June 14, 2013

*Via Electronic Transmittal and Hand Delivery*

Mr. Chris Hoidal, Western Region Director
Pipeline and Hazardous Materials Safety Administration
12300 W. Dakota Ave, Suite 110
Lakewood, CO 80228

Re: Response to Notice of Probable Violation
And Proposed Compliance Order, CPF 5-2013-5005
Sinclair Transportation Company

Dear Mr. Hoidal:

Sinclair Transportation Company ("Sinclair") hereby responds to the Notice of Probable Violation and Proposed Compliance Order CPF 5-2013-5005 issued by the Western Region of the Pipeline and Hazardous Materials Safety Administration ("PHMSA") on April 25th, 2013 and received by Sinclair on May 1st. PHMSA alleges numerous violations of pipeline safety regulations promulgated in 49 CFR 195 at Sinclair's breakout tanks based on PHMSA's inspection of Sinclair's Denver Products Terminal during July 10 through 12, 2012. Sinclair respectfully disagrees with certain of the allegations and with the general gravity of a Notice of Proposed Violations. Sinclair provides our responses to the allegations in the Notice of Probable Violations herein for your further consideration.

Notice of Probable Violation Count 1

PHMSA alleges that Sinclair failed to document the method of calculation of maximum flow rates for normal/ emergency relief vents of its breakout tanks in

accordance with API Standard 2000, incorporated by reference into 49 CFR 264(e)(2). Sinclair believes that API Standard 2000 is not applicable to Sinclair's breakout tanks. The provisions of 49 CFR 195.264(e) apply to pressure/vacuum-relieving devices installed on aboveground tanks after October 2, 2000. The vents were installed during the period 1963 to 1969 prior to the effective date of the provision. Sinclair believes that a plain reading of the 195.264 does not have retroactive effect. Sinclair therefore disagrees with this Count of Notice of Probable Violation and requests that remove this count from the NOPV and modify the Compliance Order accordingly.

Please be aware that Sinclair has determined the maximum flow rates for normal/emergency relieve vents at the breakout tanks and found that the vent capacities comply with the API Standard 2000, as demonstrated in Exhibit A to this response, Summary of Tank Venting Requirements.

Notice of Probable Violation Count 2

PHMSA alleges that Sinclair failed to follow our written procedures for conducting normal operations and maintenance activities in accordance with Sinclair's O&M manual which incorporates API Standard 653 by reference. More specifically, PHMSA alleges that Sinclair did not conform to API 653, Section 4.5.2, concerning repair of concrete ring walls showing evidence of structural cracks or general deterioration to prevent water from entering the structure and corroding the reinforcing steel. PHMSA alleges that several instances of structurally cracked concrete and corrosion were evident during PHMSA's field inspection. PHMSA further alleges that Sinclair did not follow-up the recommendation by its API 653 authorized tank inspector concerning cracks in concrete foundations of breakout tanks in accordance with our written procedures.

Sinclair disagrees that it has not followed up regarding the API 653 authorized tank inspector recommendations. Following a review of all 653 reports, three tank reports were identified as having annotations in regards to concrete foundation cracks - Tanks 9, 10 and 1394 (See Exhibit B). After these inspections were performed, Sinclair documented the responses to the recommendations made by the authorized inspectors. For all three tanks Sinclair determined that the observed cracks observed were small hairline cracks and that it was impractical to seal them and that they would be monitored during the monthly tank inspections (See Exhibit B).

Sinclair contends that these are hairline cracks as referenced in API 653 4.5.1.2(e), which states "Temperature cracks (hairline cracks of uniform width) do not seriously affect the strength of the concrete foundation structure; however, these cracks can be potential access points for moisture or water seepage that could eventually result in corrosion of the reinforcing steel." Sinclair believes that the approach to monitor the hairline cracks is in line with this section of API 653. For your reference, please see the photographs typifying the hairline cracks in the foundations of the breakout tanks presented in Exhibit C, Denver Product Terminal Tank Foundations Photographs. Sinclair believes that these cracks do not constitute structural cracks nor do they permit infiltration and corrosion of the reinforcing steel. Tanks 9, 10 and 1394 have been in place on the existing foundations since 1974 for Tanks 9 and 10 and 1966 for Tank 1394 without progressive deterioration or expansion of the hairline cracks. Sinclair has documented on-going monitoring of integrity of tank foundations, among other inspection items, in its monthly inspection records.

