TANK TRUCK LOADING AND UNLOADING USERS

We are very pleased to advise you that DOT-RSPA's has issued Special Permit 14447 (See attached) for relaxed attendance requirements for Tank Truck Unloading.

The U.S. Department of Transportation-Pipeline and Hazardous Materials Safety Administration has issued Special Permit 14447 – which provides that the use of a Smart-Hose Technologies hose assembly will exempt the user from 49 CFR 177.834(i) Loading and Unloading Attendance Requirements. This regulation normally provides that that a cargo tank motor vehicle be attended by a qualified person (usually the driver) at all times while it is to ensure the safe loading or unloading of hazardous materials being loaded or unloaded. **The NEWLY ISSUED EXEMPTION (February 23, 2007) provides that the attendance requirements in the above regulations are relaxed if the tank truck operator is using a Smart-Hose hose assembly.**

While the current gases specified are limited to each user's needs, we have been assured that all 2.2, 2.3 and other liquid and compressed gas and fluids will be given "Party-To" status upon application.

The enclosed form makes you, the user, a **"Party To" Special Permit 14447**. Smart-Hose will assist and coordinate all activities so long as you fill out the enclosed form and forward it back to Smart-Hose, attention Andrew Abrams. We will file a copy via fax and send you a confirmation of this filing by mail. If you do not fill it out **you will not be covered**.

Please make sure to send the enclosed form to my attention. Thank you and enjoy the safety and regulatory benefits of our Smart Hose system.

Regards,

Tim Raferty
Smart-Hose Technologies, Inc.
2536 South 59th Street
Philadelphia, PA 19153
215-730-9000 X106
f-215-730-0558
e-mail: TRaferty@SmartHose.com

Application for Party to Exemption 14447
(Railcar Exemption under 49 CFR 177.834(i)

Date:_____

Associate Administrator for Hazardous Materials
Safety, Research and Special Programs Administration
US Department of Transportation
400 7th Street SW
Washington, DC 20590-0001
Attn.: J. Suzanne Hedgepath DHM-1
Director, Office of Hazardous Materials,
Exemptions and Approvals

Applicants Name: Company _____
Address: _____
City: _____
State: _____
Zip Code_____
Responsible Party:_____
Telephone Number:_____
Fax Number: _____
E-Mail Address:_____

49 CFR-107.105(b)- Confidential Information- No confidential treatment is requested.

49 CFR 107.105(C) – Description of Exemption Proposal

The Associate Administrator,

Our company, _____, desires to be a party to exemption 12325-N. My company is eligible for this status as we offload, load and transfer (circle the applicable) _____ from railcars. Furthermore, our company is using or planning to use the Smart-Hose Safety System at our facility located at
_____
_____
_____.

Since Smart-Hose Technologies, Inc. is assisting in the administration of this application, please forward all necessary correspondence to:

Smart-Hose Technologies, Inc.
2536 S. 59th Street
Philadelphia, Pennsylvania 19143
Attn: Andrew Abrams

Thank you for your assistance in this matter.

Sincerely,

U.S. Department
of Transportation

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

**Pipeline and Hazardous
Materials Safety Administration**

SPECIAL PERMIT AUTHORIZATION

DOT-SP 14447

EXPIRATION DATE: January 31, 2009

GRANTEE: California Tank Lines, Inc.
Stockton, CA

In response to your November 2, 2006 application for Special Permit DOT-SP 14447, California Tank Lines, Inc. is hereby granted authorization under DOT-SP 14447 in accordance with 49 CFR § 107.105.

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.

If you have questions regarding this action please call the Office of Hazardous Materials Special Permits and Approvals at (202)366-4535.

Issued in Washington D.C. on February 23, 2007.

for Bob Richard
Deputy Associate Administrator
for Hazardous Materials Safety

February 23, 2007

U.S. Department
of Transportation

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

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 14447

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)

2. PURPOSE AND LIMITATION:

a. This special permit authorizes DOT Specification MC 330 and MC 331 cargo tank motor vehicles to be loaded with anhydrous ammonia using specially designed hoses in lieu of full time attendance by a qualified person during loading operations. 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.

