



SPECIAL PERMIT 2361 REVISION NO. 3

This Special Permit is issued pursuant to the terms of Section 71.6(a) of the "Canadian Transport Commission's Regulations for the Transportation of Dangerous Commodities by Rail" to authorize the shipment of non-CTC Specification 3AA cylinders by rail in Canada, under conditions prescribed herein, and does not relieve any shipper or carrier from compliance with any requirement of the said Regulations, except as specifically stated.

1. BASIS

Telex dated February 15, 1988 from FABER Industrie SPA, n.115-33043
Cividale del Friuli, Italy

2. COMMODITY CLASSIFICATION

Flammable gas 2.1.

3. COMMODITY NAME

Methane or natural gases.

4. IDENTIFICATION NUMBER

1971.

5. REGULATION AFFECTED

73.302.

6. AUTHORIZED SHIPPER

FABER Industrie S.P.A. and its customers.

7. PACKAGING DESCRIPTION

Specification CTC 3AA cylinders except that

- a) The wall stress shall not exceed 75 per cent of the minimum tensile strength at test pressure.
- b) The wall stress at test pressure shall be a maximum of 87,000 psi.
- c) The tensile strength to be in the range of 116,000 to 126,000 psi.
- d) Each cylinder shall be marked "CNG ONLY" in addition to all other markings as prescribed by CTC Specification 3AA and Section 7 of this Special Permit.

Cylinders manufactured in accordance with this Special Permit shall be as described in FABER Industrie's application dated March 14, 1986 and

Drawings 316-345/50-55-60-70 USA-CAN/REV. 3 and Drawings 355-345/70-75-80 USA/CAN/REV. 3 and Drawings CAN-267-345-669-1 on file with this office.

8. SPECIAL REQUIREMENTS

- a) Each cylinder shall be plainly marked "CTC SP 2361" with letters and figures at least one-half inch high.
- b) Gas quality: methane or natural gases shall not contain more than:
 - 1. 5.0 lbs. of water per million cubic feet at standard temperature and pressure (STP) (60°F., 30 inches H_g).
 - 2. 1.0 grain of hydrogen sulfide per 100 cubic feet at standard temperature and pressure (STP) as determined by ASTM 2385-76 test for hydrogen sulfide and mercaptan sulfur in natural gas (cadmium sulfate iodometric titration method).
 - 3. Total soluble sulfides other than H₂S must be less than 1.0 grain per 100 cubic feet at STP.
 - 4. One per cent by volume of oxygen.
 - 5. Three per cent by volume of carbon dioxide.
 - 6. Four per cent total (including but not limited to items (4) and (5) of this paragraph) by volume of all non-hydrocarbon gases (excluding nitrogen).
- c) At least one hardness test shall be made on the cylinder used for physical tests and the result shall not exceed a value of HRC 26.

9. ADDITIONAL TESTING


One out of each group of 1,000 cylinders shall be subjected to the cycling test to destruction at service pressure and pulse frequency shall be approximately 5 cycles per minute. The results of the cycling tests shall be reported to this office.

10. REPORTING REQUIREMENTS

The Director of Operation shall be advised of any incident involving loss of contents and shall be provided with a summary of experience before the expiration date of the Special Permit.

11. EXPIRY DATE

March 7, 1989.


Director of Operation
Rail Safety Branch

Issued at Hull, Quebec
this 7th day of March, 1988

Address all inquiries to:

Director of Operation, Rail Safety Branch
National Transportation Agency
25 Eddy Street, 14th Floor
Hull, Quebec
K1A 0N9