

April 1, 2021

VIA ELECTRONIC DELIVERY & FASCIMILE

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

Mary L. McDaniel, Director, Southwest Region
8701 S. Gessner, Suite 630
Houston, TX 77074

Re: CPF 4-2021-005-NOPV

Dear Ms. McDaniel:

Centurion Pipeline L.P., henceforth referred to as "CPL" of "Centurion" received the Notice of Probable Violation (NOPV) dated February 11, 2021. In response to the Notice of Probable Violation Proposed Civil Penalty and Proposed Compliance Order dated February 11, 2021, CPL is providing response and documentation of the actions it has taken in response to the NOPV.

Item 1 - Centurion Pipeline performs risk analysis on its pipelines with information obtained from different sources and integrates all available information into the risk algorithm. In addition to this, Centurion has created the Spill Prevention, Control and Countermeasure (SPCC) plans for its facilities. These plans consider releases from breakout tanks and other sources of oil within the facility and provide preventive and mitigative measures to ensure that oil does not escape the facility boundaries. Therefore, it is incorrect for PHMSA to conclude that Centurion did not consider facility components like breakout tanks and pumps located in facilities that could affect an HCA. The SPCC plans provide exactly that consideration, with the addition of documented mitigation and oil spill control measures. PHMSA's refusal to acknowledge the existence of the SPCC plans is an oversight that must be corrected. The SPCC plans were provided to the PHMSA Audit staff in a timely manner so that they were able to assess Centurion's considerable efforts to ensure that oil released from breakout tanks or facility equipment could not escape the facility boundaries and could not affect any nearby HCA areas. As a result of Centurion's facility mitigation measures and analysis, the only source of oil that could affect an HCA area near a facility is oil coming from the pipelines flowing into or out of the facility. Centurion used detailed modelling of the pipeline release potential to thoroughly assess the potential of the facility to affect an HCA. Centurion's Pipeline & Facility Integrity Manager(PFIM) program is used for risk ranking of pipeline segments and for assessing the benefits of P&M measures on the risk of a pipeline segment. There is no specific requirement in 195.452 for facility risk ranking and no regulatory requirement or any PHMSA guidance on how a relative risk ranking of facilities would be used. For Centurion's interstate system there are two facilities identified with the ability to affect an HCA, so a relative risk ranking would serve little purpose. The SPCC plans, on the other hand, already contain risk mitigation counter measures and control measures to minimize the possibility of a release of oil from the facility boundary.

For the reasons stated herein, Centurion Pipeline respectfully requests PHMSA remove this violation.

Notwithstanding the foregoing, Centurion recognizes that further disagreement over its method for facility management is counter-productive. Therefore, Centurion in 2021 is undertaking a project with the well-known consulting company, American Innovations (AI), to adopt the AI risk analysis program and software to perform risk analysis on both pipelines and facilities. Centurion will perform HCA analysis on its facilities, which will include

consideration of oil releases from breakout tanks, using oil spill planning guidance from the Part 194 regulations. There are four analysis methods utilized using a combination of publicly available data sets (e.g. digital elevation data) and the vendor's software applications to determine what tanks, in the event of a full rupture, could release product into an HCA.

1. **Direct Impact** – identifies tanks located directly in an HCA. The Direct Impact method determines if a tank is located within an HCA by simply overlaying the tank center point with the HCA polygons.
2. **Spread Impact** – identifies tanks which could release enough product that travels overland to impact an HCA. The Spread Impact analysis considers the movement of product in the event of a rupture over a frictionless terrain. The spread follows ground contours, leaving behind product at a specified depth until the entire volume of the tank has been released. If the product enters a low-lying area, it will pool in this location until product can continue to flow downhill. To determine the spread area over the surrounding terrain, the model performs a spatial comparison between the tank location and elevation values in the surrounding area. The elevation values are derived from publicly available datasets called USGS NED. A spread polygon is generated based on the total product volume released from the tank flowing over the surrounding ground contours. Potential spread HCA impacts are determined by overlaying the spread polygon with the HCA polygons.
3. **Direct Watershed Impact** – identifies tanks within a water feature that intersects an HCA within a specified proximity. The Direct Watershed Analysis follows the downstream direction of waterways defined in the National Hydrographic Dataset (NHD). If at any point where a tank intersects a waterway, the model assumes the released product may be transported the configured reach distance downstream. If the waterway intersects with an HCA such as an environmentally sensitive area or a highly populated area, the tank is considered to have a could-affect HCA impact.
4. **Indirect Watershed Impact** – identifies tanks that could release enough product that travels overland into a water feature that intersects an HCA within a specified proximity. The Indirect Watershed method integrates the Spread Analysis results with water features to yield the transport flow path associated with a release that flows overland, spills into a watershed feature, and then moves downstream toward an HCA.

