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

APR 12 1988

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

DOT-E 9957

1. U.S. Department of Defense, Washington, D.C., is hereby granted an emergency exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages prescribed herein of certain lithium batteries for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the transportation of lithium batteries containing parallel branches of series connected cells without diodes, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on an application from the Department of Defense dated March 15, 1988, submitted in accordance with 49 CFR 107.113 based on the national interest.

3. HAZARDOUS MATERIALS (Descriptor and class). Lithium batteries identified as BB 590, BB 557 and M50A; classed as flammable solid.

4. PROPER SHIPPING NAME (49 CFR 172.101). Lithium batteries.

5. REGULATION AFFECTED. 49 CFR 172.101, 172.420.

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle.

7. SAFETY CONTROL MEASURES. Packaging prescribed is as follows: Batteries must be packed in strong inner fiberboard containers limited to a maximum of 500 grams of lithium in one inner container. Outside packaging must be: (1) a strong wooden box; (2) DOT Specification 12B fiberboard box (or equivalent); or (3) DOT Specification 21C fiber drum (or equivalent).

8. SPECIAL PROVISIONS.

a. Not more than 20 batteries of each type enumerated in paragraph 3 may be shipped under this exemption.

b. Batteries shipped under this exemption must be capable of passing the tests described in Appendix 4 of the document "Application for Emergency Exemption (DOT-E 9905) for Transportation of Lithium - Molybdenum Sulfide Battery Packs" submitted by Moli Energy Limited dated December 15, 1987.

c. Packages must be marked as prescribed in Subpart "D" of 49 CFR Part 172. Packages must be labeled with the FLAMMABLE SOLID label shown in 49 CFR 172.420 or in Fig. 4-9 of IACO Technical Instructions.

d. Each cell and battery must be equipped with an effective means of preventing external short circuits.

e. Each cell and battery must incorporate a safety venting device or be designed in such a manner that will preclude a violent rupture under any condition incident to transportation such as a "dead short". The design of cells and batteries not equipped with a safety venting device must be specifically identified to this office prior to the first shipment of package.

f. The batteries must be capable of being tested at 75° C for 48 hours and show no evidence of distortion, leakage or internal heating.

9. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package must be reported to the Office of Hazardous Materials Transportation as soon as practicable.

10. EXPIRATION DATE. December 30, 1988.

Issued at Washington, D.C.:

APR 12 1988

(DATE)

Alan I. Roberts
Director
Office of Hazardous Materials
Transportation

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

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