

March 23, 2016



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 11903
(TWELFTH REVISION)

EXPIRATION DATE: 2020-02-29

(FOR RENEWAL, SEE 49 § 107.109)

1. GRANTEE: Comtank Corp.
Bothwell, Ontario, Canada

US AGENT: North American Transportation Consultants, Inc.
Hightstown, NJ
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, marking, sale and use of non-DOT specification cargo tank motor vehicles constructed from glass fiber reinforced plastics (GFRP) conforming with all regulations applicable to a DOT 407 or DOT 412 cargo tank motor vehicle except as specified herein, for the transportation in commerce of the hazardous materials listed in paragraph 6 below. 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. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

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4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 107.503(b) and (c) in that the manufacturer does not hold an ASME "U" or National Board "R" stamp; § 172.102(c)(3) Special Provision B15 in that the cargo tank motor vehicle is not protected with a non-metallic lining; § 172.102(c)(3) Special Provision B23 in that the cargo tank motor vehicle is not made of steel; §§ 173.241, 173.242, 173.243, 180.405 and 180.413(d) in that the use of a non-DOT specification cargo tank motor vehicle is not authorized; and §§ 178.345-1, -2, -3, -4, -7, -14, -15, 178.347-1, -2, 178.348-1, -2, except as specified herein.
5. BASIS: This special permit is based on the application of Comptank Corp. dated December 29, 2015, submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Class 8 materials authorized to be transported in a lined MC-312 cargo tank motor vehicle, Class 8 liquid and semi-solid waste materials/specific chemical name or generic description as appropriate	8	Various	I, II or III
Class 3 liquid and semi-solid waste materials/specific chemical name or generic description as appropriate	3	Various	I, II or III
Class 6.1 liquid and semi-solid waste materials/specific chemical name or generic description as appropriate	6.1	Various	I, II or III
Class 9 liquid and semi-solid waste materials/specific chemical name or generic description as appropriate	9	Various	III

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are non-DOT specification glass fiber reinforced plastic (GFRP) cargo tanks having a design pressure of 35 psig and inside diameters and nominal capacities as described in paragraphs 7.a.(1), (2) and (3) below. Cargo tanks must be designed and manufactured in accordance with the drawings, calculations and technical specifications on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD).

(1) Three (3) cargo tank designs having an inside diameter of 4-feet as follows:

(i) a capacity of 3,750 U.S. gallons, designed and constructed in accordance with California State University Structures Laboratory (CSUSL) Report No. 99-2-37, revised March 16, 1999;

(ii) a capacity of 2,000 U.S. gallons, designed and constructed in accordance with CSUSL Report No. 99-2-39, revised March 16, 1999; and

(iii) a capacity of 1,000 U.S. gallons, designed and constructed in accordance with CSUSL Report No. 99-2-38, revised March 16, 1999.

(2) Four (4) cargo tank designs having an inside diameter of 5-feet as follows:

(i) a capacity of 5,500 U.S. gallons, designed and constructed in accordance with CSUSL drawings CC-101-97 through CC-112 dated April 17, 1997 and related calculations and technical specifications,

(ii) a capacity of 4,000 U.S. gallons, designed and constructed in accordance with CSUSL Report No. 98-2-22A, revised March 16, 1999;

(iii) a capacity of 2,500 U.S. gallons, designed and constructed in accordance with CSUSL Report No. 98-2-21A, revised March 16, 1999; and

(iv) a capacity of 600 U.S. gallons, designed and constructed in accordance with CSUSL Report No. 98-2-20A, revised March 16, 1999.

(3) One (1) cargo tank design having an inside diameter of 6 feet and having a maximum capacity of 10,430 U.S. gallons, designed and constructed in accordance with CSUSL Report No. 99-11-21 dated December 30, 1999.

(4) One (1) cargo tank design having an inside diameter of 4.5 feet and having a maximum capacity of 3,200 U.S. gallons, designed and constructed in accordance with Tank Design, Inspection & Certification Services (TICS) Report No. 14-5-6 dated May 7, 2014.

(5) For each cross-sectional diameter, cargo tanks smaller than the capacity described in each CSUSL or TICS Report may be constructed using the same design and safety details as the largest tank in each CSUSL or TICS design report. For example, cargo tanks having an inside diameter of 4 feet may not exceed 3,750 U.S. gallons as described in paragraph 7.a.(1)(i) but may have lower capacities. Similarly, cargo tanks having an inside diameter of 5 feet may not exceed 5,500 U.S. gallons as described in paragraph 7.a.(2)(i) but may have lower capacities. Each such cargo tank motor vehicle must be certified as a separate design type, defined in § 178.320(a), by a Design Certifying Engineer as specified in § 178.345-15 (b)(1).

b. The GFRP cargo tanks must be in compliance with §§ 173.241, 173.242 or 173.243, as prescribed in the Hazardous Materials Table (§ 172.101), except that Special Provisions B15 and B23 are waived. A Quality Assurance Plan comparable to provisions set forth in the ASME Code must be followed during all production and test phases of manufacture. In addition, they must meet all performance requirements for the DOT 407 and DOT 412 Specification cargo tank motor vehicle (§§ 178.345, 178.347 and 178.348), except as follows:

(i) § 178.345-1 (d) and (f) requiring the manufacturer to have an ASME certification and to certify that the construction meets the ASME Code do not apply.

