



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

AUG 08 2019

Mr. Harry K. Brower Jr.
Mayor
North Slope Borough
1274 Agvik Street
Utqiagvik, Alaska 99723

Re: CPF No. 5-2019-0002

Dear Mayor Brower:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation and finds that North Slope Borough's Department of Public Works has completed the actions specified in the Notice to comply with the pipeline safety regulations. Therefore, this case is now closed. Service of the Final Order by certified mail is effective upon the date of mailing, as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. Dustin Hubbard, Director, Western Region, Office of Pipeline Safety, PHMSA
Mr. Scott K. Danner, Director, North Slope Borough Public Works, 1274 Agvik Street,
Utqiagvik, Alaska 99723

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590**

In the Matter of)

North Slope Borough,)
a municipal corporation,)

Respondent.)
_____)

CPF No. 5-2019-0002

FINAL ORDER

On March 27 through March 31, 2017, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of North Slope Borough's Department of Public Works (NSBPW or Respondent), specifically, the Barrow Gas Field Transmission Line in Utqiagvik, Alaska. The Barrow Gas Field Transmission Line is a six-inch, 5.6-mile-long gas transmission pipeline.¹

As a result of the inspection, the Director, Western Region, OPS (Director), issued to Respondent, by letter dated January 15, 2019, a Notice of Probable Violation and Proposed Compliance Order (Notice), which also included warnings pursuant to 49 C.F.R. § 190.205. In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that NSBPW had committed two violations of 49 C.F.R. Part 192 and proposed ordering Respondent to take certain measures to correct the alleged violations. The warning items required no further action, but warned the operator to correct the probable violations or face possible future enforcement action.

NSBPW responded to the Notice by letter dated January 28, 2019 (Response). The company did not contest the allegations of violation but provided information concerning the corrective actions it had taken. Respondent did not request a hearing and therefore has waived its right to one.

FINDINGS OF VIOLATION

In its Response, Respondent did not contest the allegations in the Notice that it violated 49 C.F.R. Part 192, as follows:

¹ Pipeline Safety Violation Report (Violation Report), (Jan. 15, 2019) (on file with PHMSA), at 1; NSBPW website, available at <http://www.north-slope.org/departments/public-works/fuel-natural-gas> (last visited Mar. 19, 2019).

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 192.463(a) which states:

§ 192.463 External corrosion control: Cathodic protection.

(a) Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in appendix D of this part. If none of these criteria is applicable, the cathodic protection system must provide a level of cathodic protection at least equal to that provided by compliance with one or more of these criteria.

Appendix D to Part 192—Criteria for Cathodic Protection and Determination of Measurements states in relevant part:

I. Criteria for cathodic protection—A. Steel, cast iron, and ductile iron structures. (1) A negative (cathodic) voltage of at least 0.85 volt, with reference to a saturated copper-copper sulfate half cell. Determination of this voltage must be made with the protective current applied, and in accordance with sections II and IV of this appendix.

The Notice alleged that Respondent violated 49 C.F.R. § 192.463(a) by failing to have the cathodic protection (CP) system required by this subpart to provide a level of CP that complies with one or more of the applicable criteria contained in Appendix D of Part 192. Specifically, the Notice alleged that Respondent produced a contracted study from October 2016 which showed that the pipeline was tested for CP. The study showed, however, that the current configuration of the CP system on the transmission line did not allow CP readings to be properly tested as required by 49 CFR 192.463(a) or Part 192.² The configuration of the CP system featured anode ribbons directly bonded to the buried pipeline. No consideration for voltage drop due to soil resistivity (IR Drop) could be considered as magnesium anodes were bonded uninterruptedly, directly to the pipe. Pipe-to-soil measurements were recorded despite the inability to remove the IR Drop.³ Although roughly 50 percent of the pipeline's "on" potential was above the -850 mV structure-to-soil criterion, the readings were inaccurate because of the inability to remove the IR Drop, which, when calculated, would ultimately reduce the value of the "on" potential. Accounting for the IR Drop would result in an even larger percentage (more than 50 percent) of the line not meeting the CP criteria.⁴

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 192.463(a) by failing to have the cathodic protection system required by this subpart to provide a level of cathodic protection that complies with one or more of the applicable criteria contained in Appendix D of Part 192.

² Violation Report, at 4-5 and Ex. A.

³ Violation Report, at 4-5 and Ex. A.

⁴ Violation Report, at 4-5 and Ex. A.

Item 2: The Notice alleged that Respondent violated 49 C.F.R. § 192.465(d), which states:

§ 192.465(d) External corrosion control: Monitoring.

(a)

(d) Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring.

