



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

901 Locust Street, Suite 480
Kansas City, MO 64106

**NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER**

VIA ELECTRONIC MAIL TO: mos@everdesk.com and BMcDowell@BOEMidstream.com

November 10 , 2021

Mr. Michael O'Shaughnessy
President/CEO
BOE Midstream
8301 E. 21st Street North, Suite 420
Wichita, KS 67206

CPF 3-2021-051-NOPV

Dear Mr. O'Shaughnessy:

On January 26, March 10-12, March 29-31, April 6, and April 21-22, 2021, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected your records, procedures and facilities virtually and in Dickinson and Killdeer, North Dakota.

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

1. **§ 195.440 Public awareness.**

(a)

(c) The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.

BOE failed to conduct a four-year effectiveness evaluation of the affected public audience in 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 Public 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.

2. **§ 195.440 Public awareness.**

(a)

(c) The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.

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).

3. § 195.440 Public awareness.

(a)

(g) The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area.

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.

4. § 195.452 Pipeline integrity management in high consequence areas.

(a)

(l) What records must an operator keep to demonstrate compliance?

(i)

(ii) 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 section.

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.

#	Measure and Goal Description	2017	2018	2019	2020
1	Measure number of IM program activities with goal to ensure processes are <u>monitored, completed and IM program improvements are implemented. (meetings and completed IMP action items)</u>	Missing	Completed	Missing	Completed
2	Measure the effectiveness of the PA program with the goal of zero (0) leaks due the third party damage.	Missing	Completed	Missing	Completed
3	Measure number of action items from internal audits with goal to ensure processes are <u>monitored, completed and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
4	Measure number of action items from external audits with goal to ensure processes are <u>monitored, completed and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
5	Measure root cause failure analysis program for systematic problems to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Missing

6	Measure number of annual CP surveys readings below 850 mV criteria to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
7	Measure pipeline patrol reports with no "One Call" notifications to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
8	Measure number of exposed pipe reports to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
9	Measure number of hydro test leaks to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
10	Measure number of reportable leaks (i.e., leaks greater than 5 bbl to land) to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Missing
11	Measure number of leaks due to corrosion to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Missing
12	Measure number of leaks due to third party damage to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Missing
13	Measure number of miles of pipeline assessed to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
14	Number of anomalies found requiring repair or mitigation to ensure processes are <u>monitored, completed, and IM program improvements are implemented.</u>	Missing	Missing	Missing	Completed
15	Leaks due to equipment failure.	Missing	Missing	Missing	Missing

5. § 195.452 Pipeline integrity management in high consequence areas.

(a)

(h) *What actions must an operator take to address integrity issues? – (1)*

(4) *Special Requirements for scheduling remediation—(i)*

(iii) *180-day conditions. Except for conditions listed in paragraph (h)(4)(i) or (ii) of this section, an operator must schedule evaluation and remediation of the following within 180 days of discovery of the condition.*

(E) *An area of general corrosion with a predicted metal loss greater than 50% of nominal wall.*

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.

6. § 195.452 Pipeline integrity management in high consequence areas.

(a)

(1) What records must an operator keep to demonstrate compliance?

(1) An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At a minimum, an operator must maintain the following records for review during an inspection:

(ii) 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 section.

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(i)(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 EFRDs are needed. BOE submitted raw data to PHMSA, but failed to provide any documentation of conclusions or recommendations to address if additional EFRDs are needed, or not.

7. § 195.573 What must I do to monitor external corrosion control?

(a)

(e) *Corrective action.* You must correct any identified deficiency in corrosion control as required by § 195.401(b). However, if the deficiency involves a pipeline in an integrity management program under § 195.452, you must correct the deficiency as required by § 195.452(h).

BOE Midstream failed to repair inoperable test stations (cathodic protection test leads connected to the pipe and held above ground in a stand) 965 & 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).

8. § 195.581 Which pipelines must I protect against atmospheric corrosion and what coating material may I use?

(a)

(b) Coating material must be suitable for the prevention of atmospheric corrosion.

