



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

12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

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

VIA ELECTRONIC MAIL TO: Josiah.patkotak@north-slope.org

November 2, 2023

The Honorable Josiah Patkotak
Mayor of the North Slope Borough
North Slope Borough Energy Management
P.O. Box 69
Utqiagvik, AK 99723

CPF 5-2023-039-NOPV

Dear Mayor Patkotak:

From October 17 through October 20, 2022 of the on-site inspection, 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 the procedures and records of the North Slope Borough Energy Management's (NSB), Nuiqsut Gas Distribution System, in Nuiqsut, Alaska.

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

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

NSB failed to follow its Management of Change (MOC) procedures as required under § 192.605(a) and directly outlined in its Operations and Maintenance (O&M) manual^a. Specifically, NSB significantly altered the pipeline monitoring system without prior notification to field personnel (contractors), Nuiqsut Utility Cooperation (NUC).

PHMSA observed a computer display located within the Nuiqsut gas distribution operations office. The field personnel present during the inspection alleged prior to July 2022, the computer monitoring system within the Nuiqsut gas distribution operations office mirrored the Controller Display Panel located within the Nuiqsut PRV Station, displaying real-time data and alarm notifications, and was utilized daily to check system parameters and ensure that any safety issues or trends could be addressed immediately.

However, the computer display observed at the time of the inspection could only be used to obtain past historian information through an NSB server. Field personnel could not provide documentation to demonstrate that the MOC process had been followed in accordance with the O&M manual. Additionally, field personnel onsite alleged that NSB changed the monitoring system without communicating a MOC change to the field personnel, in violation of its procedures outlined in the O&M manual.^a

Therefore, NSB failed to follow as its procedures as required pursuant to § 192.605(a).

^a Exhibit A-5, O&M manual, Section 2.6, pages 7 and 8 of 525

2. § 192.605 Procedural manual for operations, maintenance, and emergencies.

(a) *General.* Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

NSB failed to review and update its operations and maintenance manuals at intervals not exceeding 15 months but at least once each calendar year, as required. Specifically, NSB failed to review and update its operations and maintenance manuals for the calendar years of 2020 and 2021. During the inspection, PHMSA observed that the O&M manual^b dated August 2019, revision log did not include updates beyond August 2019. Additionally, the Pipeline-Specific Operations and Maintenance (PSOM^c) manual, dated August 2019, revision log also did not include updates dated beyond August 2019.

Therefore, NSB failed to review and update its manual of written procedures once a calendar year, at intervals not exceeding 15 months as required per § 192.605(a).

3. § 192.605 Procedural manual for operations, maintenance, and emergencies.

(a) ...

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

(1) ...

(8) Periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operation and maintenance and modifying the procedures when deficiencies are found.

NSB failed to complete periodic effectiveness reviews, by modifying its procedures when deficiencies were found. Specifically, PHMSA reviewed NSB's records from March 28, 2015, through October 10, 2022, and observed that NSB had conducted the first stage of effectiveness reviews by identifying deficiencies in its procedures as described in the reviewed "Evaluations of Accelerated Action"^d, and e-mails^e provided. However, NSB did not modify its O&M and PSOM manuals based on the identified deficiencies as § 192.605(b)(8) required.

Based on emails and other records reviewed during PHMSA's inspection, NSB field personnel reviewed procedures for effectiveness but the suggested revisions to the procedures sent to NSB

^b Exhibit A-5, O&M Manual

^c Exhibit A-4, PSOM

^d Exhibit A-7, Evaluation of Accelerated Action

^e Exhibit G-1 & G-2, NUC e-mails

management for inclusion in the operations and maintenance manuals were not reflected in updated procedures and no evidence of revisions was documented.

Therefore, NSB failed to review and modify its procedures for effectiveness in accordance with § 192.605(b)(8).

4. § 192.615 Emergency plans.

(a) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:

(1) ...

(4) The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency.

NSB failed to ensure the availability of personnel, equipment, tools, and materials, as needed, at the scene of an emergency. Specifically, the table within NSB's PSOM^f manual, showed that the emergency equipment items were to be located in a "tech. truck" to respond to an emergency event. However, during PHMSA's inspection, field personnel provided PHMSA with verbal testimony stating that there had been no working vehicles supplied by NSB in the previous years. Field personnel also provided PHMSA with written testimony^g which demonstrated that the vehicle maintenance issues often left field personnel with only one operable vehicle, and stated that a contract between NSB and their contractor required NSB to provide two vehicles. Furthermore, it appeared field personnel had no working vehicles to respond to emergencies within the village between December 2021 and March of 2022.