In addition to this, Centurion performs HCA analysis on its pipelines following six types of analyses using a combination of publicly available data sets (e.g. census data), Centurion's proprietary data (e.g. pipe centerline) and vendor's software applications to determine what sections of a pipeline, in the event of a full rupture, could release product into an HCA.

1. **Direct Impact** – identifies portions of a pipeline that crosses directly through an HCA
2. **Indirect Impact** – identifies portions of a pipeline outside the HCA boundary but could impact an HCA because of proximity.
3. **Terrain Impact** – identifies portions of a pipeline that could release sufficient amount of product that travels overland to impact an HCA
4. **Direct Watershed Impact** – identifies portions of a pipeline that crosses directly through a water feature that intersects an HCA within a specified proximity.
5. **Indirect Watershed Impact** – identifies portions of a pipeline that could release sufficient amount of product that travels overland into a water feature that intersects an HCA within a specified proximity.
6. **Pool Fire Impact** - identifies portions of a pipeline where released product may collect (pool) and ignite and impact an HCA.

Centurion has launched its 2021 HCA analysis program and it is expected to have one of its phases ready for internal review, which include tanks, by the end of the second quarter. HCA analysis on Centurion pipelines is expected to be ready for internal review by the fourth quarter. Following the HCA analysis, Centurion will implement the AI risk analysis for pipeline segments and facilities in a manner that Centurion believes will meet PHMSA expectations.

Item 2 - This proposed violation is incorrect in its statement of violation, and Centurion requests that PHMSA rescind the violation. The audit team failed to collect enough information during the audit to make the determination that Centurion failed to make a required National Registry of Pipeline and LNG Operators notice 60 days prior to the construction of 10 or more miles of new or replacement hazardous liquid or carbon dioxide pipeline as required by §195.64(1)(ii). The pipeline project noted in the violation statement consisted of a 9.8-mile pipeline and the addition of piping, pumps, and meters at three existing facilities. PHMSA is incorrect in its determination that the pipeline was greater than 10 miles in length. See Item A for a map with mileage of the pipeline segment.

Centurion requests that this violation be removed from the list of Probable Violations.

Item 3 - Centurion agrees with PHMSA that the regulations at 195.401(b) require Non-Integrity management repairs to a condition that could adversely affect the safe operation of the pipeline system be made within a reasonable time. PHMSA formed an opinion following the audit that Centurion did not respond "within a reasonable time", but there was not a failure by Centurion to meet any discrete regulatory requirement. The issue on this matter is whether Centurion responded to 22 low CP test point readings out of a total of 48 test points on the newly installed Cedar Canyon to Jal pipeline "within a reasonable time."

Timeline: Centurion notes that the facts provided during the audit have not been given full recognition in the NOPV statement. Therefore, a summary of the timeline following the installation of the new Cedar Canyon to Jal pipeline is in order:

1. Cedar Canyon to Jal Initial In-Service Date – August 29, 2017.
 - a. This pipeline was installed within an area of existing Centurion pipelines with existing CP systems. At the time of installation, the effect of the existing CP systems on the Cedar Canyon to Jal pipeline was not known.
 - b. The soil in this part of New Mexico is very sandy and has a high to very high resistivity which deters both external corrosion and CP current distribution.
2. Initial native potential survey was conducted in November 2017.
3. Initial Pipe to Soil Potential readings at test stations were taken in January 2018.
 - a. The August to January delay allowed the pipeline to fully polarize to determine the effect of the existing Centurion pipeline CP systems in the area between Cedar Canyon and Jal.
 - b. The pipeline was given time to polarize at this time so that Centurion could make an accurate assessment of the CP potential coverage provided by the existing CP system.
 - c. This survey determined that 42 of 48 potentials were below the -0.850v criteria.
 - d. It must be noted that this survey was only 5 months after the in-service date of the pipeline, so the low readings at this time were acceptable under the regulations. The NOPV statement that "The records show that the cathodic protection criteria established by Centurion was not achieved during the three inspection cycles for twenty-two test points" is inaccurate and misleading. The test point readings on this first inspection cycle were acceptable.
 - e. System rectifiers were adjusted at this time to provide more output.
4. A new ground bed was installed and energized in September 2018 on the Jal Station end of the pipeline to improve CP coverage.
5. The new system was given time to polarize, and the annual survey was conducted in January 2019.
 - a. The survey determined that 48 of 48 potentials were below the -0.850v criteria, despite the additional new rectifier.
6. A Close Interval Survey (CIS) of the line was conducted during November 2019.
 - a. CIS results were used to select locations for two new rectifiers and ground beds.

