U.S. Department
of Transportation
**Research and
Special Programs
Administration**

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

MAR 15 2000

Mr. Jack E. Gilbert, Jr.
Sperry-Sun Drilling Services
4607 Highway 90 East
Broussard, LA 70518

Ref. No. 99-0270

Dear Mr. Gilbert:

This is in response to your letter dated September 21,1999, requesting clarification on the packaging requirements for gas samples under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether shipping gas samples in bags placed in an open top can such as a coffee can or paint can with a friction lid sealed with plastic-ring seals is permissible under the HMR.

Section 173.306(a)(4)(iii) requires that non-pressurized gases, flammable be packed in hermetically sealed glass or metal inner packagings of not more than 2.5 L (0.5 gallons) overpacked in a strong outer packaging. You have proposed to place the gas sample in a plastic bag which is enclosed in a one gallon round metal can closed with a friction lid and a HAZLOC ring lock.

You have provided no information to show that your proposed packaging meets the definition of hermetically sealed in § 171.8. If you determine that a 2.5 L (0.5 gallon) metal can closed with a friction lid and a HAZLOC ring lock meets the definition of hermetically sealed, it can be used as an inner packaging as specified in § 173.306 (a)(4)(iii). The use of a one gallon metal can will require an exemption from the HMR. Exemption application procedures and requirements are provided in § 107.105 of the HMR.

I hope this answers your inquiry.

Sincerely,

Delmer F. Billings
Chief, Standards Development
Office of Hazardous Materials Standards

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§173.22
99-0270

September 21,1999

Jack Gilbert
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4607 Hwy 90 East
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Edward Mazzullo
Director, Office of Hazardous Materials
US DOT- RSPA (DHM-10)
400 7TH Steet, SW
Washington, DC - 20590

Subject:Hermetically Sealed Containers

Dear Sir:

I have questions regarding the proper transportation of flammable gas samples. The samples, which will be pumped into 1-liter sample bags, are taken from the mud-pit area on offshore and land-based drilling rigs and contain various hydrocarbons associated with oil/gas well drilling. They will then be shipped to the customer for analysis. The sample bags are multi-layered with the center layer being aluminum.

On June 3,1999, I spoke with David Moore, Hazardous Materials Information Office, about shipping containers meeting DOT's definition of hermectically sealed. In question was the double friction seal can (i.e. paint can) with a plastic locking ring. Mr. Moore stated that this would not meet the requirements of being hermetically sealed. He also stated that to obtain a hermetically sealed container, one would have to weld, braze, crimp, or use a gasketed lid. It was also his determination that the gas sample bags, which are multi-layered and sealed by utilizing a steel air valve that is capped, would not meet the requirements of the metal inner container.

Since our conversation, Sperry-sun has purchased and has been using the open top cans (coffee can style) and crimping the lids on with a sealing machine.

Recently, we had a meeting with one of our customers who wants us to use the friction lid type cans with plastic-ring seals. They believe that the IATA standards allows for the use of such cans and I have attached the documentation that they have given me.

Please review the attachments and provide us with a determination in writing as the proper packaging.

Thank you for your assistance,

Jack E. Gilbert, Jr.
HSE Advisor