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 § 177.834(i) in that loading operations of certain Division 2.2 liquefied gases on DOT Specification MC 330 and MC 331 cargo tanks may be performed using specially designed hoses in lieu of full time attendance by a qualified person; and that the marking requirements of § 172.302(c) are waived.

5. BASIS: This special permit is based on the application of California Tank Lines, Inc. dated November 2, 2006 and additional information dated February 8, 2007, submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi-fication Number	Packing Group
Ammonia, anhydrous	2.2	UN1005	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING – Packaging prescribed is a DOT Specification MC 330 or MC 331 cargo tank motor vehicle authorized for the material specified and meeting all DOT specification requirements.

b. OPERATIONAL CONTROLS –

(1) This special permit is limited to loading of cargo tank motor vehicles owned and operated by California Tank Lines, Inc.

(2) Hoses used for the loading operation must be: manufactured by Smart Hose Technologies, Inc.; equipped with an internal cable connected to "valve plungers" located on each end of the cable; and marked with the name of the manufacturer, the location (city and state) of the facility at which it is manufactured, and the date of manufacture.

(3) Each hose must be able to stop the flow of product from both the source and the receiving tank within one second without human intervention in the event of a hose rupture, disconnection or separation.

(4) Each loading facility must designate an employee or employees responsible for on-site monitoring of the loading operation. The designated employee(s) must be made familiar with the nature and properties of the product contained in a cargo tank being loaded on site, procedures to be followed in the event of an emergency, and, in the event of an emergency, have the ability and authority to take responsive actions. The loading operation must be inspected by one of the designated employees at least once every sixty (60) minutes and a log must be maintained documenting the times and dates of inspection. If more than one employee is

"designated," during each shift or any other time when the cargo tank containing a hazardous material is being loaded, the special permit holder must specify which of the designated employees is responsible for on-site monitoring of the loading operation.

(5) Prior to the first use of any hose, it must be tested in accordance with the written procedures and acceptance criteria established and provided by Smart Hose Technologies, Inc. and on file with the Office of Hazardous Materials Special Permits and Approvals. Such written procedures must specify retest procedures and time frames for periodic requalification of each hose.

(6) Prior to each use, each hose must be inspected to ensure that it is of sound quality, without defects detectable through visual observation.

8. SPECIAL PROVISIONS:

a. The marking requirements of § 172.302(c) are waived.

b. A current copy of this special permit must be maintained at each loading facility where this special permit is utilized. A current copy of this special permit must be made available to a DOT representative upon request.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor Vehicle.

10. MODAL REQUIREMENTS: None as a requirement of 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:

- All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- 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.

- Registration required by § 107.601 et seq., when applicable.

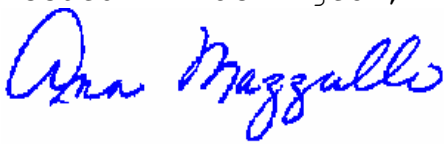
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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

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 Bob Richard
Deputy Associate Administrator
for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material 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: DBURGER

portion of the highway and every available means employed for the safe disposal of the leaking material by preventing, so far as practicable, its spread over a wide area, such as by digging trenches to drain to a hole or depression in the ground, diverting the liquid away from streams or sewers if possible, or catching the liquid in containers if practicable. Smoking, and any other source of ignition, in the vicinity of a leaking cargo tank is not permitted.

(c) *Movement of leaking cargo tanks.* A leaking cargo tank may be transported only the minimum distance necessary to reach a place where the contents of the tank or compartment may be disposed of safely. Every available means must be utilized to prevent the leakage or spillage of the liquid upon the highway.

[Amdt. 177–35, 41 FR 16130, Apr. 15, 1976, as amended by Amdt. 177–67, 50 FR 41521, Oct. 11, 1985; Amdt. 177–86, 61 FR 18933, Apr. 29, 1996]

Subpart B—Loading and Unloading

NOTE: For prohibited loading and storage of hazardous materials, see §177.848.

§ 177.834 General requirements.

(a) *Packages secured in a motor vehicle.* Any package containing any hazardous material, not permanently attached to a motor vehicle, must be secured against movement, including relative motion between packages, within the vehicle on which it is being transported, under conditions normally incident to transportation. Packages having valves or other fittings must be loaded in a manner to minimize the likelihood of damage during transportation.

