



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

1200 New Jersey Ave., S.E.  
Washington, DC 20590

MAR 18 2008

Ms. Pamela J. Jackson  
Director of Global Product Marketing  
SeQual Technologies Inc.  
11436 Sorrento Valley Road  
San Diego, CA 92121

Ref. No.: 08-0029

Dear Ms. Jackson:

This responds to your January 22, 2008 letter requesting clarification of new requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) as amended in Docket HM-224C and HM-224E, published August 9, 2007 (72 FR 44929). Specifically you ask about the applicability of the revised passenger exceptions in § 175.10(a)(17) to individuals traveling on passenger aircraft with the Eclipse™ Oxygen System.

According to your letter, the Eclipse™ Oxygen System is a portable oxygen concentrator - a device that separates oxygen from room air for delivery to patients who require supplemental oxygen therapy. The battery pack for your Eclipse Oxygen System device contains twenty-four (24), 2.2 ampere-hour lithium ion cells. The battery pack consists of two, independent, 12-cell batteries. Both batteries are housed in a single plastic enclosure that are electrically isolated and mechanically separated from the other. The two batteries in the enclosure are not electrically connected together by permanent means. Each battery has 7.90 grams of equivalent lithium content (ELC). The lithium ion battery has been tested pursuant to the United Nations Manual of Tests and Criteria. The battery pack's electrical connectors are designed to allow independent electrical access to each of the two 12-cell batteries in the enclosures. When the battery pack is inserted into the battery compartment of your device, the two separate 12-cell batteries within the pack are electrically connected by circuitry that is part of the internal power management system, but external to and separate from the battery pack.

Your questions are paraphrased and answered as follows:

Q1. Does the exception in § 175.10(a)(17) apply to passengers carrying an Eclipse™ Oxygen System as described above?

A1. Yes. As described in your letters, the battery pack's electrical connectors are designed to allow independent electrical access to each of the two 12-cell batteries (each containing 7.90 grams ELC) in the enclosures. When the battery pack is inserted into the battery compartment of your device, the two separate 12-cell batteries within the pack are electrically connected by circuitry that is part of the internal power management system, but external to and separate from the battery pack. Therefore, when intended for personal use, the exception in § 175.10(a)(17) would apply.

Q2. Is there a limit on the number of spare lithium ion batteries as described in your letter that passengers can bring with them in their carry-on baggage?

A2. No. The two-battery limit per passenger in § 175.10(a)(17) only applies to batteries that exceed 8 grams of ELC. There is no limit to how many spare batteries passengers using the Eclipse™ Oxygen System, as described above, may have in their carry-on luggage.

Q3. May passengers traveling with the Eclipse™ Oxygen System offer the equipment as checked baggage with the lithium ion batteries installed?

A3. Yes. Passengers should be aware that any batteries for the system must be installed if offered as checked baggage.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read 'H. Mitchell', written in a cursive style.

Hattie L. Mitchell  
Chief, Regulatory Review and Reinvention  
Office of Hazardous Materials, Standards

Pollack  
§ 175.10(a)(7)  
Batteries Exceptions  
08-0029



SeQual Technologies Inc.  
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January 22, 2008

Mr. John Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards  
Pipeline and Hazardous Materials Safety Administration  
U.S. Department of Transportation  
400 Seventh Street SW  
Washington, DC 20590-0001

Re: SeQual Technologies' Lithium ion Battery and DOT's New Carry-on Provisions

Dear Mr. Gale:

I am writing to request a clarification from the U.S. Department of Transportation (DOT) regarding the new lithium ion battery carry-on provisions that apply to individuals traveling on passenger aircraft. These new provisions referenced in 49 CFR 175.10 of the U.S. hazardous materials regulations (HMR) went into effect on January 1, 2008 created some confusion for our customers and patients that travel with SeQual Technologies' battery-powered Eclipse™ Oxygen System. Therefore, a letter from your office will help to make it easier for our customers and patients to fully understand and comply with these new regulations.

As you are aware, the Eclipse™ Oxygen System is powered by two lithium ion batteries and has been authorized for use on aircraft by the Federal Aviation Administration. Each battery contains 7.90 grams of equivalent lithium content (approximately 96 watt-hours). This was clarified in a letter dated May 15, 2006 from your office to SeQual Technologies. A copy of that letter is attached for reference.

Based on our understanding of these new regulations, lithium ion batteries with less than 8 grams of equivalent lithium content can be carried onboard the aircraft by passengers in their carry-on baggage either as spares or installed in equipment for "personal use." It's also our understanding that there is no limit on the number of spare batteries with less than 8 grams of equivalent lithium content that can be carried onboard the aircraft. To be sure our understanding of these new carry-on provisions is accurate and users of the Eclipse™ Oxygen System are fully compliant with the U.S. DOT regulations, please provide answers to each of the following questions:

1. Are users of the Eclipse™ Oxygen System authorized under the new DOT lithium ion battery carry-on provisions authorized to carry this equipment and spare lithium ion batteries onboard passenger aircraft?

2. Is there a limit on the number of spare lithium ion batteries with less than 8 grams of equivalent lithium content that passengers can bring with them in their carry-on baggage?
3. May passengers traveling with the Eclipse™ Oxygen System offer the equipment as checked baggage with the lithium ion batteries installed? (We specify in our manual to remove the battery when shipping as luggage.)
4. May SeQual Technologies' employees traveling with the Eclipse™ Oxygen System for business purposes (e.g., to trade shows or visiting medical facilities) offer the equipment as checked baggage with the lithium ion batteries installed? (Again, we recommend removing the battery when checking unit as luggage.)
5. May SeQual Technologies' employees traveling with the Eclipse™ Oxygen System for business purposes (e.g., to trade shows or visiting medical facilities) bring the equipment and spare batteries onboard the aircraft as part of their carry-on baggage?

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These new regulations have a significant impact on our company and users of the Eclipse™ Oxygen System that require supplemental oxygen when they travel. Therefore, your immediate response to these questions would be greatly appreciated. Should you need additional information or have any questions regarding our product, please do not hesitate to contact me.

Respectfully,



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cc: Robert Schneider, Vice President Business Development, SeQual Technologies Inc.  
Ron Richard, Sr., Vice President Sales and Marketing, SeQual Technologies Inc.  
James Bixby, CEO and President, SeQual Technologies Inc.