U.S. Department
of Transportation

Research and
Special Programs
Administration

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

DOT-E 10449 (PTE)
SECOND REVISION February 11, 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 10449. The expiration date of the exemption for the party(ies) is January 31, 1993.

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.

J. Suzanne Hedgepeth

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

OCT 29 1991
(DATE)

Dist: FHWA

EXEMPTION HOLDER	APPLICATION DATE
SRI International Menlo Park, CA	June 11, 1991

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

400 Seventh Street, S.W.
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FEB 11 1991

DOT-E 10449
(SECOND REVISION)

1. Tren-Fuels, Inc., Austin, Texas, is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages prescribed herein of a compressed natural gas for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the use of DOT Specification 3AAX cylinders for compressed natural gases (CNG) and provides no relief from any regulation other than as specifically stated.

2. Basis. This exemption is based on NGCT's application dated August 24, and November 21, 1990, supplemental information dated August 28, August 31, 1990 submitted in accordance with 49 CFR 107.103 and 107.105 and the public proceeding thereon.

3. MATERIALS (Descriptor and class). Compressed natural gas classed as flammable gas.

4. PROPER SHIPPING NAME (49 CFR 172.101). Compressed gas,n.o.s.

5. REGULATION AFFECTED. 49 CFR 173.301(d)(2) and 173.302(a)(3).

6. MODE OF TRANSPORTATION AUTHORIZED. Motor vehicle.

7. SAFETY CONTROL MEASURES. Packaging prescribed is a DOT Specification 3AAX cylinder assembly with a maximum charge pressure not more than the lowest marked service pressure in the assembly, manifolded in accordance with 49 CFR 173.301(d)(2) and securely mounted on a motor vehicle frame. In no case may the tube trailer be charged above 2800 psig. In addition:

a. Each cylinder must have appropriate manufacturer's marking adjacent to the required DOT markings to indicate its suitability for (CNG) compressed natural gas service.

b. The product authorized for transportation in the prescribed packaging is CNG which must be non-corrosive. The gas quality must be checked each day prior to first shipment, and must meet the following requirements:

(1) Moisture content may not exceed 0.5 pounds per 1,000,000 cubic feet of gas at standard atmospheric condition.

(2) Oxygen may not exceed one percent by volume.

(3) Carbon dioxide may not exceed 3 percent by volume.

(4) Hydrogen Sulfide (H_2S) and other soluble sulfides or sulfates may not exceed 0.1 grains per 100 cubic feet of gas at standard atmosphere condition.

c. Records of the gas composition analysis must be maintained for two years.

d. Each cylinder in CNG service completing 2 years or 500 fill cycles whichever comes first must be subjected to internal surface examination for corrosion or stress corrosion cracking. Cylinders suspected of damage by hydrogen sulfide exposure must be subjected to 100 percent ultrasonic examination for determining their suitability for continued service.

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 used to transport packages covered by this exemption.

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

d. Motor carriers operating under the terms of this exemption must have a "Satisfactory" or "Conditional" safety rating as prescribed in 49 CFR Part 385.

e. Each tube trailer must be plainly marked on both sides near the middle, in letters at least 2 inches high on a contrasting background, "DOT-E-10449".

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.

10. EXPIRATION DATE: January 31, 1993.

Issued at Washington, D.C.:

FEB 11 1991

for J. Suzanne Hedgepeth

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

(DATE)

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

Dist: FHWA.