



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

JUL 12 2000

Mr. Michael Keller
Ground Services Team Leader
MedCenter Air
P.O. Box 32861
Charlotte, NC 28232-2861

Ref. No. 00-0172

Dear Mr. Keller:

This is in response to your letter requesting clarification on the use of nitric oxide and nitrogen mixtures for medical use under the Hazardous Materials Regulation (HMR: 49 CFR Parts 171-180). Specifically, you ask if a mixture comprised of .08% nitric oxide with the balance nitrogen is regulated when used in ground ambulances, medical helicopters and medical fixed wing aircraft.

It is the opinion of this Office that a compressed gas mixture containing .08% of nitric oxide with the balance nitrogen is properly classed as Division 2.2. Such a gas is not poisonous by inhalation.

An ambulance that uses a compressed gas to treat a patient being transported is not regulated under the HMR. Such materials are not being transported as items of commerce and are not subject to the HMR. It is regulated, however, when transported on board commercial medical helicopters and medical fixed wing aircraft.

For your information, as provided by § 175.10(a)(14), a transport incubator unit necessary to protect life transported by aircraft is not regulated under the HMR when: (1) the compressed gas used to operate the unit is in an authorized DOT specification cylinder that is marked, labeled, filled and maintained as prescribed by the HMR; (2) any batteries used in its operation are of the non-spillable type; (3) the unit is constructed so that valves, fittings, and gauges are protected from damage; (4) the pilot in command is advised that the unit is onboard and when it is intended for use; (5) it is accompanied by a person qualified to operate it; (6) it is secured in the aircraft in a manner that does not restrict access to or use of any required emergency or regular exit or of the aisle in the passenger compartment; and (7) there is no smoking within ten feet of the unit.



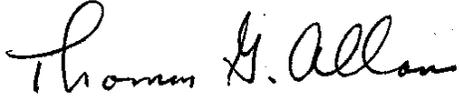
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An incubator unit using a Division 2.2 (non-flammable gas) compressed gas mixture is not regulated for air transport when the above conditions are met. Therefore, you may transport an incubator as described above as unregulated.

I hope this information is helpful.

Sincerely,

A handwritten signature in cursive script that reads "Thomas G. Allan".

Thomas G. Allan

Senior Transportation Regulations Specialist
Office of Hazardous Materials Standards



MEDCENTER AIR

Twitter
§ 175.10
00-0172

Delmer F. Billings
Chief, Standards Development
Office of Hazardous Materials Standards
US Department of Transportation
Research and Special Programs Administration
400 Seventh Street, SW
Washington, D.C. 20590

Dear Mr. Billings:

Please find enclosed several correspondences regarding the transport of Nitric Oxide as a medical use gas.

One of the documents is a letter from you to Ms. Kathleen Adams of the American Association for Respiratory Care and the other is an attached letter from Ms. Adams to our Neonatal Transport Medical Director, Dr. Kueser. The administration of MedCenter Air of the Carolinas Healthcare System is requesting a letter from your organization, addressed to our organization, outlining the same issues you clarified for Ms. Adams. We are in the process of completing our protocols and procedures for the transport of this medical gas on our aircraft and ground ambulances and desire a correspondence from your office to remain on file.

Thank you for your consideration on this matter. If I can answer any questions, please do not hesitate to contact me.

Sincerely,

Michael Keller
Ground Services Team Leader
704-355-1624
mkeller@carolinas.org