



*The Medical Gas Company*

October 13, 2003

Department of Health and Human Services  
Dockets Management Branch (HFA-305)  
Food and Drug Administration  
5630 Fishers Lane, Room 1061  
Rockville, MD 20852

**RE: Docket No. 00N-1484 Safety Reporting Requirements for Human Drug  
and Biological Products**

To Whom It May Concern:

**Introduction/Overview**

LifeGas, Ltd., with 20 sites registered as a manufacturer of medical gases, would like to request an exemption for medical gas products from the proposed rule regarding safety reporting requirements for human drugs as published in the Federal Register on March 14, 2003<sup>1/</sup>. We support the intent of the proposed rule with respect to drug products for which pharmacological effects are important, but for the reasons explained below, the requirements specified in the draft copy would not advance the stated goals of the proposal for medical gas products.

The Medical Gas Industry presents a unique characteristic as recognized in the 1978 preamble regarding CFR 21, Parts 210 and 211, that differentiates medical gases from this sector and from other aspects of the pharmaceutical industry. These important distinctions, as described below, warrant special consideration and separate postmarket reporting requirements.

The comments provided below: (1) Historical profile, to help explain and support the need for postmarket rulemaking distinctions between medical gases and conventional pharmaceutical products; (2) discuss how a number of proposals in the Federal Register notice raise special questions and concerns for the medical gas sector; and (3) request that certain procedural protections be applied to this industry segment, as part of this rulemaking process in the event that the agency does not concur with our requested exemption.

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<sup>1/</sup> "Safety Reporting Requirements for Human Drugs and Biological Products," 68 Fed. Reg. 12406 (proposed March 14, 2003).

## **I. Historical Medical Gas Applications**

We believe there are clearly certain requirements for medical gases that would warrant reporting. Specifically, any incident involving the use, or potential use, of a wrong medical gas product by end users, should always be considered a serious unexpected event that must be reported. We do support the Agency's access to prompt, complete, and accurate data related to all such incidents. Similarly, LifeGas recognizes and supports reporting of any incident where, in the medical judgment of end users, there is any reasonable question of possible medical gas being a contributing factor to a patient safety concern.

The proposed rule as drafted, however, goes well beyond these LifeGas and Agency interests. In order to tailor medical gas reporting so that it extends only to postmarket information of true public health value, we believe the Agency must first consider the historical profile and clinical context of medical gas products.

### **A. Historical**

Medical oxygen represents approximately 90% of all medical gas applications and, thus, dominates any postmarketing analysis. Reports of adverse incidents for this product over the years have been extremely rare as compared to other conventional drug products. As noted in the Agency's proposal, there may be as many as 98,000 fatalities per year due to medication errors from more traditional drug products. By contrast, in the past 20 years, and based on hundreds of thousands of uses annually and millions of uses over time, LifeGas is aware of only eight incidents involving medical gas associated fatalities. This historical safety profile, with events so rare as to preclude any meaningful statistical trend analysis, has not been considered in the proposed rule.

Likewise, historical root causes for medical gas incidents have not been considered. In the Agency's recent accounting of past medical gas fatalities and other injuries,<sup>2/</sup> we can conclude that all such incidents related to either product mix ups at point of use (all incidents since March of 1996), contamination of supply lines (1 incident) or labeling/identification errors (two incidents, both prior to 7/86). No reports reflect on the pharmacology of the drug products themselves when administered as intended.

In each of the cases reported in more recent years, information about the events has been disseminated quickly throughout the industry and to regulatory authorities where they were fully and openly discussed and evaluated for root cause. To further address root cause concerns from these few events, there has been intensive FDA and industry collaboration over the past two years to mitigate end-use mix-ups and related risks through training and related "awareness" initiatives. Since that time, there

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<sup>2/</sup> FDA, Current Good Manufacturing Practice for Medical Gases (Draft Guidance, May 2003).

have been no reported fatalities involving medical gas products, suggesting that these collaborative interactions have begun to be successful. These well understood, and now collaboratively managed, root cause assessments do not seem to have been recognized in FDA's postmarket reporting proposal.

