



SPECIAL PERMIT 1347 REVISION NO. 6

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 by railway in Canada of certain non flammable gases in filament-wound reinforced plastic (FRP) seamless, aluminum lined cylinders under conditions prescribed herein and does not relieve any shipper or carrier from compliance with any requirement of the Commission's Regulations, except as specifically stated.

1. BASIS

Letter dated September 18, 1987 from Structural Composites Industries Inc., 325 Enterprise Place, Pomona, California, 91768.

2. COMMODITY CLASSIFICATION

Non flammable gas 2.2.

3. COMMODITY NAME

- a) Air, compressed.
- b) Oxygen, compressed.

4. IDENTIFICATION NUMBER

- a) 1002
- b) 1072.

5. REGULATION AFFECTED

73.302.

6. AUTHORIZED SHIPPER

Structural Composites Industries Inc., 325 Enterprise Place, Pomona, California, 91768, its agents or distributors or customers.

7. PACKAGING DESCRIPTION

- a) Non-CTC Specification filament-wound reinforced plastic seamless, aluminum lined cylinders made of definitely prescribed materials.
- a) (1) Design, construction and inspection must be in accordance with SCI Drawing Nos. 1269433(2-25-75) and 1269432 (2-25-75) model ALT 59 on file with the Director of Operation and DOT FRP-1 Standard, Revision 1 dated March 15, 1982, or
- a) (2) (i) Design, construction and inspection must be in accordance with SCI Drawing Nos. 1270181 (6-2-82), 1270180 (6-1-82) and 1270179 (5-28-82) model ALT 285 on file with the Director of Operation

- a) (2) (ii) Liner material for Model ALT 285 a)(2)(i) shall be as described on SCI's material specification SCI 82-267 Temper T6 on file with the Director of Operation.
- a) (3) Design, construction and inspection must be in accordance with SCI Drawing Nos. 1270249 (2-18-83), 1270254 (5-18-83) and 1270253 (5-10-83) Model ALT 294 on file with the Director of Operation or
- a) (4) Design, construction and inspection must be in accordance with SCI Drawing Nos. 1269734 (5-2-79), 1269674 (5-23-77) and 1269673 (4-24-79) Model ALT 129 on file with the Director of Operation or
- a) (5) Design, construction and inspection must be in accordance with SCI Drawing Nos. 1270265 (4-25-83), 1270264 (4-21-83) and 1270281 (6-10-83) Model ALT 296 on file with the Director of Operation or
- a) (6) Design, construction and inspection must be in accordance with SCI Drawing Nos. 1270250 (2-21-83) and 1270259 (7-14-83) Model ALT 295 on file with the Director of Operation.
- b) In addition, the cylinders shall be in full compliance with DOT FRP-1 Standard Revision I dated March 15, 1982 (178.AA) except as follows:

- i) 178.AA-3 Inspection by whom and where.

Inspections and verifications must be performed by an approved Independent Inspection Agency.

- ii) 178.AA-4 Duties of Inspector.

- (a) ***
 - (b) ***
 - (c) ***
 - (d) ***
 - (e) ***
 - (f) ***

- (g) Furnish complete inspector's report (178.AA-16) to the maker of the cylinder, to the Director of Operation and upon request, to the purchaser. (See 178.AA-17).

- iii) 178.AA-15 Marking.

- (a) ***

- (b) Required markings are as follows:

- (1) "CTC SP 1347" or "CTC/DOT E-7277".

- (2) A serial number and an identifying symbol (letters); location of number to be just below or immediately following the CTC mark; location of symbol to be just below or immediately following the number. The symbol and numbers must be those of the maker.

- (3) ***
- (4) ***
- (c) ***

iv) 178.AA-18 Design Qualification Tests.

