the test results must be carried on the motor vehicle.

(3) Tanks or compartments that are non-pressure capable must be annually leak tested with water or the material to be transported without external pressure. Tanks or compartments must show no signs of leakage at filled volume capacity for at least five minutes. Leakage of any nature requires further inspection and repair before use under the terms of this special permit.

c. OPERATIONAL CONTROLS -

(1) Transportation is limited to private carriage by company owned or leased vehicles, private carriage by wholly-owned subsidiary companies, or contract carriers specifically identified to, and acknowledged in writing by OHMSPA prior to first shipment.

(2) IME-22 container(s) or compartment(s) must be located directly behind the cab or at other locations entirely within the profile of the vehicle, forward of the rear most axle, and may not be located on the front of the vehicle. The IME-22 container(s) or compartment(s) which are transporting Division 1.1B, 1.4B or 1.4S electric or non-electric detonators and/or detonator assemblies must be on the opposite side of the vehicle from the IME-22 container(s) or compartment(s) which are transporting Division 1.1D, 1.4D and 1.5D packaged explosives. An IME-22 container(s) or compartment(s) may not share a common wall or be in direct contact with another IME-22 container or compartment or a cargo tank, container or piping containing a hazardous material, except that IME-22 containers as shown in the appended Tread Corporation Drawings S10150A01, dated August 11, 2005 or similar approved designs by the Associate Administrator for Hazardous Materials Safety.

(3) None of the materials in any cargo tank or container on the motor vehicle may be mixed, transferred or circulated while the vehicle is in transit on a public road or highway.

(4) The discharge valve for all tanks containing liquid or emulsion must be closed during transportation.

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(5) Augers that are an integral part of the containers identified in Section 7(a)(6) of this Special Permit may remain full of material while in transportation on public road or highway.

(6) NA1993 hazardous materials that are contained in process lines or pumps may be transported on public road or highway.

(7) UN3375 and UN0332 hazardous materials that are contained in process lines and pumps that are included in a DOT specification cargo tank Leakage Test, may be transported on public road or highway, provided:

(i) pumps and lines are readily identifiable with a stainless steel tag attached to the pump indicating inspector and date that the pump, suction and discharge line (if applicable) were included in the Leakage Test; and

(ii) a label(s) is placed on the items tested in paragraph (i) above.

(8) All other process lines, discharge lines, chutes, surge hoppers, pumps or augers should be appropriately cleaned to the extent practicable to minimize residue prior to transport on public roads or highways.

(9) 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

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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.

(10) Training after an accident. Beginning the date this special permit is issued, 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.c.(9)(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 his or her vehicle.

(11) 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.



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(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 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

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Standards of the Commercial Vehicle Safety Alliance. However, tread depth must meet the minimum requirements of paragraph 7.c.(11)(ii)(C). Tires that meet the out-of-service criteria must be replaced prior to the vehicle being used on a public roadway.

(12) Vehicle Batteries.

(i) Emergency Disconnect Standards

By July 1, 2011, 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."

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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.

(13) 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. 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.

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

b. The cargo compartment of the motor vehicle must be plainly and durably marked on both sides behind the cab section in letters and numbers at least 5 cm (2 inches) high on a contrasting background "DOT-SP 11579".

c. All Class 1 materials and bulk packages of Division 5.1, Class 8 and Combustible liquids must be multi-placarded as specified in 49 CFR 172.500 or in accordance with the Institute of Manufacturers of Explosives "Bulk Truck Marking and Placarding Guide". All non-bulk packages of Class 8 and Division 5.1 must be marked and labeled as specified in 49 CFR §§ 172.300 and 172.400.

d. 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 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

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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.

e. 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 and cargo vessel.

10. MODAL REQUIREMENTS:

a. A current copy this special permit must be carried aboard each cargo vessel or motor vehicle used to transport the combinations of hazardous materials covered by this special permit.

b. Drivers must have been instructed as to the necessary safeguards and proper procedures in the event of an unusual 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.

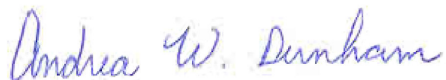
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Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704. No person may use or apply this special permit, including display of its number, when this 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.

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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)

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