PI-01-0103

February 15, 2001

Mr. Tad A. Schell Regulatory Compliance Officer Marathon Ashland Pipe Line, LLC 539 South Main Street Findlay, OH 45840-3295

Dear Mr. Schell:

I am responding to your letter concerning an LPG storage tank on the grounds of a refinery. You requested our opinion on whether the tank is subject to 49 CFR Part 195.

According to your letter, the refinery produces LPG from crude oil and stores it in the tank for use at the refinery or sale to marketers. The refinery also transfers LPG back and forth between the tank and a remote storage cavern via regulated pipelines.

As provided in § 195.1(b)(7), Part 195 does not apply to "transportation of a hazardous liquid or carbon dioxide through onshore production (including flow lines), refining, or manufacturing facilities, or storage or in-plant piping systems associated with such facilities." Thus, storage associated with refining facilities is not covered by Part 195. It follows that because the LPG tank in question is associated with refining operations, Part 195 does not apply to the tank.

I hope this information meets your needs. If you would like further assistance, please call Mr. Lucian Furrow, of my staff, at (202) 366-4559.

Sincerely, Richard D. Huriaux, P.E. Regulations Manager Office of Pipeline Safety Marathon Ashland Pipe Line, LLC 539 South Main Street Findlay, OH 45840-3295

October 18, 2000

Mr. Richard D. Huriaux, P.E. Director of Technology and Regulations Office of Pipeline Safety, USDOT 400 Seventh St. SW Washington, D.C. 20590-0001

RE: Determination of refining equipment not being subject to Part 195 Dear Mr. Huriaux:

Marathon Ashland Pipe Line Company has been working with it's Refinery clients to determine if certain equipment within a refinery perimeter connected to a pipeline is subject to 49 CFR part 195.

Based on our understanding of Part 195, we have made a determination that Butane sphere at one of our refining customer locations is not subject to 49 CFR part 195. We seek OPS concurrence of our determination.

## **Background**

A Petroleum refinery customer has a Butane Sphere (n-Butane) located on the southeast corner of the refining facility. The Butane Sphere was constructed in 1976, in compliance with ASME codes in effect at the time of construction. The refinery itself was originally constructed in the 1930's with various additions in succeeding years. The facility is located in a commercial and light industrial area near several other petroleum terminals, distribution warehouses, and small businesses.

The primary business activity of the refining complex is the conversion of crude oil into petroleum products. In the course of this conversion, LPG (chiefly Propane and Butane) products and intermediates are produced. These materials are either sold to marketers or used within the refining complex for gasoline blending to meet EPA mandated RVP targets. The volume of these LPG materials produced by the refinery is relatively constant, however the consumption varies seasonally. In the fall and winter months, the refinery requires more Butane for gasoline blending than is produced, and in the spring and summer, the refinery produces excess LPG.

To best utilize this material, an offsite LPG cavern facility, located approximately 14 miles away, is utilized to store LPG materials in times of excess LPG production, and supply LPG to the refinery when the refinery requires additional LPG. This cavern facility is connected to the refinery via two pipelines.

## Part 195 Applicability

Part 195 requirements apply to 1) pipelines between the LPG cavern facility and 2) refinery, and Refinery LPG station pipeline pressure safety devices and associated piping necessary to keep the pipeline from exceeding the MOP requirements of 49 CFR 195.406(b).

Most of the piping at the refinery LPG terminal can be differentiated as part 195 or non-part 195 piping using the rules in part 195.1. Our implementation of part 195.1 at the Refinery LPG station is shown on the attached drawing, **Exhibit A.** 

However, the direction of pipeline flow, as explained earlier, varies seasonally. Typically, from mid-May to mid-August, excess refinery LPG is shipped via pipeline from the refinery to the cavern facility; from mid-September to mid-April, LPG is shipped from the cavern facility to the refinery. As such, the Butane sphere is seasonally, switched between a "receive-from pipeline" mode and a "ship-to-pipeline mode."

As you can see, the tank is not truly a traditional pipeline breakout tank. A breakout tank provides either 1) an intermediate storage point between two pipeline segments, or 2) accepts surge (relief) pressure from a pipeline

system. Sometimes, the Butane sphere receives material in from the LPG pipeline system (please see **Exhibit B**) and at other times the Butane sphere provides material for shipment out through the same pipeline (please see Exhibit C). In other words, the tank is a terminal tank. Sometimes the terminal is receiving, and sometimes the terminal is shipping, but always through the same pipeline. This Butane Sphere does not serve as pressure relief surge vessel to the LPG pipeline system.

## **Other Information**

In addition to serving as a pipeline terminal tank, the Butane sphere is intimately involved with refinery operations. The vessel receives process unit run-down from several units, such as the alkylation unit deisobutanizer tower, and the MTBE unit debutanizer. The Butane sphere also supplies feedstock to the gasoline blending unit.

The Butane sphere is subject to the OSHA PSM standard, which is equivalent to part 195 vessel maintenance and integrity practices (i.e. API 2510 is followed). In addition, the Butane sphere is currently maintained by refinery personnel who are trained and qualified in refinery operation and maintenance procedures.

## **Conclusion**

Based on the above, we believe the sphere is not subject to 49 CFR Part 195. Please contact me if you require further information to consider this matter.

Sincerely, Tad A. Schell, P.E.