**B. Medical Gas Applications (Oxygen USP)**

As with the historical postmarket experience for medical gases, the unique clinical context, particularly for medical oxygen (USP), has not been recognized in the proposal. Oxygen USP is an element that is used extensively for life support, rather than for a specific pharmacological effect. Given the supporting (rather than altering) role of oxygen in sustaining human life, it is not surprising that LifeGas knows of no incident where patients have had a negative pharmacological reaction to this product when administered as prescribed. Similarly, LifeGas knows of no reactions of oxygen USP with other drug products. Consequently, unlike conventional pharmaceutical products, where postmarket analyses often shed important insights into short and long-term adverse effects, and now concomitant medication concerns and risks, these concerns and risks are irrelevant for oxygen USP.

We request that these important and unique historical and clinical distinctions be factored into the request that medical gases be exempt from the proposed rule requirements.

**II. Aspects of the Proposed Rule of Particular Concern**

Because the reporting rule, as drafted, has not considered the historical profile and clinical context of medical gas products, there are a number of proposals that raise important questions and concerns for the industry, that would not serve any public health benefit and would possibly confound FDA's true post-market reporting interests. LifeGas' principal concerns, as described below, relate to: (1) data collection and data review requirements; (2) new causation standards for Suspected Adverse Drug Reactions; (3) new standards for "acute respiratory failure," which appear to trigger "always expedited reports."

**A. Data Collection and Review Requirements**

LifeGas fully supports that any investigation of significant adverse events requires thorough efforts to determine root causes of problems. LifeGas also believes, however, that there are fundamental distinctions between root cause investigations for medical gases and more conventional pharmaceutical products. With traditional pharmacological agents, investigations necessarily involve the full array of clinical issues present with a given patient and therapeutic regimen (e.g., the expected or unexpected adverse effect profile of a given pharmacologic agent; the

underlying disease condition(s) of a patient; concomitant medications; medical care and error; and related factors). By contrast, for medical gases, root cause investigations are more straightforward and focus primarily on the actions of involved parties (those who distribute or administer the drug) to determine the cause of the mix-up or related use concerns. Thus, the extensive need for medical evaluation, including active querying of adjunctive medical issues, and a review of the data by a licensed physician, brings no apparent value when considering our industry's historical product safety issues. As described below, the proposed rule appears to require significant new reporting for medical gas companies. Active querying and physician review obligations in this context run the risk of masking, or even potentially delaying the review of, legitimate incidents and analysis to identify root cause concerns. We support general concepts and intent of active querying to ensure that appropriate information is aggressively procured and that investigations are undertaken by qualified individuals. For medical gas products, we believe that these goals would be best served through a focus on manufacture, distribution and administration factors as opposed to extensive gathering of medical information.

**B. Causation of Suspected Adverse Drug Reactions (“SADRs”)**

Approximately 120,000 patients die each year as a result of Chronic Obstructive Pulmonary Disease (“COPD”), either in the homecare or hospital environments. These patients, as well as hundreds of thousands of other patients, are routinely on supplemental oxygen for life support, some almost continuously, and most with an anticipated terminal outcome. Hospitals are, of course, aware when expired patients have been administered oxygen and homecare companies are routinely notified to retrieve their equipment when a patient expires. Currently, such cases are not reported as serious adverse events necessitating a 15-day alert report, unless there is medical cause to suspect that the wrong product was administered or that the product was in some other way compromised, extremely rare events, as noted above. Thus, until recently, virtually all events involving terminal patients on oxygen have been presumed not to be reportable upon notice of death, absent information suggesting a contributing medical gas problem.