Therefore, NSB failed to ensure the availability of the equipment required in its emergency procedures in accordance with § 192.615(a)(4).

5. § 192.625 Odorization of gas.

(a) ...

(f) To assure the proper concentration of odorant in accordance with this section, each operator must conduct periodic sampling of combustible gases using an instrument capable of determining the percentage of gas in air at which the odor becomes readily detectable. Operators of master meter systems may comply with this requirement by -

NSB failed to adequately conduct and record periodic sampling of combustible gases for odorization. Specifically, a review of NSB's records and equipment demonstrated that its records were incomplete and equipment not calibrated. During the PHMSA inspection, the inspector found documentation for the monthly odorant checks unclear and incomplete^h. A review of NSB's records showed the operator's monthly odorant check record ('Sniff Test' and/or

^f Exhibit A-4, PSOM, Section 13.1 Emergency Response Procedures, page 48 of 94

^g Exhibit I-1, Written testimony

^h Exhibit E-1 through E-4, Odor checks

'Odorometer Test,' Odorization Check Report, Form 11), did not include associated units, such that it could not be determined whether the document was recording % LEL, % odorant by volume, PPM, or another measure of detection. The "DTEX" odorator instrumentation displays in Part Per Million (PPM); however, the measurements were allegedly documented in percent Lower Explosive Level (LEL).

Additionally, the operator used equipment for the monthly odorant check that was not calibrated. "DTEX" sampling equipment is required to be factory calibratedⁱ every two years to ensure the instrument can determine the percentage of gas in the air at which the odor becomes readily detectable. The operator stated that the equipment had not been calibrated within the past two years and no documentation was provided to demonstrate the last calibration date.

Therefore, NSB failed to conduct and record periodic sampling of combustible gases as required pursuant to § 192.625(f).

6. § 192.739 Pressure limiting and regulating stations: Inspection and testing.

(a) Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is -

(1) In good mechanical condition;

(2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;

(3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of § 192.201(a); and

(4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.

NSB failed to inspect and test its pressure relief devices at least once a calendar year, at intervals not exceeding 15 months, as required. Specifically, NSB failed to produce clear and accurate inspection and testing records for pressure-relief device PSV No.62252A. Annual inspection and testing records for PSV No.62252A did not have consistent identification number, and serial number between 2020 and 2021.

A review of NSB's records^j showed a PSV inspection on June 25, 2020, was completed on PSV No. 62252A, serial number 04-05039. The following year^k, on July 24, 2021, the same valve was tested as PSV No. 6225A with serial number 01/05039. PSV tag numbers and serial numbers did not match between the years 2020 and 2021 for the same PSV. The valve was believed to be the same because the operator stated that the valve had not been exchanged or replaced, the valve was observed to be in the same general location, and records also did not indicate a new valve was installed.

ⁱ Exhibit J-1, Manufacturer's manual for DTEX DX-1000G

^j Exhibit F-1, PSV testing record, page 5 of 5

^k Exhibit F-1, PSV testing record, page 4 of 5

Therefore, NSB failed to properly document inspection and testing of pressure relief device PSV number 62252A as required.

7. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program.

The NSB failed to follow its written qualification program. Specifically, its Operator Qualification Plan (OQ Plan) Manual¹ stated, "The Program Manager or Designee will annually review, at intervals not to exceed 15 months but at least once each calendar year, the OQ Qualification Plan, considering the above items." The review and revision log within the OQ Plan manual had no documented revision since 2019.

Therefore, NSB failed to follow its written qualification program per § 192.805.

8. § 192.1007 What are the required elements of an integrity management plan?

A written integrity management plan must contain procedures for developing and implementing the following elements:

(a) ...

(f) *Periodic Evaluation and Improvement.* An operator must re-evaluate threats and risks on its entire pipeline and consider the relevance of threats in one location to other areas. Each operator must determine the appropriate period for conducting complete program evaluations based on the complexity of its system and changes in factors affecting the risk of failure. An operator must conduct a complete program re-evaluation at least every five years. The operator must consider the results of the performance monitoring in these evaluations.

NSB failed to conduct a complete program re-evaluation at least every five years as required. Specifically, NSB failed to implement a periodic evaluation and improvements review within its Distribution Integrity Management Plan (DIMP)^m. During inspection, NSB could not produce any evidence demonstrating that evaluations were implemented into the DIMP. The DIMP had no revisions or updates since 2014.