BOE failed to use a coating material suitable for the prevention of atmospheric corrosion on its BOE Express pipeline. Specifically, BOE used Polyguard RD-6 as transition zone wraps (corrosion protection at soil-air interfaces) at various locations on the BOE Express 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.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$225,134 per violation per day the violation persists, up to a maximum of \$2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed \$209,002 per violation per day, with a maximum penalty not to exceed \$2,090,022. For violations occurring prior to November 2, 2015, the maximum penalty may not exceed \$200,000 per violation per day, with a maximum penalty not to exceed \$2,000,000 for a related series of violations. We have reviewed the circumstances and supporting documentation involved for the above probable violations and recommend that you be preliminarily assessed a civil penalty of \$61,700.00 as follows:

<u>Item number</u>	<u>PENALTY</u>
2	\$19,000.00
4	\$16,500.00
5	\$ 6,900.00
7	\$19,300.00

Proposed Compliance Order

With respect to items 1, 2, 3, 4, 6, and 8 pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to BOE Midstream. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. If you do not respond within 30 days of receipt of this Notice,

this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to **CPF 3-2021-051-NOPV** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Gregory A. Ochs
Director, Central Region, OPS
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Enforcement Proceedings

cc: Mr. Brandon McDowell, Director – ND Operations & Regulatory Compliance, 8301 E. 21st Street North, Suite 420, Wichita, KS 67206, BMcDowell@BOEMidstream.com

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to BOE Midstream (BOE) a Compliance Order incorporating the following remedial requirements to ensure the compliance of BOE Midstream with the pipeline safety regulations:

- A. In regard to Item 1 of the Notice pertaining to a four-year effectiveness review of the affected public audience, BOE must conduct an effectiveness evaluation of the affected public audience within **120** days of receipt of the Final Order.
- B. In regard to Item 2 of the Notice pertaining to measuring bottom line results, BOE must measure bottom line results by either reviewing third party damage or following API RP 1162 recommendations in Section 8.8.4.4 for small systems which measure the affected public's perception of the safety of the BOE Express pipeline within **120** days of receipt of the Final Order.
- C. In regard to Item 3 of the Notice pertaining to conducting a language survey, BOE must conduct a language survey within **120** days of receipt of the Final Order.
- D. In regard to Item 4 of the Notice pertaining to annual calculation of IMP program performance measures, BOE must finish the half completed 2020 performance measure calculation sheet within **90** days of receipt of the Final Order.
- E. In regard to Item 6 of the Notice pertaining to inadequate documentation of the decision for a five-year reassessment interval, inadequate documentation of the consideration of facility threats and facility preventative and mitigative measures in the risk analysis, and inadequate documentation of the analysis and recommendations from the EFRD study, BOE must, within **90** days of receipt of the Final Order, provide to the Director the following documentation:
 - i. The reasons behind the five-year interval determination based on the guidance in their IMP plan for making the reassessment interval determination;
 - ii. The consideration of facility threats and facility preventative and mitigative measures in its joint risk analysis of line pipe and facilities; and
 - iii. The summary/conclusions/recommendations from the EFRD study.
- F. In regard to Item 8 of the Notice pertaining to inadequate protection against atmospheric corrosion, BOE must do the following within **180** days of receipt of the Final Order:
 - At all locations where used, coat the Polyguard RD-6 used as transition zone wrap to protect it from ultraviolet light deterioration as required by the product data sheet.

- Coat the transition zones at the discharge of both the main and booster pumps at the Killdeer station with a wrap suitable for the prevention of atmospheric corrosion.
 - Adequately protect the carrier pipe from contact with the supports at both the Killdeer main and booster pump stations.
- G. BOE must provide documents of all items listed in above showing progress or completion at least ever 90 days period after issuance of the Final Order. These documents are to be submitted to Gregory Ochs, Director, Central Region, OPS, Pipeline and Hazardous Materials Safety Administration.
- H. It is requested that BOE maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Gregory Ochs, Director, Central Region, OPS, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.