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Mark A. Hurley
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Via E-mail

October 12, 2022

Mr. Gregory Ochs
Director, Central Region
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
901 Locust Street, Suite 480
Kansas City, MO 64106

**RE: Explorer Pipeline
CPF 3-2022-063-WL
Written Response to Warning Letter**

Dear Mr. Ochs:

Explorer Pipeline Company (Explorer or the Company) is in receipt of the Warning Letter issued by Pipeline and Hazardous Materials Safety Administration's (PHMSA) on September 13, 2022 (the "Warning Letter"), which sets forth six (6) alleged violations identified during the inspection of the Company's system in Missouri, Oklahoma, and Texas from June 7 – September 20, 2021. As provided in this response, Explorer is contesting four (4) of the allegations and requests that PHMSA withdraw these items. With respect to the remaining allegations, Explorer is accepting the warning and providing factual clarifications below.

I. Background

The Pipeline and Hazardous Safety Administration (PHMSA or the Agency) issued the above-referenced Warning Letter to Explorer. The Warning Letter is based on findings from PHMSA's inspection of Explorer's system in Illinois, Missouri, Oklahoma, and Texas from June 7 - September 20, 2021 and includes six (6) allegations related to various sections of the federal pipeline safety regulations at Title 49, Code of Federal Regulations Part 195.

As set forth below, Explorer is contesting four (4) of the warning items, Items 1, 2, 4, and 6 and requests that PHMSA withdraw these allegations, many of which are based on a misunderstanding of Explorer's current procedures or processes (Item 1, Item 2, Item 4), and a misapplication of the applicable regulatory requirement (Item 6). In the spirit of cooperation, Explorer has voluntarily and without admission revised its procedures and processes to further clarify its procedures in response to many of the Agency's concerns. With respect to the remaining allegations, Items 3 and 5, Explorer agrees to accept these warnings with the factual clarifications provided below.

Written Response to Warning Items

A. Warning Item 1: 49 C.F.R. § 195.402(c)(1)

1. PHMSA Allegation

§ 195.402 Procedural manual for operations, maintenance, and emergencies.

(c) *Maintenance and normal operations.* The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(1) Making construction records, maps, and operating history available as necessary for safe operation and maintenance.

Explorer failed to maintain current maps and records of its pipeline system as required under 195.402(c)(1). Specifically, Explorer did not have each valve and safety device labeled in the field. During emergency conditions, it is essential that pipeline valves can be identified quickly and accurately to facilitate a prompt and effective response to minimize the volume of hazardous liquid released in the event of a failure, per procedures required by 195.402(e)(4).

During a field visit, the technician was asked about the identification of a particular valve. The information was not readily available, per procedures required under 195.402(c)(1).

The information was obtained from drawings online, but there was no service at this location so the identification of the valve was not able to be given until later in the day. It was noted during the field inspections that the identification of the valves and safety devices were not handled consistently across the pipeline system. Some were identified by tags or markings on the device and others were not. Explorer's operation and maintenance procedures did not address device identification on the device itself.

1. Explorer Response

Explorer contests Warning Item 1. As required by 49 C.F.R. § 195.402(c)(1) and consistent with PHMSA guidance, Explorer's DOT Procedure §195.402(c)(1) - Records, Map, History requires that construction records, maps, and operating history are available at every field location. Pursuant to this procedure, the Company maintains current station drawings, isometric (ISO) drawings, piping, and instrumentation diagrams (P&ID) drawings, and alignment sheets, in electronic format online, and in hardcopy are maintained at all field locations. These drawings include the location of each valve and safety device in the field.

To accommodate PHMSA's inspection schedule, Explorer utilized personnel from a different area who was not familiar with the specific field location of the relevant hardcopy records. All of the information was available at the field location at the time of the inspection, however, and would be available to all field location personnel in the event of an emergency. In addition, Explorer's Control Center personnel can also remotely isolate stations or the pipeline in order to facilitate a prompt and effective emergency response.

B. Warning Item 2: 49 C.F.R § 195.406(b)

2. PHMSA's Allegation

§ 195.406 Maximum operating pressure.

(a) ...

(b) No operator may permit the pressure in a pipeline during surges or other variations from normal operations to exceed 110 percent of the operating pressure limit established under paragraph (a) of this section. Each operator must provide adequate controls and protective equipment to control the pressure within this limit.

