



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

SEP 10 2015

Les Adolph
Viking Packaging
5505 North Bird Creek Ave.
Catoosa, OK 74015

Ref. No. 15-0094

Dear Mr. Adolph:

This responds to your e-mail of March 19, 2015 requesting clarification on the packaging requirements applicable to life-saving appliances under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you have asked if a life-saving appliance with a compressed oxygen cylinder would require an outer packaging that meets the flame penetration and thermal protection standards set forth in §§ 173.302(f)(3)(ii) and 173.302(f)(4), respectively, when shipped by air.

The answer is yes. Under § 173.219(b), life-saving appliances containing Division 2.2 compressed or liquefied gases, such as compressed oxygen, "must be packaged in cylinders in accordance with the requirements of this subchapter [the HMR]." It is the opinion of this Office that the language in § 173.219(b) requires a life-saving appliance with a compressed oxygen cylinder to be packaged in an outer packaging that meets both the flame penetration and thermal protection standards. In particular, per § 173.302(f)(3)(ii), the cylinder must be placed in a rigid outer packaging that is capable of passing the Flame Penetration Resistance Test in Appendix E to part 178. Per § 173.302(f)(4), the cylinder and the outer packaging must be capable of passing the Thermal Resistance Test specified in Appendix D to part 178.

I hope this answers your inquiry. If you need additional assistance, please contact this Office again.

Sincerely,

Dirk Der Kinderen
Acting Chief, Standards Development Branch
Standards and Rulemaking Division

Lesko
\$173.219
Life Saving Appliances
15-0094

Dodd, Alice (PHMSA)

From: Kelley, Shane (PHMSA)
Sent: Thursday, May 07, 2015 10:57 AM
To: Dodd, Alice (PHMSA); Goodall, Shante CTR (PHMSA)
Cc: Betts, Charles (PHMSA)
Subject: FW: Question on PHMSA position on new small aircraft lavatory cylinders

Alice/Shante,

Could you kindly log this email from Mr. Adolph in as a formal request for interpretation? Please also include the below email chain so the drafter is aware of the communication we have had to date. Anything we can do to expedite this response would be much appreciated.

Thanks so much!

-Shane

From: Kelley, Shane (PHMSA)
Sent: Thursday, May 07, 2015 10:52 AM
To: Les Adolph
Cc: Betts, Charles (PHMSA); Pfund, Duane (PHMSA); Foster, Glenn (PHMSA)
Subject: RE: Question on PHMSA position on new small aircraft lavatory cylinders

Les,

Appreciate the follow-up by phone on this issue today and my apologies for the delay in finalizing a response. After further review, the question you've asked is slightly different than that which was posed by Bombardier and as such the formal response we've had in coordination won't address the key point you have raised. Bombardier's incoming simply asked whether the generators assembled and ready for installation (replete with the panel/mask etc) may be described as life saving appliances. Your question is whether such assemblies, if properly described as life saving appliances, would be subject to the FP packaging in the same manner as the component cylinders shipped separately. Clearly the implications here are significant and we want to make sure the answer we give is fully coordinated. To facilitate, as per our discussion today, we'll log your email as a formal request for interpretation to ensure a full review to include our FAA partners, legal counsel, etc. and work to get a response to you as expeditiously as possible.

You've as usual asked a great question that has already led to quite a bit of discussion here! Thanks so much for your patience as we sort this out, and as always it is a pleasure working with you.

Kind regards,

Shane

-----Original Message-----

From: Les Adolph [mailto:ladolph@vikingpacking.com]
Sent: Friday, March 20, 2015 11:42 AM
To: Kelley, Shane (PHMSA)
Cc: Benedict, Robert (PHMSA); Pfund, Duane (PHMSA); Foster, Glenn (PHMSA)
Subject: RE: Question on PHMSA position on new small aircraft lavatory cylinders

Shane, I think Bombardier may have already provided this but just in case you don't have access to it, this information may be helpful.

Regards,
Les

-----Original Message-----

From: shane.kelley@dot.gov [mailto:shane.kelley@dot.gov]
Sent: Friday, March 20, 2015 8:59 AM
To: Les Adolph
Cc: robert.benedict@dot.gov; Duane.Pfund@dot.gov; Glenn.Foster@dot.gov
Subject: RE: Question on PHMSA position on new small aircraft lavatory cylinders

Les,

Charles is out of Office but forwarded your below inquiry. We are working on it and will get back to you once we have a coordinated response.

All the best,

Shane

From: Betts, Charles (PHMSA)
Sent: Thursday, March 19, 2015 11:21 AM
To: Kelley, Shane (PHMSA); Foster, Glenn (PHMSA)
Cc: Benedict, Robert (PHMSA); Pfund, Duane (PHMSA)
Subject: Fw: Question on PHMSA position on new small aircraft lavatory cylinders

Sent from my BlackBerry 10 smartphone on the Verizon Wireless 4G LTE network.

From: Les Adolph <ladolph@vikingpacking.com>
Sent: Thursday, March 19, 2015 11:17 AM
To: Betts, Charles (PHMSA)
Subject: Question on PHMSA position on new small aircraft lavatory cylinders

Charles, sorry to bother you as I had tried to reach out to Glenn Foster with my question but have been unable to make contact with Glenn. A few years back when the FAA perceived a threat to the air carriers for the oxygen generators used in aircraft lavatories they issued an AD that required US air carriers to remove the generators, now they are requiring reinstallation of small compressed oxygen cylinders in the lavatories. A question we are getting is when the cylinder is installed in the panel with the breathing mask, is it still considered oxygen, compressed UN1072 or is it considered a Life-saving appliance not self inflating UN3072? My opinion is that it clearly falls under UN3072 but Viking's dilemma is that we have customers who are asking us if they must use a DOT31FP type container that meets the flame penetration, thermal protection requirements when shipping by air? No issue on the cylinder itself as it clearly would fall under the UN1072 but it is the panel when containing the cylinder that is raising the questions. Viking is reluctant to go out and spend a lot of money on developing a compliant DOT31FP container when it is a likely possibility that PHMSA would interpret the UN3072 as I believe it meets so I'm needing to either get an emergency interp of at least a feeling of PHMSA position on this as the air carriers are getting nervous about how they will be moving them. You can reach either myself at my cell at 918-809-1133 or go through the Viking switchboard at 800-788-8525 and ask for either I or Ben Weaver who is also familiar with this issue. I'm not asking you specifically to respond but if you can get this to the right person to address it that would be great. Bombardier may already have a request for clarification out there as well?

this communication. The information in this e-mail from Viking Packing Specialist is confidential and may be legally privileged. It is intended solely for the addressee. Access to this e-mail by anyone else is unauthorized. If you are not the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing or copying is strictly prohibited. If you receive this e-mail in error, please immediately notify the sender via reply e-mail and delete this communication.