Sinclair engaged Acuren Inspection, Inc., after receipt of the NOPV to review the condition of the tank foundations and make recommendations for appropriate remedial measures. Acuren, by correspondence presented in Exhibit D, confirmed to Sinclair that the API inspectors are keenly aware of conditions of the tank foundations that could compromise whether the tanks are fit for duty. Acuren's opinion is that the hairline cracks do not pose a risk of significant corrosion of the reinforcing steel and are of no

cause for concern, particularly in the dry climate of Colorado. Acuren further states that the lack of significant corrosion of the reinforcing steel in the ring wall foundations is consistent with settlement survey data for the tanks.

PHMSA's observation of "corrosion in the area of the Tank foundations" may be more plausibly explained based on a prior Warning Letter received from PHMSA dated February 28, 2013. The Warning Letter alerted Sinclair to several instances of rust along tank chimes, based its observations during the same July 2012 inspection that is the source of this Notice of Probable Violations. Sinclair believes that the tank corrosion is the more plausible explanation of the corrosion in the area of the tank foundations alleged under this Count of the NOPV. Sinclair promptly took corrective action during the spring of 2013 after the February Warning Letter to protect the tanks against corrosion by sandblasting and painting the areas of corrosion observed in the chime areas. Sinclair's corrective actions, to the best of its knowledge, have fully resolved PHMSA's Warning Letter.

Please be aware that, although Sinclair's API 653 authorized tank inspectors have not brought any problems with other tank foundations to Sinclair's attention, Sinclair has identified and caulked eight to twelve foundation cracks on Tanks 11, 12, and 13 combined that were determined to be 1/8 to 1/4-inch in width. Photographs of typical cracks are presented in Exhibit E, Photographs of Caulked Tank Foundations. None of these cracks were noted in any authorized inspector 653 reports. No similar cracks were found on Tanks 9, 10 and 1394.

Sinclair will continue to monitor the tank foundations, including visual inspection for further deterioration of and potential infiltration into, the foundation cracks in accordance with its O&M monthly inspection procedures.

Notice of Probable Violation Count 3

PHMSA alleges that Sinclair failed to follow Section 206.6(e) of its O&M Manual by failing to document the method by which it determined the internal inspection intervals. Section 206.6(e) of Sinclair's O&M Manual provides that "*An inspector performing the internal inspection shall be required to provide Sinclair with the internal inspection interval based upon the calculations as described in API 653 Section 6.4.2 and 6.4.3.*"

Sinclair notes that all internal inspections have been performed by API 653 authorized tank inspectors in accordance with the inspection procedures required under API 653. All breakout tanks were inspected on or before 2009 as required by Sinclair's O&M inspection procedures in effect as of 1999. Sinclair revised and improved its O&M inspection procedures in almost every year between 2002 – 2012 to more clearly incorporate the inspection standards from API 653. A summary of tank inspections since 1999 given in the table below, indicates that the next inspection interval was calculated in accordance with API 653, Section 4.4.5.1, and documented for seven of the twelve internal inspections. Sinclair agrees that in 5 of the 12 internal inspections, the method of calculation was not fully documented in the records. In four of those five tanks (tanks 6, 9, 10, and 13) the corrosion rate, either by inspection findings or as a result of application of interior tank coating, was determined to be zero, hence the inspection intervals were infinite. In those cases, the API 653 authorized inspector automatically defaulted to the regulatory 20 year interval in the inspection report. The Tank 12 inspection interval was calculated to be 13 years by the API 653 authorized tank inspector, but supporting documentation was not provided to Sinclair. Sinclair's recalculation of the interval based on 2002 inspection findings, as shown for Tank 12 in Exhibit F, Tank Floor Re-Inspection Interval Clarification, indicates that the 2002 re-inspection intervals were conservative in comparison to the 16 year interval determined in the clarifications.