Explorer failed to provide adequate controls and protection equipment to control the pressure within one hundred ten percent (110%) of the operation pressure limit. Explorer's DOT Procedure Manual did not include requirements for locations not protected by equipment to control the pressure within one hundred ten percent (110%) of the operating pressure. Specifically, Revision 2.4 of the procedures did not address locations, as identified during field visits, without thermal over pressure protection between valves. Both the procedures and regulations require adequate controls and protective equipment to control the pressure, which includes thermal devices in areas that can be shut-in such as between valves. PHMSA would like some designation on drawings or on the valve to indicate that the valves are, in fact, normally open.

2. Explorer Response

Explorer contests Warning Item 2 and maintains that it did not violate the requirements of 49 C.F.R. § 195.406(b). As demonstrated during the inspection, all of the station valves at issue in Warning Item 2 were in the open position and remain in the open position. In the event that the station valves are to be closed in the future, then Explorer will address as part of a project or valve line-up that would be in place to control pressure within one hundred ten percent (110%) of the operation pressure limit.

Without admission and to further address PHMSA's concern, Explorer will institutionalize a more transparent methodology for the controls or operations that could include signage, ISO, or P&ID drawings that are maintained online, and in hardcopy at remote locations for the field technicians to indicate that the valves are normally open and to address pressure relief projects.

C. Warning Item 3: 49 C.F.R. § 195.412(a)

3. PHMSA Allegation

§ 195.412 Inspection of rights-of-way and crossings under navigable waters.

(a) Each operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way.

Explorer failed to maintain the right-of-way (ROW) at an appropriate level for the type of patrols that were being done. During the ROW inspections there were several areas noted by PHMSA as being overgrown with some areas having tree growth canopied over the pipeline.

Patrolling of rights-of-way is essential to help identify potential problems from third party activities along the pipeline and for leak detection. The surface conditions of the right-of-way and adjacent areas cannot be inspected by aerial patrolling if these areas are obstructed by an overhanging tree canopy.

3. Explorer Response

Explorer does not contest Warning Item 3, but offers additional information for clarification purposes. Consistent with 49 C.F.R. § 195.412(a) and pursuant to Explorer's ROW Clearing and Marking Procedure, Explorer maintains the right-of-way (ROW) along its pipeline system and uses a variety of methods to identify areas, including overgrown tree canopies, which require remediation to support the Company's robust ROW patrolling program. In 2020, Explorer implemented a new aerial inspection system, which incorporates high-definition digital photography to aide in identifying potential areas within its ROW that need clearing and Explorer is diligently working to address these areas.

D. Warning Item 4: 49 C.F.R. § 195.452(f)(6);(i)(1)

4. PHMSA Allegation

§ 195.452 Pipeline integrity management in high consequence areas.

(f) What are the elements of an integrity management program? An integrity management program begins with the initial framework. An operator must continually change the program to reflect operating experience, conclusions drawn from results of the integrity assessments, and other maintenance and surveillance data, and evaluation of consequences of a failure on the high consequence area. An operator must include, at minimum, each of the following elements in its written integrity management program:

(1) ...

(6) Identification of preventive and mitigative measures to protect the high consequence area (see paragraph (i) of this section);

(i) What preventive and mitigative measures must an operator take to protect the high consequence area?

(1) General requirements. An operator must take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. These measures include conducting a risk analysis of the pipeline segment to identify additional actions to enhance public safety or environmental protection. Such actions may include, but are not limited to, implementing damage prevention best practices, better monitoring of cathodic protection where corrosion is a concern, establishing shorter inspection intervals, installing EFRDs on the pipeline segment, modifying the systems that monitor pressure and detect leaks, providing additional training to personnel on

response procedures, conducting drills with local emergency responders and adopting other management controls.

Explorer failed to establish an adequate procedure for the identification of preventive and mitigative (P&M) measures that is compliant with 195.452(f)(6). The current processes, "Facility Integrity Management Plan" last revised on 11/30/2021, and "Preventive and Mitigative Action to Project HCA's," last revised on 11/23/2021, addressed both facilities and pipelines. These processes did not define time-frames for additional leak detection and emergency flow restricting devices evaluations or state the documentation requirements, in accordance with 195.452(1), for each evaluation. Additionally, many of the listed P&M measures were required per regulations and were not in addition to normal requirements based upon a risk analysis of that line segment.