(b) Each package containing a hazardous material bearing package orientation markings prescribed in §172.312 of this subchapter must be loaded on a transport vehicle or within a freight container in accordance with such markings and must remain in the correct position indicated by the markings during transportation.

(c) *No smoking while loading or unloading.* Smoking on or about any motor vehicle while loading or unloading any Class 1 (explosive), Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), or Division 2.1 (flammable gas) materials is forbidden.

(d) *Keep fire away, loading and unloading.* Extreme care shall be taken in the loading or unloading of any Class 1 (explosive), Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), or Division 2.1 (flammable gas) materials into or from any motor vehicle to keep fire away and to prevent persons in the vicinity from smoking, lighting matches, or carrying any flame or lighted cigar, pipe, or cigarette.

(e) *Handbrake set while loading and unloading.* No hazardous material shall be loaded into or on, or unloaded from, any motor vehicle unless the handbrake be securely set and all other reasonable precautions be taken to prevent motion of the motor vehicle during such loading or unloading process.

(f) *Use of tools, loading and unloading.* No tools which are likely to damage the effectiveness of the closure of any package or other container, or likely adversely to affect such package or container, shall be used for the loading or unloading of any Class 1 (explosive) material or other dangerous article.

(g) [Reserved]

(h) *Precautions concerning containers in transit; fueling road units.* Reasonable care should be taken to prevent undue rise in temperature of containers and their contents during transit. There must be no tampering with such container or the contents thereof nor any discharge of the contents of any container between point of origin and point of billed destination. Discharge of contents of any container, other than a cargo tank or IM portable tank, must not be made prior to removal from the motor vehicle. Nothing contained in this paragraph shall be so construed as to prohibit the fueling of machinery or vehicles used in road construction or maintenance.

(i) *Attendance requirements.* (1) *Loading.* A cargo tank must be attended by a qualified person at all times when it is being loaded. The person who is responsible for loading the cargo tank is also responsible for ensuring that it is so attended.

(2) *Unloading.* A motor carrier who transports hazardous materials by a cargo tank must ensure that the cargo tank is attended by a qualified person at all times during unloading. However, the carrier's obligation to ensure attendance during unloading ceases when:

(i) The carrier's obligation for transporting the materials is fulfilled;

(ii) The cargo tank has been placed upon the consignee's premises; and

(iii) The motive power has been removed from the cargo tank and removed from the premises.

(3) Except for unloading operations subject to §§177.837(d), 177.840(p), and 177.840(q), a qualified person "attends" the loading or unloading of a cargo tank if, throughout the process, he is alert and is within 7.62 m (25 feet) of the cargo tank. The qualified person attending the unloading of a cargo tank must have an unobstructed view of the cargo tank and delivery hose to the maximum extent practicable during the unloading operation.

(4) A person is "qualified" if he has been made aware of the nature of the hazardous material which is to be loaded or unloaded, he has been instructed on the procedures to be followed in emergencies, he is authorized to move the cargo tank, and he has the means to do so.

(j) Except for a cargo tank conforming to §173.29(b)(2) of this subchapter, a person may not drive a cargo tank motor vehicle containing a hazardous material regardless of quantity unless:

(1) All manhole closures are closed and secured; and

(2) All valves and other closures in liquid discharge systems are closed and free of leaks.

(k) [Reserved]

(l) *Use of cargo heaters when transporting certain hazardous material.* Transportation includes loading, carrying, and unloading.

(1) *When transporting Class 1 (explosive) materials.* A motor vehicle equipped with a cargo heater of any type may transport Class 1 (explosive) materials only if the cargo heater is rendered inoperable by: (i) Draining or removing the cargo heater fuel tank; and (ii) disconnecting the heater's power source.

(2) *When transporting certain flammable material*—(i) *Use of combustion cargo heaters.* A motor vehicle equipped with a combustion cargo heater may be used to transport Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials only if each of the following requirements are met:

(A) It is a catalytic heater.

(B) The heater's surface temperature cannot exceed 54 °C (130 °F)—either on a thermostatically controlled heater or on a heater without thermostatic control when the outside or ambient temperature is 16 °C (61 °F) or less.

(C) The heater is not ignited in a loaded vehicle.

(D) There is no flame, either on the catalyst or anywhere in the heater.

