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

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

07 JUL 1989

DOT-E 9577
(FIFTH REVISION)

1. Altus Corporation, San Jose, California, is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages prescribed herein of a reserve-activated lithium/thionyl chloride battery for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the transportation of a package containing lithium metal, thionyl chloride and compressed argon in separate compartments, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on Altus Corporation's application dated November 8, 1988, and supplemental correspondence dated November 22, 1988, submitted in accordance with 49 CFR 107.105 and 107.103 and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and class). Lithium metal, classed as flammable solid; thionyl chloride solution, classed as corrosive material; argon classed as nonflammable gas.

4. PROPER SHIPPING NAME (49 CFR 172.101). Lithium metal, Thionyl chloride solution and Argon.

5. REGULATION AFFECTED. 49 CFR 172.101, 172.400(a), 173.206, 173.247

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle.

7. SAFETY CONTROL MEASURES. Packaging prescribed is as described in the application for exemption. The lithium metal and thionyl chloride solution will be in separate stainless steel compartments separated by a burst disc rated at 120 psi. The argon will be at a pressure not greater than 7000 psi in a small pressure vessel not exceeding 27 ml water capacity and having a burst pressure of about 15,000 psi. The pressure vessel contains a squib which releases the gas when fired. The whole battery must be cushioned in a 30-gallon steel drum, MS 27683-36, as shown in Altus Corporation's drawing A880223, Rev. A., dated February 24, 1988. The battery may also be shipped when enclosed in the IRSS wafer shown in Enclosure 2, page 2, of Martin Marietta letter dated June 22, 1988, overpacked in the fiberglass packaging shown on page 3 of Enclosure 2.

8. SPECIAL PROVISIONS.

a. Persons who receive packages covered by this exemption may reship them pursuant to the provisions of 49 CFR 173.22a.

b. The construction of the battery must be as described in the application and as shown on Drawings 0923-0003 and 0923-0004 dated

c. Each outside packaging must be labeled with CORROSIVE and FLAMMABLE SOLID labels.

d. A copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.

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

f. Depleted batteries as described in Altus' application dated December 7, 1987 may be shipped under the applicable provisions of this exemption.

9. REPORTING REQUIREMENTS. Any incident involving loss of package contents or package failure must be reported to the Office of Hazardous Materials Transportation (OHMT) as soon as possible.

10. EXPIRATION DATE. March 31, 1991.

Issued at Washington, D.C.

07 JUL 1989

Alan I. Roberts
Director
Office of Hazardous Materials Transportation

(DATE)

Address all inquiries to: Director, Office of Hazardous Materials Transportation, Research and Special Programs Administration, U.S. Department of Transportation, Washington, D.C. 20590.
Attention: Exemptions Branch.

Dist: FHWA