| | INTERNAL INSPECTION SUMMARY<br>Sinclair Denver Products Terminal | | | |
|---|---|---|---|---|
| Tank | Inspection Year | Inspection Company | Recommended Re-Inspection Interval | Method to Determine Interval |
| 1 | 2002 | Consolidated | 20 years | API 653 4.4.5.1 Calculations |
| 2 | 2004 | Longview | 20 years | API 653 4.4.5.1 Calculations |
| 4 | 2002 | MQS Cooperheat | 20 years | API 653 4.4.5.1 Calculations |
| 6 | 2003 | MQS Cooperheat | 20 years | MFE and UT data |
| 7 | 2001 | MQS Cooperheat | 20 years | API 653 4.4.5.1 Calculations |
| 8 | 2003 | MQS Cooperheat | 20 years | API 653 4.4.5.1 Calculations |
| 9 | 2005 | Longview | 20 years | MFE and UT data |
| 10 | 2004 | Longview | 20 years | MFE and UT data |
| 11 | 2004 | Longview | 20 years | API 653 4.4.5.1 Calculations |
| 12 | 2002 | MQS | 13 years | MFE and UT data |
| 13 | 2003 | Conam | 20 years | MFE and UT data |
| 1394 | 2002 | Consolidated | 20 years | API 653 4.4.5.1 Calculations |

Sinclair recognizes that not all methods of calculating inspection intervals were documented and has taken remedial measures to ensure compliance under this Count. Sinclair has now clarified the calculation method for the record by having an authorized inspector re-calculate the inspection intervals using the data collected at the time of each floor inspection for the tanks where the calculations were not previously documented, as shown in Exhibit F. Sinclair will henceforth require its API 653 authorized tank inspectors to report their findings in compliance with the API 653 reporting requirements applicable to the method for calculation of inspection intervals.

Notice of Probable Violation Count 4

PHMSA alleges that Sinclair failed to follow its written procedures for conducting visual inspections by not documenting the method of calculation to determine the next external inspection interval in accordance with Section 206.6(c) of its O&M Manual.

Sinclair believes that PHMSA has overlooked the equivalency of the *RCA/4N* calculation method in Sinclair's O&M Procedures to the calculations performed for each external inspection as documented in Exhibit G, Tank External Re-Inspection Interval Calculations, and hence disagrees with the allegations in Count 4.

Section 206.6(c) provides that external visual inspections of the tank shells (after the corrosion rate is known as in this case) shall be performed at the greater frequency (or lesser interval) of either 5 years or *RCA/4N* where *RCA* is the shell corrosion allowance in millimeters and *N* is the shell corrosion rate in millimeters per year. Mathematically, this can be expressed as;

Inspection interval = minimum (5 years, *RCA/4N*),

Thus, for 5 years to be the inspection interval, then

(5 years) < (*RCA/4N*).

Rearranging the inequality by removing the constant from the denominator of the right side, yields:

(4 * 5 year) < *RCA/N*.

Therefore *RCA/N* must be greater than 20 years for the inspection interval to be 5 years. If RCA/N is less than 20 years then RCA/4N is less than 5 years and the inspection interval becomes *RCA/4N*.

The Remaining Life calculations in the Exhibit G re-inspection interval calculations were performed as:

Inspection interval = minimum(5 years, Remaining Life/4),

based on determination of

$$RL = Ca/Cr$$

Where: RL is Remaining Life

Ca is the Corrosion allowance in inches, and

Cr is the Corrosion rate in inches per year

Hence, once the Remaining Life is less than 20 years, the inspection interval defaults to one-fourth of the Remaining Life since that is less than 5 years. The documents in Exhibit G reasonably indicate that 20 years was the Remaining Life threshold that allowed 5 year inspection intervals.

Both methods explained above are algebraically equivalent, incorporate the same input information and result in the same inspection interval when applied properly. The effect of dividing the Remaining Life by 4 in Exhibit G or multiplying the corrosion rate by 4 in 206.6 is the same in ensuring that the inspection interval is no greater than 5 years or one-fourth of the Remaining Life. Sinclair believes, based on the foregoing, that the substantive calculations in Section 202.6(c) and those presented in Exhibit G are effectively the same and hence documentation of our records as shown in Exhibit G are compliant with Sinclair's O&M procedures. To the extent the methods are comparable, Sinclair disagrees with Count 4 of the PHMSA Notice of Probable Violation.