(E) The manufacturer has certified that the heater meets the requirements under paragraph (l)(2)(i) of this section by permanently marking the heater "*MEETS DOT REQUIREMENTS FOR CATALYTIC HEATERS USED WITH FLAMMABLE LIQUID AND GAS.*"

(F) The heater is also marked "*DO NOT LOAD INTO OR USE IN CARGO COMPARTMENTS CONTAINING FLAMMABLE LIQUID OR GAS IF FLAME IS VISIBLE ON CATALYST OR IN HEATER.*"

(G) Heater requirements under §393.77 of this title are complied with.

(ii) *Effective date for combustion heater requirements.* The requirements under paragraph (l)(2)(i) of this section govern as follows:

(A) Use of a heater manufactured after November 14, 1975, is governed by every requirement under (l)(2)(i) of this section;

(B) Use of a heater manufactured before November 15, 1975, is governed only by the requirements under (l)(2)(i)(A), (C), (D), (F) and (G) of this section until October 1, 1976; and

(C) Use of any heater after September 30, 1976, is governed by every requirement under paragraph (l)(2)(i) of this section.

(iii) *Restrictions on automatic cargo-space-heating temperature control devices.* Restrictions on these devices have two dimensions: Restrictions upon use and restrictions which apply when the device must not be used.

(A) *Use restrictions.* An automatic cargo-space-heating temperature control device may be used when transporting Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials only if each of the following requirements is met:

(*1*) Electrical apparatus in the cargo compartment is nonsparking or explosion proof.

(*2*) There is no combustion apparatus in the cargo compartment.

(*3*) There is no connection for return of air from the cargo compartment to the combustion apparatus.

(*4*) The heating system will not heat any part of the cargo to more than 54 °C (129 °F).

(*5*) Heater requirements under § 393.77 of this title are complied with.

(B) *Protection against use.* Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials may be transported by a vehicle, which is equipped with an automatic cargo-space-heating temperature control device that does not meet each requirement of paragraph (l)(2)(iii)(A) of this section, only if the device is first rendered inoperable, as follows:

(*1*) Each cargo heater fuel tank, if other than LPG, must be emptied or removed.

(*2*) Each LPG fuel tank for automatic temperature control equipment must have its discharge valve closed and its fuel feed line disconnected.

(m) Tanks constructed and maintained in compliance with Spec. 106A or 110A (§§ 179.300, 179.301 of this subchapter) that are authorized for the shipment of hazardous materials by highway in part 173 of this subchapter must be carried in accordance with the following requirements:

(1) Tanks must be securely chocked or clamped on vehicles to prevent any shifting.

(2) Equipment suitable for handling a tank must be provided at any point where a tank is to be loaded upon or removed from a vehicle.

(3) No more than two cargo carrying vehicles may be in the same combination of vehicles.

(4) Compliance with §§ 174.200 and 174.204 of this subchapter for combination rail freight, highway shipments and for trailer-on-flat-car service is required.

(n) Specification 56, 57, IM 101, and IM 102 portable tanks, when loaded, may not be stacked on each other nor placed under other freight during transportation by motor vehicle.

(o) *Unloading of IM and UN portable tanks.* No person may unload an IM or UN portable tank while it remains on a transport vehicle with the motive power unit attached except under the following conditions:

(1) The unloading operation must be attended by a qualified person in accordance with the requirements in paragraph (i) of this section. The person performing unloading functions must be trained in handling emergencies that may occur during the unloading operation.

(2) Prior to unloading, the operator of the vehicle on which the portable tank is transported must ascertain that the conditions of this paragraph (o) are met.

(3) An IM or UN portable tank equipped with a bottom outlet as authorized in Column (7) of the § 172.101 Table of this subchapter by assignment of a T Code in the appropriate proper shipping name entry, and that contains a liquid hazardous material of Class 3, PG I or II, or PG III with a flash point of less than 100 °F (38 °C); Division 5.1, PG I or II; or Division 6.1, PG I or II, must conform to the outlet requirements in § 178.275(d)(3) of this subchapter; or, until October 1, 2004, be unloaded only at a facility conforming to the following—

(i) The applicable fire suppression requirements in 29 CFR 1910.106(e), (f), (g), (h), and (i);

(ii) The emergency shutdown requirements in 29 CFR 1910.119(f), 1910.120(q) and 1910.38(a);

(iii) The emergency response planning requirements in 29 CFR part 1910 and 40 CFR part 68;

(iv) An emergency discharge control procedure applicable to unloading operations, including instructions on handling emergencies that may occur during the unloading operation; and

(v) Public access to the unloading area must be controlled in a manner ensuring no public access during unloading.