(ii) § 178.345-2 Material and material thickness. Does not apply.

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(iii) § 178.345-3 Structural integrity. References to the ASME Code do not apply. Stress factors calculated using the GFRP materials and strengths must equal or exceed those specified for steel.

(iv) § 178.345-4 Joints. Does not apply.

(v) § 178.345-7 Circumferential reinforcements. Do not apply. Calculations for reinforcements must be at least equal to or greater than specified for steel and aluminum.

(vi) § 178.345-14 Marking. Nameplate requirements in paragraph (b) are changed as follows:

(A) line (1), the DOT Specification number is replaced with the special permit number DOT-SP 11903.

(B) lines (10), (13) and (14) are not required.

(vii) § 178.345-15 Certification. Manufacturer's certification documents must be appropriately modified to reflect compliance with the terms of this special permit. Each design type must be certified by a Design Certifying Engineer.

(viii) § 178.347-1 General requirements. Paragraphs (c), and (d), with the exception that (d) (2), (3), (4), (5), (6) and (7) do not apply.

(ix) § 178.347-2 Material and thickness of material. Does not apply.

(x) § 178.348-1 General requirements. Except for paragraphs (ii), (iv), (vii), subsection (e) does not apply.

(xi) § 178.348-2 Material and thickness of material. Does not apply.

c. TESTING - The non-DOT specification (GFRP) cargo tank motor vehicles must conform with all test and inspection requirements of §§ 178.345, 178.347 and 178.348 for DOT 407 and DOT 412 Specification cargo tank motor vehicles, and must meet the requirements in Subpart E of Part 180 for the periodic testing and inspection of DOT 407 and DOT 412 Specification cargo tank motor vehicles.

d. OPERATIONAL CONTROLS:

(1) Cargo tanks that are used in transporting Class 3 materials must be equipped with a spring loaded relief valve.

(2) Compatibility of commodities and the GFRP cargo tank.

(i) The compatibility of each commodity offered for transportation and the GFRP cargo tank must be confirmed. Compatibility must be based on testing performed in accordance with ASTM C 581 "Standard Test Method for Chemical Resistance of Thermosetting Resins Used in Glass Fiber Reinforced Structures", or compatibility information provided by the composite material manufacturer.

(ii) The cargo tank owner or leasee must maintain product compatibility data for as long as the cargo tank remains in active operation. On a semi-annual basis or at the end of the cargo tank lease if less six months, each leasee must provide the cargo tank owner with a listing of the materials transported in the cargo tank as authorized in the manufacturer's reference or the product compatibility data for materials transported in the GFRP cargo tank

(iii) Prior to loading a cargo tank, the cargo tank owner or leasee must determine that the product being loaded is compatible with the cargo tank.

(iv) Shippers using cargo tanks authorized under this special permit must comply with the compatibility requirements of § 173.24(e).

e. The grantee of the special permit shall inform OHMSAPD of the person who is manufacturing the GFRP shells under the terms of the special permit. The grantee may not utilize a new person to manufacture the GFRP shells unless

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acknowledged in writing by OHMSAPD. Persons manufacturing the GFRP shells may be inspected by PHMSA or other government agencies to verify their capability to perform their manufacturing functions authorized under the terms of the special permit.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but 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 offered for transportation in conformance with this special permit and the (HMR).

c. A current copy of this special permit must be retained by each person who offers hazardous materials for transportation under this special permit. The training requirements referenced in paragraph 11 apply to that person and all employees who perform functions that affect compliance with this special permit.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Safety Approvals and Permits Division (OHMSAPD) for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. The manufacturer's data report for the first cargo tank of each design type which is fabricated must be submitted to the OHMEA prior to the initial shipment of hazardous materials.

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g. In addition to the information contained on the metal certification plate, the following information must be plainly and durably marked on the cargo tank or another metal plate if not currently on the specification or name plate required under § 178.345-14:

CARGO TANK MANUFACTURED BY
 XXXXXXXXX, INC.
 XXXXXXXX, XX

DOT Reg. #:	CT-
CARGO TANK MFR:	_____
CARGO TANK MFR. SERIAL #:	_____
CARGO TANK DESIGN TEMP. RANGE:	<u> -xx°F to xxx°F </u>
NOMINAL WATER CAPACITY:	_____
MAXIMUM LADING DENSITY:	_____
SHELL MATERIAL:	_____
MINIMUM SHELL THICKNESS:	_____
HEAD MATERIAL:	_____
MINIMUM HEAD THICKNESS:	_____
LINER/CORROSION BARRIER MATERIAL	_____
MIN. LINER/CORROSION BARRIER THICKNESS	_____
EXPOSED SURFACE AREA:	_____
SPECIFICATION:	<u>DOT-SP 11903</u>
CARGO TANK MOTOR VEHICLE MFR. VIN:	_____

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

10. MODAL REQUIREMENTS:

a. A current copy of this special permit must be carried on each motor vehicle used to transport packages covered by this special permit.

b. Drivers must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire, or accident.

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, Parts 171-180.

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- 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.

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 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

Continuation of DOT-SP 11903 (12th Rev.)

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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
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PTO: Staniszewski/NICKS