Notice of Probable Violation 5

PHMSA alleges that Sinclair failed to ensure that its personnel are qualified in accordance with a written qualification program as required by 49 CFR 195.505(c). Section 195.505(c) provides in part the following:

> 195.505 Qualification program.
>
> Each operator shall have and follow a written qualification program. The program shall include provisions to:
>
> ..
>
> (c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;

PHMSA alleges that Sinclair's monthly inspector was not qualified. PHMSA supports this contention by alleging that the Inspector did not annotate the conditions of the concrete foundation, did not have a proper tool to measure the cracks, did not provide written comments or suggestions on the inspection checklist, and indicated that the representative deemed the concrete foundations as in satisfactory condition as indicated by a check on the inspection checklist.

Sinclair disagrees with the PHMSA allegations under this count. First and foremost, Sinclair's qualification of its inspectors in compliance with Sinclair's written qualification program is documented in the records summarized in Exhibit H, Sinclair Inspector 2007-2012 OQ Qualification for Task 2710 -Routine Monthly Inspection of Breakout Tanks. Our inspectors are indeed qualified and completion of such qualification is documented.

PHMSA's premise is that the cracks observed in the concrete foundation are structural and concludes therefore that the Inspector should have recorded the condition of the foundations as unsatisfactory on his checklist. Sinclair has disputed that premise in its response to Notice of Probable Violation Count 2. Because Sinclair believes,

based on independent findings and recommendations, that the cracks in the concrete foundation were not structural, it accordingly disagrees with PHMSA allegation that the inspector did not measure the cracks and annotate the inspection checklist properly. Sinclair's written procedure includes a visual inspection of the condition of the foundation concrete. Sinclair contends that by checking the box the qualified individual indicates that the item was inspected and that as part of this visual inspection the hairline cracks were monitored.

PHMSA asserts that because the inspector did not have the "proper tools" to measure the cracks, then Sinclair did not ensure that its inspectors are qualified to follow its written program. Sinclair's inspectors, however as shown in Exhibit I, Section 6.6.1 Monthly Inspection Procedures, are not necessarily charged with measuring foundation cracks, whether structural or not, but only in monitoring them monthly to determine whether the condition of the foundations appear to be deteriorating, hence satisfactory or unsatisfactory. Because Sinclair's inspector, based upon his documented inspections, found that the foundations were not deteriorating and were satisfactory in accordance with the API 653 authorized tank inspectors' recommendations, Sinclair's monthly inspector appropriately recorded that the inspection had been performed. The inspector was not required to measure the foundations or annotate the inspection records. Neither was the inspector required to annotate the checklist when the observations of tank foundations showed them to be satisfactory. Because Sinclair believes the inspector was compliant with its O&M procedures, Sinclair asks PHMSA to reconsider this count of the Notice of Probable Violations and modify its Compliance Order accordingly.

Sinclair is in the process of changing its written procedures so that if an 653 authorized inspector makes a formal recommendation in its final report, the recommendation shall be communicated as a training document to the qualified individual performing the routine monthly inspections of the breakout tanks.

Sinclair appreciates your consideration of our response to the Notice of Probable Violations and Proposed Compliance Order. Please contact us if you have any questions regarding the information presented herein. Sinclair requests that, if after consideration of our response, you find allegations to be adequately addressed, the Notice of Probable Violation and the requirements of the Proposed Compliance Order be modified accordingly.

Sincerely,
Sinclair Transportation Company

Mark A. Petersen
Vice President

Enclosures:

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|---|---|
| Exhibit A – | Summary of Tank Venting Requirements |
| Exhibit B - | Reports on Foundation Cracks, Inspector Recommendations and Sinclair's Response |
| Exhibit C - | Denver Product Terminal Tank Foundation Photographs |
| Exhibit D - | E-mail, D. McMullin to J. Brown, 6/3/13, RE: Sinclair Denver Tanks |
| Exhibit E - | Photographs of Caulked Tank Foundations |
| Exhibit F - | Tank Floor Re-Inspection Interval Clarification |
| Exhibit G - | Tank External Re-Inspection Interval Calculations |
| Exhibit H - | Records of Inspector Qualifications |
| Exhibit I - | Section 6.6.1 Monthly Inspection Procedures |

Cc: Jon Brown, Regulatory Compliance Coordinator
David E. Stice, Corporate Attorney