Based on the newly proposed definition of SADR, however, every patient death, including those that historically have been classified as “expected,” would need to be reported. The proposed standards state that, those deaths “probably” caused by the underlying disease and not the result of the product would need to be reported.<sup>3/</sup> Even if a medical gas manufacturer determines that the likelihood of a causal relationship between its product and an adverse event is “unlikely” or “remote,” the event must still be reported to FDA.<sup>4/</sup>

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3/ 68 Fed. Reg. at 12417.

4/ Id.

For medical oxygen alone, the proposal would theoretically increase reports by approximately 120,000 submissions per year. This consequence is fundamentally inconsistent with the premise of minimal additional reporting of a “spontaneous” nature that is assumed under the proposal’s cost projections.

Without an express presumption of non-reportability, absent awareness of information that would suggest a medical gas problem, the new SADR definition of causation would not advance the goal of improving drug postmarket safety reporting. Moreover, without such a non-reporting presumption, FDA’s postmarket system would be flooded with needless over-reporting, that would simply burden and confound FDA’s oversight of this industry sector, possibly masking a rare legitimate incident that might occur.

### **C. Always Expedited Reports**

Under the proposed rule, it appears that all situations involving patients who expire while on oxygen support would be deemed “always expedited reports” under the category of “acute respiratory failure.” There are several concerns with this apparent standard. First, the term itself requires better definition; our clinical consultants and colleagues indicate that this terminology may apply to almost all cases of patient death. Second, and of greater importance to the medical gas industry, the potential impact would be the same as that described under the new causation standard for SADRs, discussed above. This over-reporting of uninformative events would increase significantly the burden on LifeGas, regulatory agencies, and eventually, the health care system, all without advancing the safety and postmarket surveillance of medical gas products.

For example, if reports were required for all expired COPD patients, due to spontaneous reports or due to classification as “always expedited reports,” there is also a significant multiplying effect that could result from this interpretation. Specifically, any reports initially generated for medical oxygen would provide FDA with information regarding numerous other drugs taken by the expired patients, and, presumably, a report should then be issued for each such drug. The reportable events under the “spontaneous” or “always expedited” categories, therefore, would not only increase by as much as 120,000 annually, but potentially many times more, due to the prevalent use of multiple concomitant medications by most terminally ill patients. The Agency’s reporting objectives cannot and will not be served by this unintended cascade of potentially hundreds of thousands of additional reports annually.

### **III. Rulemaking Protections for Medical Gas Companies**

#### **A. Risk-Based Regulation**

While LifeGas fully supports the concept of expeditious and thorough reporting for serious events, the proposal as applied to medical gas products would add enormous burdens to the gathering and analysis of product safety data and offer little if any benefit. History supports that the current system is capable of identifying all meaningful postmarket reports and we feel that the imposition of an expensive, vastly expanded reporting regime, would provide little tangible benefit, and could potentially create confounding harm. Safety concerns for this mature product line do not center around issues of pharmacologic effect, which is the focus of the proposed regulation.

We believe that if a formal risk based analysis were performed for safety reporting of medical gases, it would be clear that this proposal would require significant restructuring to avoid needlessly and overwhelming reporting to both LifeGas and the FDA. LifeGas, Ltd. requests that this risk-based need analysis be undertaken if FDA plans to apply the proposed rule requirements to medical gas products.

As noted above, the few events reported worldwide are disseminated quickly throughout industry and to regulatory authorities, where there is open discussion and focus on problem elimination. Since medical gas product safety concerns are very well understood, both by industry and regulators, it is unclear how international harmonization needs would be further served by significant new reporting obligations for medical gas companies. We believe that this conclusion would be reached through a comprehensive risk analysis.

LifeGas appreciates the opportunity to comment on this proposed rule. If there are any questions regarding the proposed recommendations for exemption and clarification, please do not hesitate to contact me (Gregory A Reppar) by phone at (770) 242-0470 ext 12, or via email at [greppar@lifegas.com](mailto:greppar@lifegas.com) .

Thank you for your consideration.

Sincerely,

Gregory A Reppar  
Director of Quality and Regulatory Compliance  
LifeGas, Ltd.