U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

OCT 20 2011

Ms. Marilyn Williams
Logistics Representative
Eastman Chemical Company
Texas Operations
P.O. Box 7444
Longview, Texas 75607-7444

Ref. No. 10-0073

Dear Ms. Williams:

This responds to your letter requesting clarification of the applicability of certain regulatory requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to a tank car that previously contained "UN1038, Ethylene, refrigerated liquid," a cryogenic, Division 2.1 (flammable gas) material. You ask whether the annular space absolute pressure requirement (< 75 microns of mercury) specified in § 173.319(b)(2) of the HMR applies to a tank car containing the residue of ethylene no longer in cryogenic form that is depressurized to 10 psi or less and purged with nitrogen. Additionally, you ask whether movement approval from the Federal Railroad Administration (FRA) under § 174.50 is necessary to offer such a purged, residue tank car for transportation if the absolute pressure does exceed 75 microns of mercury in the annular space when being offered for movement to a repair facility to correct such a deficiency. We apologize for the delay in responding and any inconvenience it may have caused.

As specified in § 173.319(b)(2), when a tank car containing a flammable cryogenic liquid is offered for transportation, the absolute pressure in the annular space must be less than 75 microns of mercury. A DOT 113 specification tank car that no longer contains flammable cryogenic liquid is not subject to this requirement because its monitoring does not provide an accurate indication of potential insulation problems. Because the residue no longer poses a risk in transportation as a flammable cryogenic liquid, the tank cars are not subject to the annular space absolute pressure requirement in § 173.319(b)(2). However, your residue may still meet the definition of a flammable gas and, therefore, be subject to other regulations. In addition, because the nonconforming tank cars are being used to transport a hazardous material residue, they are subject to movement approval by the FRA under § 174.50 when offered for transportation to a repair facility.

I trust this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

T. Glenn Foster

T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

EASTMAN

Texas Operations
P.O. Box 7444
Longview, Texas 75607-7444
Phone: (903) 237-5000

Eastman Chemical Company

March 22, 2010

Stevens
§173.29
§173.319(b)(2)
Residue
10-0073

U. S. Department of Transportation
PHMSA Office of Hazardous Materials Standards
Attn: PHH-10
East Building
1200 New Jersey Avenue, SE
Washington, DC 20590-001

Re: Letter of Interpretation

Dear PHMSA Office of Hazardous Materials Standards:

Eastman Chemical Company (Eastman) requests a letter of interpretation regarding the provisions specified in Title 49 Code of Federal Regulations (CFR), Part 173.29(a) Empty Packages and Part 173.319 (b)(2), Cryogenic liquids in Tank Cars.

Eastman offers for transportation by rail a hazardous material as UN 1038, Ethylene, Refrigerated Liquid, 2.1 in DOT 113 tank cars. Eastman does not own the railcars, but is responsible for loading and offering the cars in transportation. When railcars are received for filling, Eastman make appropriate checks to ensure micron level fall within a range that is acceptable for filling and will meet regulatory requirements after filling. If the car micron level is too high before filling, we do not fill the car. We notify the owner that the railcar cannot be filled/shipped and request owner send car to repair facility.

In order to minimize risk and to provide an equivalent level of safety we depressure the car to 10 psi or less and purge with nitrogen to the maximum extent possible to remove the maximum amount of ethylene prior to shipping the tank car for repair.

My questions concerning this matter are:

1. Does the requirements set forth in 49CFR 173.319 (b)(2) apply to shipping/offering a residue last contained ethylene tank car? In other words, when a residue last contained ethylene tank car is shipped/offered for transportation, must the "absolute pressure in the annular space be less than 75 microns of mercury
2. Would an FRA movement approval be required to offer into transportation a residue ethylene car that has 75 microns of mercury or more for movement to a repair facility?

Your assistance in this matter is greatly appreciated.

Sincerely,

Marilyn Williams

Marilyn Williams
Logistics Representative
Eastman Chemical Company