- (a) General - except as authorized in 178.AA-10(a), qualification tests as prescribed in this paragraph shall have been performed on representative cylinders of each specific design prior to the initial shipment. All cylinders used for design qualification tests must be fabricated on the same equipment and subjected to the same processes as is used to produce cylinders intended for charging and shipment. All tests must be witnessed by an independent inspector. Test reports must be kept on file by the cylinder maker and made available to the independent inspector and the Director of Operation upon request.
- (b) Revoked.
- (c) Revoked.
- (d) ***
- (e) ***
- (f) ***
- (g) ***
- (h) Qualification test results - a report of all tests for each design describing test setup, procedure and results must be submitted to the Director of Operation. This report must include at least the following basic information on each cylinder tested: ***

8. SPECIAL REQUIREMENTS

- a) Cylinder service life must not exceed 15 years.
- b) Use of these cylinders for underwater breathing is not authorized.
- c) Cylinders used in oxygen service must be equipped with brass or stainless steel valves, have straight threads in the opening and have a marked service pressure not exceeding 3,000 psi and each cylinder must be cleaned in compliance with requirements of Federal Specification R.R.-c-901b dated August 1, 1967, Paragraph 3.7.2, 3.8.2 and 4.4.2.3 one cylinder selected at random from each lot of 200 or less must be tested as prescribed in RR.-c-901b, Paragraph 4.4.2.3 and meet the standard of cleanliness specified.
- d) Cylinder must be packaged in accordance with 73.301(k).
- e) Each cylinder must be reinspected and hydrostatically retested at least once every three years in accordance with section 73.34(e) as prescribed for CTC 3HT cylinders, except that permanent volumetric expansion must not exceed five percent of total volumetric expansion at test pressure and retest dates must be imbedded in the epoxy coating

in a permanent manner other than stamping. Retest dates may be steel stamped on the outer exposed metallic surface of the cylinder neck in accordance with SCI-Sketch-SK78-084 dated November 9, 1978, as an alternate marking method. Reheat treatment or repair of rejected cylinders not authorized.

- f) A cylinder which has been subjected to action of fire must not be returned to service.
- g) The Director of Operation shall be advised of any change in design of the cylinder.
- h) D.O.T. E-7277 cylinders which were manufactured and in Canada prior to December 31, 1981 and which meet all of the above requirements are acceptable provided:
 - (1) Reports of all past accidental release of gas from D.O.T. E-7277 cylinders have been filed with the Director of Operation.
 - (2) All new markings have been permanently affixed to the cylinders by S.C.I. authorized personnel according to a method acceptable to Authorized Testing by December 31, 1982.
 - (3) the serial numbers of the newly marked cylinders and the notarized statement by authorized testing certifying compliance of these cylinders with the requirements of this Special Permit have been filed with the Director of Operation.

9. REPORTING REQUIREMENTS

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

10. EXPIRY DATE

November 26, 1988


Director of Operation
Railway Transport Committee

Issued at Hull, Quebec
this 26th day of November, 1987
Address all inquiries to:

Director of Operation, RTC
Canadian Transport Commission
25 Eddy Street, 14th Floor
Hull, Quebec
K1A 0N9



Office national
des transports
du Canada

National
Transportation
Agency of Canada

SPECIAL PERMIT 1347, REVISION NO. 7

In accordance with Section 71.6(a) of the Regulations for the Transportation of Dangerous Commodities by Rail, Special Permit 1347 is hereby extended by changing the following:

10. EXPIRY DATE

November 26, 1989

This extension applies only to the party(s) listed below based on the application(s) dated September 1, 1988 in accordance with Section 71.6(b) (3) of the said Regulations. All other terms of the Special Permit remain unchanged. This extension forms part of the Special Permit and must be attached to it.

Party(s): Structural Composites Industrial Inc., its agents or distributors or customers.

88-09-06

Director of Operation
Rail Safety Branch

Issued at Hull, Quebec
this 26th day of September, 1988

Address all inquiries to:

Director of Operation
Rail Safety Branch
Operations Directorate
National Transportation Agency
Hull, Quebec
K1A 0N9

*Mr 88.09.23
for 41 123*

Ⓛ 23-09-88

Canada