

08-22-08A11:38 RCVD



Refining and Marketing Company

Pipeline, Terminal, & Trucking
300 Concord Plaza
San Antonio, TX 78216-6999

August 21, 2008

Chris Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration
12300 W. Dakota Ave., Suite 100
Lakewood, CO 80228

Dear Mr. Hoidal:

SUBJECT: RESPONSE TO CPF NO. 5-2008-0006M – NOTICE OF AMENDMENT

This letter is in response to the above-referenced NOA, dated March 13, 2008. The finding from the NOA is repeated in shaded italics, and Tesoro Refining and Marketing Co.'s (Tesoro's) response follows. All referenced documents are attached.

Tesoro has completed a revision of its Integrity Management Program. This program, which previously covered only hazardous liquid pipelines, now includes both gas and hazardous liquid pipelines. The information and procedures for integrity management of Tesoro's only gas pipeline, the subject of this Notice of Amendment, are now interwoven into the newest revision of Tesoro's Integrity Management Program

1 – HCA Identification

1A: 192.905(a)

Tesoro's High Consequence Area (HCA) identification process does not document the method used to identify HCAs.

Tesoro's revised Procedure IM001, Volume Release and HCA Impact, describes the different methods used to identify HCAs. Method 2 is used for this determination; this is identified on page 2-3 of the Tesoro Integrity Management Program.

1B: 192.903

The calculations performed by Tesoro's consultant, SECOR, to determine the potential impact radius (PIR) appear to use a value for the pipe Diameter of 10.52 inches, while the Tesoro IMP states that the pipe outside diameter is 10.75 inches. This results in a lower PIR.

Tesoro calculated the PIR based on the nominal diameter of the pipe, 10-inches, as discussed in the description of the variable "D" in FAQ 16 (part of which is included below).

FAQ 16: Determining if Pipeline is in an HCA

Question: How will an operator determine if a pipeline is in an HCA?

Answer: The potential impact radius must be calculated along the pipeline using the following formula:

$$PIR = .69 * (p * d^2)^{0.5}$$

Where:

PIR = Potential Impact Radius (in feet)

P = maximum allowable operating pressure (in pounds per square inch)

D = nominal pipeline diameter (in inches)

0.69 is a constant applicable to natural gas (constants for other gases must be determined in accordance with Section 3.2 of ASME B31.8S-2001)

...

1C: 192.905(b)(1)

The Tesoro HCA identification results do not indicate whether high consequence areas that were identified include the area extending axially along the length of the pipeline from the outermost edge of the first potential impact circle to the outermost edge of the last contiguous potential impact circle.

Tesoro has re-evaluated the pipeline's PIR; the entire pipeline is evaluated with a PIR of 253 feet that extends axially along the length of the pipeline, as demonstrated in Procedure IM001, Volume Release and HCA Impact.

1D: 192.905(a) and 192.905(b)(1) & (2)

The Tesoro HCA identification does not include a systematic identification of potential identified sites in the vicinity of the pipeline. The HCA identification did not include consideration of the "Coke Barn" facility as an identified site, even though the site occupancy may meet the criteria for an identified site.

Tesoro has re-evaluated the HCA and now accounts for all buildings and the occupancy of the buildings. The pipeline, identified to be in a Class 3 area, is now designated as a 100% HCA segment due to the extended buffer and the counting of the identified sites. This is stated on page 2-4 of Tesoro's Integrity Management Program.

2: 192.917 Risk Assessment

The Tesoro IMP does not document the risk assessment process that will be used in future risk assessments. A risk assessment is needed to set priorities for integrity assessments and it is required to support evaluation of preventive and mitigative measures. Current documentation is from a Shell risk assessment process was last implemented in 2004. Potential errors were found in the risk scorecard evaluation that was part of the risk assessment at that time. IMP Section 3 does not indicate what risk assessment process will be conducted in the future.

Tesoro's revised Procedure IM003, Risk Assessment, describes the risk assessment process that will be used in future risk assessments (the same process that is currently used for Tesoro's hazardous liquid pipelines). This risk assessment process, performed annually, uses an algorithm based on the risk scoring presented by Kent Muhlbauer (Pipeline Risk Management Manual). The data gathering process for the risk assessment analysis is described in Procedure IM002, Information Analysis.

3: 192.937 Reassessment Intervals

The assumed corrosion growth rate used to obtain the seven-year reassessment interval is not conservative. The corrosion growth analysis assumes a corrosion half-life of 39 years. This is not consistent with NACE defaults and predicts slower corrosion growth than would be obtained using these default figures. Tesoro does not offer a basis for making these more optimistic assumptions..

Tesoro's revised Procedure IM010, Pipe Repairs, discusses appropriate techniques to address corrosion growth and reflects NACE processes.

4: Preventive and Mitigative Measures

4A: 192.935(a)

The Tesoro IMP process for evaluation of preventive and mitigative measures is not defined adequately. A risk assessment was conducted in 2004, but this was performed using Shell Pipeline's approach that is not the approach that is intended to be used in the future. .

Tesoro's Procedure IM011, Preventive and Mitigative Measures, defines the measures to implement on an HCA pipeline segment. This procedure defines the areas to review and mitigate should a concern or threat be identified. Tesoro's Procedure IM012, Leak Detection and EFRD Analysis, gives further guidance on determining the need for leak detection and EFRD.

4B: 192.935(b)(1)

The Tesoro IMP does not require the preventive and mitigative evaluation to consider the alternatives specified in 192.935(a). It is not clear what alternatives were considered in the risk assessment completed in 2004.

Tesoro's Procedure IM011, Preventive and Mitigative Measures, defines the measures to implement on an HCA pipeline segment and includes consideration of the alternatives specified in 192.935(a). A review of pipeline segments and preventive and mitigative activities for a covered segment in an HCA is conducted on an annual basis.

4C: 192.935(a)

The Tesoro IMP does not document a systematic decision-making process to decide which measures are to be implemented, considering both the likelihood and consequences for pipeline failures.

Tesoro utilizes Procedure IM003, Risk Assessment, to perform risk evaluations on covered pipeline segments and IM011, Preventive and Mitigative Measures, to enhance protection of a covered segment. The data generated from the assessment is then reviewed, in addition to other accumulated data for the covered pipeline segment, including, but not limited to, pipeline characteristics, operating history, environment, corrosion activities, leak detection, third-party activity, and threats for further preventive and mitigative actions. An action plan, as described in IM011, is developed to document the findings and, if necessary, provide recommended actions.

Should you have any questions or concerns regarding this letter or any other matters, please do not hesitate to me at 210-626-6465 or bfrieh@tsocorp.com.

Sincerely



Bernadette Frieh, P.E.
Manager Environmental, Compliance, and Training

CC: Mike McCann

Attachments:

- Procedure IM001, Volume Release and HCA Impact
- Tesoro Integrity Management Program – Section 2
- Procedure IM003, Risk Assessment
- Procedure IM002, Information Analysis
- Procedure IM010, Pipe Repairs
- Procedure IM011, Preventive and Mitigative Measures
- Procedure IM012, Leak Detection and EFRD Analysis