The DIMP stated "At least once per calendar year, at intervals not to exceed 15 months, the NSB Department of Public Works shall review this program for consistency with 49 CFR §192 Subpart P and necessary updates to system and threat information." The operator could not provide evidence to demonstrate that the DIMP manual had been reviewed or updated since 2014.

Therefore, NSB failed to conduct a complete program re-evaluation of its DIMP at least every five years as required.

¹ Exhibit A-6, Operator Qualification Plan (OQ Plan) Manual, Section 1.6 OQ Process Review, Continuous Improvement, and Updates, page 13 of 419

^m Exhibit A-2, Gas Distribution Integrity Management Plan (DIMP) Manual, Section 3.6, Annual Review, page 8 of 42

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$257,664 per violation per day the violation persists, up to a maximum of \$2,576,627 for a related series of violations. For violation occurring on or after March 21, 2022 and before January 6, 2023, the maximum penalty may not exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not 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.

We have reviewed the circumstances and supporting documents involved in this case, and have decided not to propose a civil penalty assessment at this time.

Proposed Compliance Order

With respect to Items **1** through **5** and **7** through **8** pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to North Slope Borough Energy Management. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Item(s)

With respect to Item **6**, we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these item(s). Failure to do so may result in additional enforcement action.

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 your receipt of this Notice, you have 30 days to respond as described in the enclosed *Response Options*. 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. The Region Director may extend the period for responding upon a written request timely submitted demonstrating good cause for an extension.

In your correspondence on this matter, please refer to **CPF 5-2023-039-NOPV**, and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Dustin Hubbard,
Director, Western Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

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

cc: PHP-60 Compliance Registry
PHP-500 M. Yeager (#22-254201)
Roy Martinez, Nuiqsut Gas Distribution Manager, NSBmanager@nucmail.com
Joanne Simmonds, Assistant to the Mayor Joanne.simmonds@north-slope.org
Charlie Risley, NSB Gas Field Manager Charlie.risley@north-slope.org

PROPOSED COMPLIANCE ORDER

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

- A. In regard to **Item 1** of the Notice pertaining to NSB not following their operations and maintenance (O&M) manual regarding altering the pipeline monitoring system without deploying a management of change (MOC) process, NSB must conduct a Management of Change in accordance with their own procedure for the prior pipeline monitoring system change within **30** days of receipt of the Final Order and must provide written notice (including documentation) to the Director of the Western Region within 10 business days of completing this task.
- B. In regard to **Item 2** of the Notice pertaining to updating operations and maintenance manuals within the required time intervals, NSB must update, review, and document updates and the review of their O&M manual and their Pipeline-Specific Operations & Maintenance (PSOM) manual within **90** days of receipt of the Final Order and must provide written notice (including documentation) to the Director of the Western Region within 10 business days of completing this task.
- C. In regard to **Item 3** of the Notice pertaining to periodic review of the effectiveness and adequacy of the operations and maintenance manuals, NSB must conduct reviews for effectiveness and adequacy of their O&M manual and their Pipeline-Specific Operations & Maintenance (PSOM) manual within **180** days of receipt of the Final Order and must provide written notice (including documentation) to the Director of the Western Region within 10 business days of completing this task.
- D. In regard to **Item 4** of the Notice pertaining to equipment for emergency response, NSB must provide written notice (including documentation) demonstrating their field personnel have access to the emergency response equipment as required in its Emergency Response Plan within **90** days of receipt of the Final Order.
- E. In regard to **Item 5** of the Notice pertaining sampling of combustible gases, NSB must document odorant sampling with properly calibrated equipment, and documented with objective numerical values with units ensuring proper concentration of odorant within the distribution system, within **270** days of receipt of the Final Order and must provide written notice (including documentation) to the Director of the Western Region within 10 business days of completing this task.
- F. In regard to **Item 7** of the Notice pertaining to the OQ manual, NSB must update their OQ manual within **180** days of receipt of the Final Order and must provide written notice (including documentation) to the Director of the Western Region

within 10 business days of completing this task.

- G. In regard to **Item 8** of the Notice pertaining to reevaluation of its Distribution Integrity Management Plan (DIMP), NSB must conduct evaluations and implement appropriate findings into their DIMP manual within **180** days of receipt of the Final Order and must provide written notice (including documentation) to the Director of the Western Region within 10 business days of completing this task.
- H. It is requested (not mandated) that NSB maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Dustin Hubbard, Director, Western Region, 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.