U.S. Department of Transportation
Research and Special Programs Administration

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

DOT-E 10623 (PTE)
ORIGINAL September 26, 1991

In accordance with 49 CFR 107.111 of the Department of Transportation (DOT) Hazardous Materials Regulations the party(ies) listed below is granted the status of party to DOT-E 10623. The expiration date of the exemption for the party(ies) is August 31, 1996.

This party status applies to the party(ies) listed below based on the application(s) submitted in accordance with 49 CFR 107.111 and the public proceeding thereon. All terms of the exemption remain unchanged. This authorization forms part of the exemption and must be attached to it.

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

FEB 28 1995
(DATE)

Dist: FHWA USCG

EXEMPTION HOLDER	APPLICATION DATE
Island Gases Limited Jupiter, FL	August 23, 1994

ADVISORY

IF YOU ARE A HOLDER OF AN EXEMPTION THAT AUTHORIZES THE USE OF A PACKAGING WITH A MAXIMUM CAPACITY LESS THAN 450 L (119 GALLONS) OR A MAXIMUM NET MASS LESS THAN 400 KG (882 POUNDS), PLEASE BE ADVISED THAT YOUR EXEMPTION MAY NOT BE RENEWED BEYOND SEPTEMBER 30, 1996. IN ADDITION, NO NEW CONSTRUCTION OF PACKAGINGS WHICH FALL WITHIN THE NON-BULK CAPACITIES LISTED ABOVE ARE AUTHORIZED AFTER SEPTEMBER 30, 1994. THIS IS CONSISTENT WITH THE IMPLEMENTATION OF THE NEW PACKAGING REQUIREMENTS ADOPTED UNDER DOCKET HM-181. ANY APPLICATION SUBMITTED TO THIS OFFICE TO RENEW AN EXEMPTION BEYOND THE SEPTEMBER 30, 1996 DATE WILL BE DENIED UNLESS THE APPLICATION CONTAINS SUPPORTING INFORMATION TO JUSTIFY THE CONTINUATION OF THE EXEMPTION.

U.S. Department of Transportation
Research and Special Programs Administration

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

DOT-E 10623 (EXTENSION)
ORIGINAL September 26, 1991

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 10623 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to August 31, 1996. 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 107.105. This extension constitutes a necessary part of this exemption and must be attached to it.

FEB 28 1995
(DATE)

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

Dist: FHWA USCG

EXEMPTION HOLDER	APPLICATION DATE
Carib Supply St. Croix, VI	August 23, 1994

ADVISORY

IF YOU ARE A HOLDER OF AN EXEMPTION THAT AUTHORIZES THE USE OF A PACKAGING WITH A MAXIMUM CAPACITY LESS THAN 450 L (119 GALLONS) OR A MAXIMUM NET MASS LESS THAN 400 KG (882 POUNDS), PLEASE BE ADVISED THAT YOUR EXEMPTION MAY NOT BE RENEWED BEYOND SEPTEMBER 30, 1996. IN ADDITION, NO NEW CONSTRUCTION OF PACKAGINGS WHICH FALL WITHIN THE NON-BULK CAPACITIES LISTED ABOVE ARE AUTHORIZED AFTER SEPTEMBER 30, 1994. THIS IS CONSISTENT WITH THE IMPLEMENTATION OF THE NEW PACKAGING REQUIREMENTS ADOPTED UNDER DOCKET HM-181. ANY APPLICATION SUBMITTED TO THIS OFFICE TO RENEW AN EXEMPTION BEYOND THE SEPTEMBER 30, 1996 DATE WILL BE DENIED UNLESS THE APPLICATION CONTAINS SUPPORTING INFORMATION TO JUSTIFY THE CONTINUATION OF THE EXEMPTION.

U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

SEP 26 1991

DOT-E 10623

1. Virgin Islands Industrial Gases, Inc, St. Thomas, U.S. Virgin Island is hereby granted an exemption from certain provisions of this Departments's Hazardous Materials Regulations to offer packages prescribed herein of the nonflammable cryogenic liquids described in paragraph 3 below for transportation in commerce, subject to the limitations and special requirements specified herein. This exemption authorizes the use of non-DOT specification portable tanks for certain nonflammable cryogenic liquids, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on the application from Virgin Islands Industrial Gases, Inc. dated May 30, 1990, and subsequent correspondence dated July 2, July 5, and August 23, 1991 submitted in accordance with 49 CFR 107.103 and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and Class). Liquid nitrogen, liquid oxygen and liquid argon classed as class 2.2 nonflammable gases.