- b. Property and Right of Way permits from the New Mexico Bureau of Land Management (BLM) had to be obtained. Excel Energy reported that the BLM initially refused to provide permits for electrical supply lines to the rectifiers.
7. The annual survey of CP test stations conducted in January 2020 revealed the 22 of 48 potentials were below the -0.850v criteria, a significant improvement from 2019.
8. An ILI inspection of the pipeline was conducted in October 2020, 38 months after the pipeline was placed in service.
 - a. The PHMSA required inspection interval for the line is 60 months from in-service.
 - b. The ILI inspection tool was selected to detect external corrosion on the pipeline.
 - c. The pipeline had verified holiday-free coating installed at the time of construction in 2017.
 - d. The ILI inspection revealed only one 13.4% external corrosion anomaly in the span of the 22 low reading test stations.
 - e. This ILI inspection confirmed the absence of significant corrosion occurring due to continued good performance of the pipeline coating and the high resistivity of the sandy soil along the pipeline.
9. Due to electrical power line installation delays and COVID-19 restrictions on contractors, the new rectifiers and ground beds that were installed in November 2020 could not be energized.
10. Negotiations between the electric company and BLM broke down in late 2020. Excel Energy stated that they finally obtained BLM's agreement in early 2021 to allow the electric company to run the wires on wood poles to the rectifiers without a Right of Way permit.
 - a. Electric power and COVID 19 restrictions were a significant barrier to project completion that took a large amount of time and effort to overcome.
11. After Excel Energy began work on the installation of the power lines and poles for the two new rectifiers, the installation was finished in late February 2021.
12. The two new rectifiers and ground beds were fully connected and energized in March 2021.
13. CP potentials at all test locations reached the -0.850v criteria shortly after full energization of the new systems. See Item B for the CP test point readings following the activation of the new rectifiers.

Conclusion: Centurion's actions to install CP systems on the newly constructed Cedar Canyon to Jal pipeline were progressive and reasonable, and with the addition of the 2020 ILI inspection to monitor external corrosion on the line, timely under the circumstances to ensure that there was no condition that was adversely affecting the safe operation of the pipeline. Centurion requests that PHMSA reconsider its conclusion that Centurion did not act "within a reasonable time".

Penalty Calculations and Pipeline Safety Violation Report: Centurion requests that PHMSA consider all the facts of this proposed violation in the penalty calculation. The Gravity element should consider that the facts support the conclusion that "Pipeline safety was minimally affected, notwithstanding the conditions above". In the Culpability section it should be recognized that this violation is based on PHMSA's opinion that Centurion did not act fast enough, while not giving credit for the additional actions such as the Close Interval Survey and the not-required ILI inspection that ensured that the safe operation of the pipeline was not compromised. Additionally, in terms of the speed of Centurion's actions, PHMSA has failed to consider the substantial difficulty that Excel Energy had with the New Mexico Bureau of Land Management which delayed Centurion's plan of action. Considering the timeline in total, Centurion Pipeline fully met the requirements of 195.401(b) by correcting the CP conditions in a timely manner to prevent a condition that could adversely affect the safe operation of the pipeline system. The ILI report that PHMSA failed to consider clearly shows that there was no external corrosion damage to the pipeline system.

Item 4 - According to Centurion's Public Awareness Manual, Section 11. Four-Year Effectiveness Evaluation, e. Measure 4 – Bottom Line Results, an Annual Survey is to be conducted. As such, Centurion and the third-party contractor, Enertech, followed the procedures for conducting the Four-Year Effectiveness Review which included

an analysis of Bottom-Line results. As shown previously, the Annual Reviews include tracking of One-Call tickets requiring action and third party line strikes that both results in a leak or damage to the pipeline with no leak. The Centurion KPI document, which was not shared with Enertech, contains a summary of the data that is redundant to the Annual Review. It was not Enertech's or Centurion's intention to list every single source material provided, despite that information being available for review. While not specified, Centurion's incidents are public knowledge and available on PHMSA's Operator page showing Incidents annually for at least five years previously to Enertech. Centurion does not believe the assertion that we did not follow API RP 1162's program recommendation as the Centurion procedure specifically requires a consideration of Bottom-Line Results in the Effectiveness review. It is not correct to assume that the summary data presented on the KPI listing does not exist in other documents that were correctly reviewed by Enertech.

However, the clarity of Centurion's procedures and presentation of data could be improved, despite potential redundancies. As such, Centurion will, in the future, be incorporating the Annual Data provided for KPIs in the Annual Review documentation. Previous to the Inspection, Centurion was seeking to conduct another Four-Year Effectiveness in 2021 so that the Four-Year Effectiveness would reflect data from a single vendor as opposed to a compilation of two different vendors work, as was done on the last Effectiveness review, for a more seamless analysis. When conducting this 2021 Four-Year Effectiveness review, Centurion will be including 2021 data and the report is scheduled to be completed July 30th, 2021. Centurion is seeking, based on our response and initiation of this new Four-Year Effectiveness review, that PHMSA would remove this violation from the NOPV notice and view this as an opportunity for improvement to Centurion's Public Awareness Program.

Please feel free to contact me at 346-803-2681 or at Michael_Morgan@centurionpl.com.

Respectfully submitted,



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cc: Cutty Cunningham, Director Integrity Management, Centurion Pipeline, L.P.