4. Explorer Response

Explorer contests Warning Item 4. Explorer maintains a variety of procedures that directly relate to the identification of preventive and mitigative (P&M) measures, including:

- Preventative and Mitigative Actions to Protect HCAs Procedure – Describes the steps taken to determine whether P&M actions should be taken and summarizes the measures taken by the Company to protect the integrity of its system, with particular emphasis on assets that could affect HCAs.
- Performance Measurement of Program Effectiveness Procedure – Describes the process for reviewing leading and lagging indicators and P&M measures, which are annually reported in the "IMP Effectiveness Report." The reviewed P&M measures include, but are not limited to, EFRD and leak detection implementation.
- Continual Evaluation and Assessment Procedure – Describes the annual evaluation to evaluate the Company's reassessment plan, which includes a review of P&M measures. This procedure also states that the Company should determine if and in what timeframe additional P&M actions should be performed.
- TP-800 Integrity Assessment Report – Provides a guide for documenting the integrity of a pipeline segment based on historical data and the results of an integrity assessment through an "Integrity Assessment Report." This report is completed after all actionable items identified by an integrity assessment have been completed to validate the assessment interval. The report is also updated if new threats are identified. The conclusions and recommendation section of this document summarizes and documents the current status of each integrity threat and any recommendations for additional P&M measures.

Through these procedures, Explorer reviews ongoing P&M measures and identifies additional measures for implementation on its system, including relevant timeframes and associated documentation. To address PHMSA's concern and to further clarify its processes and procedures, the Company will, without admission, revise its "Preventative and Mitigative Actions to Protect HCAs" procedure to more fully explain how the Company addresses the risk analysis and identification of P&M measures throughout the various procedures and processes mentioned above, including with respect to timing and documentation. Toward that end, the Company will develop a new report that will document the annual review of P&M measures.

E. Warning Item 5: 49 C.F.R. § 195.505(b)

5. PHMSA Allegation

§ 195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) ...
- (b) Ensure through evaluation that individuals performing covered tasks are qualified.

Explorer failed to ensure, through evaluation, that an individual performing a covered task was qualified. The individual who performed the pipeline right-of-way (ROW) foot patrols of Routes 11 and 12 had operator qualifications (OQs) that expired on February 15, 2021. Therefore, that individual had conducted the ROW foot patrols in 2021 with expired OQ's.

5. Explorer Response

Explorer does not contest Warning Item 5, but offers additional information for clarification purposes. Consistent with its OQ program, Explorer evaluates contractor and subcontractor OQ qualifications through an on-line verification system. In January, 2021, Explorer confirmed that its long-term contractor conducting the ROW ground patrols had current OQs. However, Explorer missed the requalification date because it had new personnel and there was a lag in training. Explorer has conducted training with its personnel to address confirming OQ and requalification dates.

F. Warning Item 6: 49 C.F.R. § 195.583(b)

6. PHMSA's Allegation

§ 195.583 What must I do to monitor atmospheric corrosion control?

- (a)...
- (b) During inspections you must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbanded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

Explorer failed to give particular attention to interfaces and splash zones during atmospheric corrosion inspections. During PHMSA field inspections, it was noted that some valves were in located in vaults filled with water. Personnel typically did not drain the water or remove the grating to look at the pipe below the grating during the atmospheric surveys. This does not allow for a thorough inspection of the transition of piping.

6. Explorer Response

Explorer contests Warning Item 6 and maintains that it properly complied with the requirements in 49 C.F.R. § 195.583(b). As indicated by PHMSA and provided during the inspection, all of the valves subject to Warning Item 6 are fully submerged in water. Under Part 195, submerged piping is not considered atmospheric or subject to the requirements at 49 C.F.R. § 195.583(b). See *PHMSA's Corrosion Enforcement Guidance (Jun. 22, 2016)* (stating that "[a] pipeline exposed to the atmosphere is a pipeline that is not buried or submerged in an electrolyte such as soil or water").

Based on the fact that the valves are fully submerged in water, Explorer was not required to drain the water from the related vaults or remove grating to inspect the pipe below the grating during atmospheric survey. For clarity, however, Explorer revised its Atmospheric Corrosion Control Inspection procedure to further clarify that inspections are required for any valves that are partially submerged (i.e., a valve that is not submerged for any length of time throughout the year). These inspections may require dewatering to provide access to the entirety of the valves and flanges for visual inspection.

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Please do not hesitate to contact me or Kevin Brown at kbrown@expl.com (918) 493-5104 if you have any questions or would like to discuss this response letter.

Thank you,

A handwritten signature in black ink, appearing to read 'Mark A. Hurley', written over a horizontal line.

Mark A. Hurley
President & CEO

cc: Celeste Johnson, Explorer Pipeline Co, VP/General Counsel
Lauren Sanders, Explorer Pipeline Co., VP HSSE
Kevin Brown, Explorer Pipeline Co., Mgr. DOT & Regulatory Compliance