U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

1200 New Jersey Ave, SE
Washington, D.C. 20590

FEB 24 2010

Mr. Todd Sweetland
Product Engineering Manager
Electrochem Solutions
670 Paramount Drive
Raynham, MA 02767

Ref. No.: 09-0303

Dear Mr. Sweetland:

This responds to your December 4, 2009 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transport of a lithium battery powered device. Specifically you ask if the design features described in your letter adequately prevent accidental operation of the device during transport.

In accordance with § 173.185, electrical devices with lithium batteries installed are required to be packed to prevent short circuits and unintentional activation during transport. According to your letter, this device utilizes a single connector that must be manually installed in order to activate. During transport, a red connector is installed in the device to maintain its waterproof design and ensure the device will not activate. When the device is ready for operation, a technician will remove the red connector and install the green connector. You further state the device can only operate when the green connector is installed.

The HMR do not prescribe specific means to meet the requirement to prevent accidental activation. However, the method described in your letter appears to meet the intent of this requirement.

I hope this answers your inquiry. If you have further questions, please do not hesitate to contact this office.

Sincerely,

Charles E. Betts
Chief, Standards Development
Office of Hazardous Materials Standards

ELECTROCHEM
CREATING TOMORROW

Leary
§173.185
Lithium Batteries
09-0303

December 04, 2009

U.S. DOT
PHMSA Office of Hazardous Materials Standards
Attn: PHH-10
East Building
1200 New Jersey Avenue, SE.
Washington, DC 20590-0001

Dear Sir,

I am writing this letter on behalf of a customer of ours with a lithium battery pack shipping inside the device it's meant to power. In regards to 49CFR 173.185 Lithium Cells and Batteries, we would like a review of section 173.185(c) *Lithium cells or batteries contained in equipment* to make sure we are complying correctly with the intent of the rule.

We have a series of three Li-primary battery modules all connected together in the device. There are several protection devices designed into the product including pack level protection on each string, diode protection and thermal cutoffs as well. To ensure that the device will not operate there is a single connector jumper that must be manually installed to power up the device. There is a red jumper installed during shipment to maintain the waterproof design of the device, and keep the unit powered off. Before operation a technician removes the sealed red jumper and installs the sealed green jumper to power up the device. The device will not power up with the red jumper or with no jumper installed. Only the green jumper will power the unit.

Is this design, as described above considered adequate steps to prevent accidental operation during transport ?

Please contact me if you have any questions about the details of this design or request.

Regards.

Todd Sweetland
Product Engineering Manager – Secondary
& Battery Compliance Engineer

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