December 10, 2021

Gregory A. Ochs
Director – Central Region OPS
PHMSA
901 Locust Street, Suite 480
Kansas City, MO 64160

VIA: Email to nkauj.her.ctr@dot.gov and gregory.ochs@dot.gov.

RE: Notice of Probable Violation, Proposed Civil Penalty and Proposed Compliance Order
CPF 3-2021-051-NOPV
BOE Pipeline, LLC

Mr. Ochs:

Pursuant to the provisions of 49 CFR 190, Subpart B, BOE Pipeline, LLC submits the following in response to Notice of Probable Violation (NOPV) CPF 3-2021-051-NOPV, issued November 10, 2021.

There were 8 probable violations identified in the NOPV. These are as follows:

1. 2019 when the first four-year effectiveness evaluation was due, as required under API RP 1162. Specifically, BOE failed to follow section 8.4, of API RP 1162, by not evaluating the “affected public” audience for effectiveness of its Publica [sic] Awareness Program. Section 8.4 states that operators must assess progress on four measures of effectiveness:
   1. Whether the information is reaching the intended stakeholder audience.
   2. If the recipient audiences are understanding the messages delivered.
   3. Whether the recipients are motivated to respond appropriately in alignment with the information provided.
   4. If the implementation of the Public Awareness Program is impacting bottom-line results (such as reduction in the number of incidents caused by third-party damage).

BOE acknowledged during the inspection interview that all of the required stakeholder audiences were not included in the 2019 four year effectiveness review. BOE’s November 4, 2019 effectiveness review document indicates that it conducted the required evaluation for “excavators”, “public officials”, and “emergency responders”, but did not conduct the required evaluation for the “affected public”, as defined under API RP 1162. BOE’s November 4, 2019 public awareness effectiveness review document does not reference or consider the “affected public” as an audience required to be included in the review. Accordingly, BOE failed to comply with the requirements of this regulation.

Response: This probable violation was corrected with the August 2021 Public Awareness Effectiveness Evaluation to include “affected public”.

Documentation has been provided to Nathan Solem and is attached for your reference.

2. BOE Midstream failed to measure bottom-line results as required by API RP 1162, and did not provide a justification in its program or procedural manual as to why compliance with this aspect of API RP 1162 was not practicable, and not necessary for safety.
Specifically, BOE failed to follow Section 8.4.4, of API RP 1162, which requires operators to determine if the implementation of the Public Awareness Program is impacting bottom-line results (such as reduction in the number of incidents caused by third-party damage).

Response: Section 8.4.4 of API RP 1162 (1st Edition) suggests pipeline operators track the number of incidents and consequences caused by third-party excavators. BOE Pipeline tracks and documents all incidents, both internal and external according to established policy. Since taking over operation of the pipeline in June 2017, BOE Pipeline has had no third-party incidents on the pipeline. Therefore, there have been no related leaks, damage, or pipeline failures to document, or subsequent data to compare to segment statistics. BOE Pipeline will formally document this condition and provide to PHMSA within the required 120 days of the date of this NOPV. Section 8.4.4 also indicates that pipeline operators may consider the affected publics perception of the safety of pipelines. BOE Pipeline included a survey with the 2021 Public Awareness Program. These results are attached for your reference.

Given the circumstances, as detailed above, BOE Pipeline believes an assessed civil penalty of $19,000 for this finding excessive and requests the reduction or elimination of this penalty.

3. BOE failed to follow its written Public Awareness plan that required a language survey every 5 years beginning with the plan inception date of 2014. Specifically, BOE Midstream failed to conduct the language survey that was due in 2019. BOE acknowledged during the inspection interview that they failed to follow the plan requirements of a language survey every 5 years, which made a survey due in 2019. BOE acknowledged during the inspection interview that no surveys had been done since 2014.

Response: BOE Pipeline conducted a language survey as part of the 2021 Public Awareness Program. This survey confirmed that there were no households that only speak a language other than English, and an average of only 1.6% of households that spoke English poorly. Notwithstanding these results, BOE Public Awareness documents for 2021 were presented in English and Spanish.

Documentation has been provided to Nathan Solem and is attached for your review.

4. BOE failed to implement and follow its Integrity Management Program (IMP) requirements for annual calculation of specified performance measures. Specifically, BOE’s IMP requires the below performance measures, as set forth in Element 7 of its IMP plan. Missing records are noted in the table below.