(4) Alternatively, conformance to equivalent or more stringent non-federal requirements is authorized in place of paragraphs (o)(3)(i) through (o)(3)(iv) of this section.

(o) *Unloading of IM portable tanks.* An IM portable tank may be unloaded while remaining on a transport vehicle with the power unit attached if the tank meets the outlet requirements in §178.345–11 of this subchapter and the tank is attended by a qualified person during the unloading in accordance with the requirements in paragraph (i) of this section.

[29 FR 18795, Dec. 29, 1964. Redesignated at 32 FR 5606, Apr. 5, 1967]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §177.834, see the List of CFR Sections Affected which appears in the Finding Aids section of the printed volume and on GPO Access.

EFFECTIVE DATE NOTE: At 68 FR 61942, Oct. 30, 2003, §177.834 was amended in paragraph (a) by revising the word "movement" to read "shifting", effective Oct. 1, 2004. At 69 FR 30588, May 28, 2004, the effective date was delayed until Jan. 1, 2005.

§177.835 Class 1 materials.

(See also §177.834 (a) to (j).)

(a) *Engine stopped.* No Class 1 (explosive) materials shall be loaded into or on or be unloaded from any motor vehicle with the engine running.

(b) *Care in loading, unloading, or other handling of Class 1 (explosive) materials.* No bale hooks or other metal tools shall be used for the loading, unloading, or other handling of Class 1 (explosive) materials, nor shall any package or other container of Class 1 (explosive) materials, except barrels or kegs, be rolled. No packages of Class 1 (explosive) materials shall be thrown or dropped during process of loading or unloading or handling of Class 1 (explosive) materials. Special care shall be exercised to the end that packages or other containers containing Class 1 (explosive) materials shall not catch fire from sparks or hot gases from the exhaust tailpipe.

(1) Whenever tarpaulins are used for covering Class 1 (explosive) materials, they shall be secured by means of rope, wire, or other equally efficient tie downs. Class 1 (explosive) materials placards or markings required by §177.823 shall be secured, in the appropriate locations, directly to the equipment transporting the Class 1 (explosive) materials. If the vehicle is provided with placard boards, the placards must be applied to these boards.

(2) [Reserved]

(c) *Class 1 (explosive) materials on vehicles in combination.* Division 1.1 or 1.2 (explosive) materials may not be loaded into or carried on any vehicle or a combination of vehicles if:

(1) More than two cargo carrying vehicles are in the combination;

(2) Any full trailer in the combination has a wheel base of less than 184 inches;

(3) Any vehicle in the combination is a cargo tank which is required to be marked or placarded under §177.823; or

(4) The other vehicle in the combination contains any:

(i) Substances, explosive, n.o.s., Division 1.1A (explosive) material (Initiating explosive),

(ii) Packages of Class 7 (radioactive) materials bearing "Yellow III" labels,

(iii) Division 2.3, Hazard Zone A or Hazard Zone B materials or Division 6.1, PG I, Hazard Zone A materials, or

(iv) Hazardous materials in a portable tank or a DOT specification 106A or 110A tank.

(d) [Reserved]

(e) *No sharp projections inside body of vehicles.* No motor vehicle transporting any kind of Class 1 (explosive) material shall have on the interior of the body in which the Class 1 (explosive) materials are contained, any inwardly projecting bolts, screws, nails, or other inwardly projecting parts likely to produce damage to any package or container of Class 1 (explosive) materials during the loading or unloading process or in transit.

(f) *Class 1 (explosive) materials vehicles, floors tight and lined.* Motor vehicles transporting Division 1.1, 1.2, or 1.3 (explosive) materials shall have tight floors; shall have that portion of the interior in contact with the load lined with either non-metallic material or non-ferrous metals, except that the lining is not required for truck load shipments loaded by the Departments of the Army, Navy or Air Force of the United States Government provided the Class 1 (explosive) materials are of