4. PROPER SHIPPING NAME (49 CFR 172.101). Nitrogen, refrigerated liquid (cryogenic liquid), UN 1977; Oxygen, refrigerated liquid (cryogenic liquid), UN 1073, or Argon, refrigerated liquid (cryogenic liquid), UN 1951, as appropriate.

5. REGULATIONS AFFECTED., 49 CFR 172.203, 173.32, 173.318, 176.76(h), and 178.338.

6. MODES OF TRANSPORTATION AUTHORIZED. Cargo vessel and motor vehicle.

7. SAFETY CONTROL MEASURES. Packaging prescribed is a vacuum-insulated, non-DOT specification portable tank. The tank is designed and constructed in accordance with DOT Specification MC-338, Section VIII, Division 1, of the ASME Code, and subparagraph a. of this paragraph. The tank conforms to Gibson Cryogenics, Inc. drawing number 4-41515(Model 5044), and Technical Report number GTR 44 on file with the Office of Hazardous Materials Exemptions and Approvals. The portable tank is enclosed in an ISO type frame as shown in drawing number 5044. Design pressure of the inner tank is 265 psig. Design temperature is -320 degrees F for the inner tank and any part, valve or fitting that may come in contact with the lading.

SE 26 1991

Gross volume of the tank is 3745 gallons (U.S.). Tank material is SA 240 Type 304 stainless steel for the inner tank and high strength carbon steel for the outer jacket casing. No new construction is authorized.

a. A portable tank that meets the definition of "container" in 49 CFR 450.3(a)(2) must meet the requirements of 49 CFR Parts 450 through 453, inclusive, and each tank design must be qualified in accordance with 49 CFR 178.270-13(c).

b. The portable tanks authorized under this exemption bear manufacturer's serial number 5044-1, 5044-2, 5044-3, 5044-4, and 5044-5.

8. SPECIAL PROVISIONS.

a. Persons who receive packages covered by this exemption may reoffer them for transportation provided no modifications or changes are made to the packages, all terms of this exemption are complied with and a current copy of this exemption is maintained at each facility from which such reoffering occurs.

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

c. Each portable tank must be reinspected and retested once every five years in accordance with 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:

If there is no vacuum in the outer jacket during test:

$$P_T = 1.25 \times [P_d + H_s + 14.7]$$

If vacuum exists in the outer jacket during test:

$$P_T = 1.25 \times [P_d + H_s + 14.7] - 14.7$$

Where:

P_T = Test pressure, psig
P_d = Design pressure (maximum allowable working pressure), psig
H_s = Static head of liquid in inner tank, psi

d. Each portable tank must be plainly marked on both sides near the middle, in letters at least two inches (2) inches high on a contrasting background, "DOT-E 10623".

e. Each portable tank must be loaded and shipped as required in 49 CFR 173.318 for cargo tanks and as applicable for the lading.

f. The rated holding time for each portable tank must be determined in accordance with one of the procedures specified in 49 CFR 178.338-9. The Marked Rated Holding Time (MRHT), in hours, displayed on or adjacent to the specification plate, may not exceed the rated holding time.

g. Each tank's actual holding time must be determined after each shipment. If examination indicates 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 remarked with the reduced holding time determined by this examination.

h. A portable tank may not be offered for transportation by cargo vessel unless the pressure of the lading in the tank is equal to or less than that used to determine the MRHT, and the one way travel time (OWTT) is equal to or greater than the elapsed time expected between the start and termination of travel. The OWTT is determined from the formula: OWTT = MRHT - 24. The OWTT must be marked on the shipping paper and on the vessel's dangerous cargo manifest immediately after the container description.

i. A written record of the portable tank's pressure and ambient (outside) temperature at the following times must be prepared for each shipment.

(i) At the start of each trip;

(ii) Immediately before and after any manual venting;

(iii) At least every 24 hours; and

(iv) At the destination point.

j. Any road relief valve set at a pressure lower than that prescribed for the pressure (safety) relief valve must be closed during transportation by cargo vessel, unless the rated holding time was determined based on the setting of the road relief valve.

k. Each portable tank must be stowed in accordance with 49 CFR 176.76(h)(4). The portable tank may not be overstowed with other containers or freight.

l. The Coast Guard captain of the port must be notified 24 hours in advance of shipments by water.

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. The release of contents is not a reportable incident if the release is through a pressure controlling device set at 25 PSIG or less during shipments by motor vehicle.

10. EXPIRATION DATE. August 31, 1993.

Issued at Washington, D.C.

SEP 26 1991

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 Branch.

Dist: FHWA, USCG.