Note: Items identified below are extracted from table as contained in NOPV noted as missing from 2020 IMP performance measures documentation. All other deficiencies noted from years 2017-2019 were corrected with the documentation of 2020 performance measures.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
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<tbody>
<tr>
<td>5</td>
<td>Measure root cause failure analysis program for systematic problems to ensure processes are monitored, completed, and IM program improvements are implemented.</td>
</tr>
<tr>
<td>10</td>
<td>Measure number of reportable leaks (i.e., leaks greater than 5 bbl to land) to ensure processes are monitored, completed, and IM program improvements are implemented.</td>
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<tr>
<td>11</td>
<td>Measure number of leaks due to corrosion to ensure processes are monitored, completed, and IM program improvements are implemented.</td>
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<tr>
<td>12</td>
<td>Measure number of leaks due to third party damage to ensure processes are monitored, completed, and IM program improvements are implemented.</td>
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<tr>
<td>15</td>
<td>Leaks due to equipment failure.</td>
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Response: The IMP Performance Measures were reviewed for 2020. Items 10, 11, 12 and 15, as identified above, were not applicable for 2020. Admittedly, better documentation would
have specified these as “not applicable” instead of leaving these items blank. Relative to item 5 above, BOE Pipeline will document a 2020 analysis and provide it within 90 days of the date of the NOPV as required.

Given that four of the five items identified relate only to the documentation of events that did not occur, BOE Pipeline feels that $16,500 is an excessive penalty for this finding and requests that this amount be reduced.

5. **BOE Midstream failed to schedule and remediate a 180 day condition within 180 days of discovery of the condition, as required by § 195.452(h)(4)(iii)(e).** Further, BOE did not notify PHMSA that it was unable to remediate the condition within the allowed timeframe, as required by § 195.452(h)(3), or that it was unable to obtain sufficient information about a condition to make a determination that the condition presented a potential threat to the integrity of the pipeline within 180 days after an integrity assessment, as required under § 195.452(h)(2).

Specifically, data from a January 22, 2020 ILI run on BOE’s 16-inch segment of its BOE Express pipeline revealed a 55.18% metal loss feature (Feature 218) located on bore pipe in the 1:00 position. BOE discovered this condition on March 26, 2020. This feature qualifies as a 180-day condition under § 195.452(h)(4)(iii)(E). As of May 7, 2021, this feature had not been remediated. BOE explained that the remediation had not occurred within the required 180-day time period because the segment of the pipe is buried 26 feet deep and requires an engineering analysis on how to remediate the identified feature. A review of Pipeline Data Mart IMP notification records confirms that BOE failed to submit notice to PHMSA that it was unable to meet the 180 day remediation requirement for Feature 218.

BOE Midstream brought this failure to notify to the attention of PHMSA in a March 22, 2021 virtual meeting with PHMSA Central Region management.

**Response:** Feature 218 repairs were completed on 07/22/2021. Due to the timing of the discovery (Winter) and the need for an engineered dig, BOE Pipeline was unable to remediate this condition within 180 days. BOE has acknowledged a failure to notify PHMSA of the inability to correct within 180 days. This issue was voluntarily self-disclosed to PHMSA.

Given the circumstances presented in completing these repairs and the voluntary self-disclosure of this deficiency, BOE Pipeline would request leniency in the assessment of the civil penalty associated with this finding.

6. **BOE Midstream failed to maintain records that demonstrate compliance with subpart F.** Specifically, BOE violated the regulation as follows:

(A) BOE failed to document the basis of its decision for a reassessment interval of five years, as noted on the November 4, 2020 ILI Validation Report checklist form covering both the 16-inch segment and 20-inch segment ILI runs of the BOE Express pipeline. Section 195.452(f)(5) requires that an operator include in its IMP a “continual process of assessment and evaluation . . . .” Under the regulation cited, operators are required to maintain for the useful life of a pipeline records demonstrating how reassessment intervals were determined. BOE’s records failed to demonstrate that any of the factors identified in its IMP plan (and set forth below), or any other criteria not specified in its IMP, were considered as the basis for a 5 year reassessment interval for the 16 inch and 20 inch segments of the BOE Express pipeline. BOE’s IMP plan specifies considerations for establishing a reassessment interval, such as:

1. Populated areas, unusually sensitive environmental areas, National Fish Hatcheries, commercially navigable waters, areas where people congregate;
2. Results from previous assessments, testing/inspection;
3. Leak history;
4. Known corrosion or condition of pipeline;
5. Cathodic protection history;
6. Type and quality of pipe coating (disbonded coating results in corrosion);
7. Age of pipe (older pipe shows more corrosion—may be uncoated or have an ineffective coating) and type of pipe seam;
8. Product transported (highly volatile, highly flammable and toxic liquids present a greater threat for both people and the environment);
9. Pipe wall thickness (thicker walls give a better safety margin);
10. Size of pipe (higher volume release if the pipe ruptures);
11. Local environmental factors that could affect the pipeline such as: geo-technical/seismic faults; landslides; subsidence, and soil condition; climactic condition/permafrost, etc.; and corrosivity of soil;
12. Security of throughput (effects on customers if there is failure requiring shutdown);
13. Time since the last internal inspection/pressure testing;
14. Previously discovered defects/anomalies, including type, growth rate, and size;
15. Operating stress levels in the pipeline;
16. Location of the pipeline segment as it relates to the ability of the operator to detect and respond to a leak. (e.g., pipelines deep underground, or in locations that make leak detection difficult without specific sectional monitoring and/or significantly impede access for spill response or any other purpose);
17. Physical support of the segment such as by a cable suspension bridge;
18. Non-standard or other than recognized industry practice on pipeline installation (e.g., horizontal directional drilling); and
19. Other regulatory interval requirements.