The Notice alleged that Respondent violated 49 C.F.R. § 192.465(d) by failing to take prompt remedial action to correct any deficiencies indicated by external corrosion monitoring. Specifically, the Notice alleged that NSBPW failed to take remedial action based on a study that identified deficiencies in maintaining cathodic protection over most of its pipeline.⁵

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 192.465(d) by failing to take prompt remedial action to correct any deficiencies indicated by the monitoring.

These findings of violation will be considered prior offenses in any subsequent enforcement action taken against Respondent.

WARNING ITEMS

With respect to Items 3-11, the Notice alleged probable violations of Part 192, but did not propose a civil penalty or compliance order for these items. Therefore, these are considered warning items. The warnings are for:

49 C.F.R. § 192.479(a)-(b) (**Item 3**): Respondent's alleged failure to coat each pipeline or portion of pipeline that is exposed to the atmosphere. For example, most above-ground areas had no coating and incipient pitting had occurred or the coating had deteriorated. Valve stations had significant coating loss, incipient pitting, and metal-on-metal supports. The lack of any coating and extreme coating-loss on the pipeline and facilities does not comport with the requirement to clean and coat each portion of the pipeline that is exposed to the atmosphere.

49 C.F.R. § 192.614(c) (**Item 4**): Respondent's alleged failure to meet the standards for a damage prevention program under § 192.614.

49 C.F.R. § 192.615(a)(4) (**Item 5**): Respondent's alleged failure to list the quantity, location, and availability of materials and tools for emergencies in its procedures.

49 C.F.R. § 192.615(b)(1)-(2) (**Item 6**): Respondent's alleged failure to provide any records indicating that NSBPW trained appropriate operating personnel to ensure that they were knowledgeable of the emergency procedures nor any records verifying that the training is effective.

⁵ Violation Report, at 12 and Ex. A.

49 C.F.R. § 192.615(c) **(Item 7)**: Respondent's alleged failure to liaise with appropriate fire, police, and other public officials in compliance with § 192.615(c)(1)(4). NSBPW is required to learn the responsibilities and resources of each government organization that may respond to a gas pipeline emergency, acquaint the public officials with the operator's ability in responding to a gas pipeline emergency, identify the types of gas pipeline emergencies of which the operator might notify the officials, and plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.

49 C.F.R. § 192.709(a) **(Item 8)**: Respondent's alleged failure to produce procedures in effect for 2013 pipeline repair work in accordance with the requirement to keep a "description of each repair" consistent with § 192.709(a).

49 C.F.R. § 192.709(c) **(Item 9)**: Respondent's alleged failure to provide complete records for the past five years of testing of emergency valves as required by § 192.709(c). Regarding inspection and partial operation of emergency transmission line valves, NSBPW produced complete records for 2014 and 2016, partial records for 2015 and 2011, and no records for 2012 and 2013.

49 C.F.R. § 192.805(h) **(Item 10)**: Respondent's alleged failure to demonstrate that personnel were properly qualified to perform the 2013 repair work on the Barrow Gas Field Transmission Line.

49 C.F.R. § 192.807(b) **(Item 11)**: Respondent's alleged failure to maintain records of employee training on abnormal operating conditions.

NSBPW presented information in its Response showing that it had taken certain actions to address the cited items. If OPS finds a violation of these provisions in a subsequent inspection, Respondent may be subject to future enforcement action.

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to Items 1 and 2 in the Notice for violations of 49 C.F.R. §§ 192.463(a) and 192.465(d), respectively. Under 49 U.S.C. § 60118(a), each person who engages in the transportation of gas or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. The Director indicates that Respondent has taken the following actions specified in the proposed compliance order:

1. With respect to the violation of § 192.463(a) **(Item 1)**, Respondent has implemented an extensive upgrade to the Barrow Gas Field Transmission Line cathodic protection system. A new impressed-current linear anode (AnodeFlex) cathodic protection system was designed and constructed from 2017 through 2018 and was successfully commissioned in 2018. Respondent committed extensive financial resources during the two-year period 2017 through 2018 for cathodic-protection upgrades, and has used sound engineering practices, established criteria,

and industry-recognized methods to achieve adequate levels of cathodic protection on the Barrow Gas Field Transmission Line.

2. With respect to the violation of § 192.465(d) (**Item 2**), Respondent has followed the recommendations in the Taku Engineering *October 2016 Barrow Transmission Natural Gas Pipeline Cathodic Protection Survey Report* pertaining to its 49 C.F.R. Part 192 regulated gas line and facilities and has modified the connections for the bonded below-grade anode ribbon to the transmission line with interruptible connections and repair by replacing the failed structure lead wires at all test stations.

Accordingly, I find that compliance has been achieved with respect to these violations. Therefore, the compliance terms proposed in the Notice are not included in this Order.

The terms and conditions of this Final Order are effective upon service in accordance with 49 C.F.R. § 190.5.



Alan K. Mayberry
Associate Administrator
for Pipeline Safety

AUG 08 2019

Date Issued