U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

DOT-E 10587 (EXTENSION)
ORIGINAL March 24, 1992

In accordance with 49 CFR 107.109 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 10587 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to February 28, 1999. This change is effective from the issue date of this extension. All other terms of the exemption remain unchanged.

This extension applies only to party(ies) listed below based on the application(s) received in accordance with 49 CFR 107.109. This extension constitutes a necessary part of this exemption and must be attached to it.

for Carol Mazzullo
Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

3/25/97
(DATE)

Dist: FHWA FRA USCG

EXEMPTION HOLDER	APPLICATION DATE
Container and Pressure Vessels Limited Clones Co,Managhan Ireland (U.S. AGENT: MC Tank Rental Inc. Lititz, PA)	March 20, 1997

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MAR 24 1992

DOT-E 10587

1. Containers and Pressure Vessels Ltd., Clones, Co. Monaghan, Ireland (U. S. Agent - Gardner Technology Associates (GTA), Alburtis, Pennsylvania), is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to manufacture, mark and sell the packaging described in paragraph 7 below for use in transporting the hazardous materials described in paragraph 3 below in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the use of non-DOT specification, insulated portable tanks and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on the applications of Containers and Pressure Vessels Ltd., and GTA dated February 19, 1991 and additional information dated August 25, 1991 submitted in accordance with 49 CFR 107.103, and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and class). Liquefied helium classed as a nonflammable gas.

4. PROPER SHIPPING NAME (49 CFR 172.101). Helium, refrigerated liquid (cryogenic liquid).

5. REGULATION AFFECTED. 49 CFR 172.203, 173.318, 173.320, 176.30, 176.76(h) and 178.338.

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle, rail, and cargo vessel.

7. SAFETY CONTROL MEASURES. Packaging prescribed is a non-DOT specification portable tank designed and constructed in accordance with Section VIII of the ASME Code and subparagraphs a. through c. of this paragraph. The portable tank is enclosed in an ISO type frame. The portable tank is vacuum-insulated with a supplemental liquid nitrogen shield. Each portable tank must conform to Containers and Pressure Vessels Ltd. drawings cited in paragraph d. below, and with calculations and specifications on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA).

a. Inner Tank: Design pressure is 82 PSIG (MAWP = 65 PSIG); Design temperature range is from -452 °F to +100°F for the inner tank and any part, valve or fitting that may come in contact with the lading; Nominal water capacity is 11,000 (U.S.) gallons; Tank material is SA 240 Type 304 stainless steel

b. Nitrogen Tank: Design pressure is 23 PSIG (MAWP = 6 PSIG) ; Design temperature is -320 °F, for the liquid nitrogen tank and any part, valve or fitting that may come in contact with liquid nitrogen. Nominal water capacity is 385 (U.S.) gallons for the nitrogen tank. Tank material is SA 240 Type 304 stainless steel.

c. Outer jacket: Constructed of ASTM A 516 Grade 40 or equivalent carbon steel.

d. Q275-A-06 Rev A dated September 16, 1987,
Q275-A 51 Rev 0 dated September 9, 1987,
Q275-A-55 Rev A dated September 21, 1987,
Q275-B-01 Rev A dated September 11, 1987,
Q275-J-03 Rev 0 dated September 9, 1987,
Q275-L-05 Rev A dated September 10, 1987.

e. In addition, each tank must conform with 49 CFR 178.338, except as follows:

(1) § 178.338-10 does not apply.

(2) The portable tank need not conform with the provisions of § 178.338-13(b) or (c). Lifting lugs, framework and any anchoring to the inner tank, the nitrogen shield tank or the tank jacket must conform with the provisions of § 178.338-13(a). Portable tanks that meet the definition of "container" must meet the requirements of 49 CFR Parts 450 thru 453, and each design must be qualified in accordance with 49 CFR 178.270-13(c).

(3) "DOT-E 10587" must replace the mark "MC 338".

8. SPECIAL PROVISIONS.

a. A copy of this exemption must be carried aboard each cargo vessel and motor vehicle used to transport packages covered by this exemption.

b. Each portable tank must be reinspected and retested once every five years in accordance with the provisions of 49 CFR §173.32(e) as prescribed for DOT Specification 51 portable tanks. The test pressure in the inner tank shall be determined from the following formulas:

(ii) Immediately before and after any manual venting;

(iii) At least every 24 hours; and

(iv) At the destination point.

(4) Any lading pressure control valve or road relief valve set at a pressure lower than that prescribed for the (safety) pressure relief valve must be closed during transportation by cargo vessel.

g. No person may transport or offer for transportation a charged portable tank unless the pressure of the lading is equal to or less than that used to determine the marked rated holding time and the OWTT is equal to or greater than the elapsed time between the start and termination of travel.

h. The actual holding time for each tank must be determined after each shipment. If it is determined that the actual holding time is less than 90 percent of the MRHT of the tank, the tank may not be refilled until it is restored to its MRHT or the tank is re-marked with the holding time determined by this examination.

i. Offerors for transportation of hazardous materials specified in this exemption may use the packaging described in this exemption for the transportation of such hazardous materials so long as no modifications or changes are made to the packages, all terms of this exemption are complied with, and a copy of the current exemption is maintained at each facility from which such offering occurs.

j. Shippers using the packaging covered by this exemption must comply with the shipping paper, marking, labeling, and placarding requirements of 49 CFR Part 172; all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 100-180.

k. Each packaging manufactured under the authority of this exemption 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 for a specific manufacturing facility.

l. A copy of this exemption, in its current status, must be maintained at each manufacturing facility at which this packaging is manufactured and must be made available to a DOT representative upon request.

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

9. REPORTING REQUIREMENTS. Any incident involving loss of packaging contents or packaging failure must be reported to the Associate Administrator for Hazardous Materials Safety as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.)

10. EXPIRATION DATE. February 28, 1994.

Issued at Washington, D.C.

MAR 24 1992

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

(DATE)

Address all inquiries to: Associate Administrator, for Hazardous Materials Safety, Research and Special Programs Administration, U.S. Department of Transportation, Washington, D.C. 20590. Attention: Exemptions Program.

Dist: USCG, FHWA, FRA.