(B) BOE failed to adequately document, in its joint risk analysis of line pipe and facilities, the consideration of facility threats and facility preventative and mitigative measures. This is noted by the absence of facility specific threats in its analysis records. The key facility threats identified include corrosion and equipment failure, as noted during the virtual records inspection. Section 195.452(f)(3) requires that an IMP include an “analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure . . . .” BOE Midstream failed to comply with the regulation by not maintaining documents to support the decisions and analyses, including any modifications, justifications, deviations and determinations made, variances, and actions taken, to implement and evaluate each element of the integrity management program listed in paragraph (f) of this § 195.452; and

(C) BOE failed to provide adequate documentation of its EFRD determination, as required by § 195.452(j)(4). Specifically, a summary, conclusions, or recommendations were missing from the data provided to PHMSA. The regulation requires operators to make a determination if additional ERFDs are needed. BOE submitted raw data to PHMSA, but failed to provide any documentation of conclusions or recommendations to address if additional ERFDs are needed, or not.

Response: BOE has retained a third-party consultant to document the decision behind 5-year intervals, consideration of facility threats, facility preventative and mitigative measures, and the conclusions of the EFRD study. This will be provided within 90 days of the date of the NOPV as required.

7. BOE Midstream failed to repair inoperable test stations (cathodic protection test leads connected to the pipe and held above ground in a stand) 965 [sic] & 1729 within a reasonable amount of time, as required by the regulation. Specifically, BOE failed to repair the inoperable test stations, discovered on December 3, 2017 during the annual cathodic protection survey, until May 7, 2019, which was 520 days (17 months) after discovery of the condition. Further, BOE’s corrosion control procedures require that such conditions be repaired before the next monitoring cycle. Section 2.12.1.7 of the operator’s O&M manual states: “any deficiencies will be corrected promptly. Remedial action will be taken prior to the next inspection period (this would be no later than March 4, 2019). When remedial actions taken are unsuccessful in returning the cathodic protection to an acceptable minimum level (-0.850 mV pipe to soil) an in-depth evaluation of the cathodic protection system will be conducted by the Compliance Manager.” This repair was not a specified corrosion repair under § 195.452(h).

Response: BOE Pipeline acknowledges unintended delays in making these repairs. However, this item was self-identified and corrected in March 2019, almost two years prior to this audit.
Based on this item being self-identified and corrected, BOE Pipeline feels the assessment of $19,300 to be excessive and requests the reduction or elimination of this penalty.

8. BOE failed to use a coating material suitable for the prevention of atmospheric corrosion on its BOE Express [sic] pipeline. Specifically, BOE used Polyguard RD-6 as transition zone wraps (corrosion protection at soil-air interfaces) at various locations on the BOE Express [sic] pipeline, but failed to coat the wraps with an ultraviolet light protection paint to protect it from ultraviolet light deterioration, which is identified in the manufacturer’s installation recommendation on the Polyguard RD-6 product data sheet. In addition, BOE failed to coat the transition zones at the discharge of both the main and booster pump stations at Killdeer with a coating suitable for transition zones. Rather, BOE used a paint suitable for above ground applications.

Response: All transition zone wraps have been repaired as of 08/04/2021.

Documentation has been provided to Nathan Solem and is included for your reference.

Please also note that BOE Pipeline ceased pipeline shipments in June 2021.

Specifically:

1. Last inbound shipment to breakout tank from the Tesoro 10-inch pipeline connection was in October 2020. This connection has been removed.
2. Last shipment from breakout tank at LL Terminals via BOE Pipeline was in March 2021. This tank was emptied, cleaned, and taken out of service on 04/20/2021.
3. The BOE Pipeline 16-inch pipeline segment was cleaned, and nitrogen purged in March 2021.
4. Last shipments from Belle Fourche Pipeline connection were in June 2021. The connection has been removed.
5. The BOE Pipeline 20-inch pipeline segment was cleaned, and nitrogen purged in August 2021.

In ceasing operations, BOE Pipeline has not generated revenue since June 2021, further limiting the ability to pay civil penalties. Going forward, BOE Pipeline will continue to maintain the pipeline under a low-pressure nitrogen fill as it seeks to determine the disposition of these assets.

If you have any questions regarding this response, please do not hesitate to contact me at bmcdowell@boemidstream.com or by phone at (303) 887.8005.

Sincerely,

Brandon McDowell
Director – Operations and Corporate Regulatory Compliance