



August 10, 2021

Mr. Gregory A. Ochs, Director  
Central Region, OPS  
U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration

Re: NST Express, LLC Written Response to Notice of Probable Violations; CPF 3-2021-052-NOPV

Dear Mr. Ochs:

This letter relates to the Notice of Probable Violations (“NOPV”), issued by the Pipeline and Hazardous Materials Safety Administration (“PHMSA”), dated June 15, 2021, alleging certain violations at the crude oil pipeline system between East Fairview and Alexander, North Dakota, that is owned and operated by NST Express, LLC (“NorthStar”), a subsidiary of NorthStar Holdco Energy, LLC. The NOPV states that NorthStar has 30 days from the receipt of the NOPV to submit written comments or request a hearing. However, in an e-mail dated June 25, 2021, PHMSA granted an extension of the deadline to respond to the NOPV until August 16, 2021 – 60 days from the NOPV issuance date.

This letter provides NorthStar’s position with respect to PHMSA’s allegations. By submission of this letter, NorthStar is contesting a number of the allegations in writing, consistent with the requirements in 49 C.F.R. § 190.208(a)(3). NorthStar has endeavored to provide a detailed response to the allegations in the NOPV and is expectant that upon review of this information, PHMSA will conclude that certain alleged violations are not, in fact, violations and that the proposed civil penalty should be significantly reduced.

NorthStar is fully committed to compliance with all applicable rules and regulations and will continue its efforts to fully meet that expectation. NorthStar is also appreciative of the opportunity to productively address PHMSA’s findings. As such, NorthStar is committed to working with PHMSA to fully address the NOPV and to make timely improvements to its policies, procedures and practices moving forward.

## I. Response to Alleged Violations

### 1. § 195.262 Pumping equipment.

(a) . . .

**(c) Each safety device must be tested under conditions approximating actual operations and found to function properly before the pumping station may be used.**

**Alleged Violation:** PHMSA alleges that NorthStar failed to test and determine that pumping station safety devices were functioning properly prior to operation per § 195.262(c). Specifically, PHMSA alleges that seven safety devices for pumping stations located at East Fairview (three devices) and Alexander Station (four devices) were not functioning properly before November 16, 2016, when the commodity was introduced to the pipeline.

PHMSA also alleges, that based on its review of NorthStar's records dated October 3, 2018, and the associated work orders #ST120222 and #ST120221, the fire, Hydrogen Sulfide ("H<sub>2</sub>S"), and Lower Explosive Limit ("LEL") detectors did not sound any alarms or shutdowns. Furthermore, PHMSA alleges that as of October 16, 2018, the condition had not been corrected at the local facility or at the Remote Operations Center.

**Response:** While commissioning activities were taking place as early as November 2016, the pump stations referred to in the PHMSA allegations were not completed and placed into operation until March of 2017. None of the pump stations located at East Fairview or the Alexander Station – the two sites that are used for transportation purposes – were placed into service until March of 2017. Testing of both the East Fairview and Alexander Stations, and related safety devices at those pump stations, were conducted before they were placed into service.

Commissioning activities, which included final check out, concluded prior to placing the pump stations into service. NorthStar conducted User Acceptance Testing ("UAT") on February 4, 2017 with the aid of CSE-Icon and CSD Engineers. During this testing, the above referenced safety devices were tested and proven to be in satisfactory working condition as documented starting on page 54 of **Attachment A**. As such, the pump stations were not put into service until after NorthStar conducted appropriate testing in February of 2017.

With regard to the devices specifically referred to in the NOPV, NorthStar determined, during routine testing on October 3, 2018, that the detectors did not trigger the proper shutdowns. NorthStar commenced corrective actions and resolved the issue on October 23, 2018. NorthStar determined that a setting in the programmable logic controller ("PLC") had been inadvertently changed to require the alarms to be active longer than the designed 3 seconds. The setting was corrected and the problem resolved on October 23, 2018. NorthStar has since conducted routine testing of these detectors to confirm they are functioning properly.

Because NorthStar did test the pump station safety devices in February of 2017, prior to placing the pump stations into service in March of 2017, NorthStar respectfully requests that PHMSA withdraw the alleged violation for failure to test the pump station safety devices prior to use. In addition, because the alarm issue was resolved in a timely manner and routine testing demonstrates

that the detectors are functioning properly, NorthStar respectfully requests that PHMSA withdraw Violation No. 1 and the penalty associated with this alleged violation from the NOPV.

**2. § 195.406 Maximum operating pressure.**

**(a) Except for surge pressures and other variations from normal operations, no operator may operate a pipeline at a pressure that exceeds any of the following:**

**(1) ...**

**(3) Eighty percent of the test pressure for any part of the pipeline which has been pressure tested under subpart E of this part.**

**Alleged Violation:** PHMSA alleges that Northstar failed to follow maximum operating pressure guidelines per § 195.406(a)(3) by operating segments of its pipeline at a pressure that exceeded 80% of the test pressure during normal operations, as indicated in the chart below:

East Fairview Regulated Low Pressure				
Location at NorthstarExpress Pipeline. Stations. Fairview Pipeline. Station Analog Points.	Month/Year of Pressure Exceedance	Hydrostatic Test Pressure (psi)	80% of Test Pressure	Actual Discharge Pressure (psi)
PIT-126	Apr/2017	370	296	300.0721
PIT-126	Aug/2017	370	296	307.4821
PIT-126	Jan/2018	370	296	317.0023
PIT-126	Feb/2018	370	296	300.2194
PIT-030	Jan/2018	370	296	308.0219

Furthermore, PHMSA alleges that NorthStar has not provided any records to substantiate that these events occurred due to surges or other variations from normal operations.

**Response:** 49 C.F.R. § 195.406 specifically contemplates surge pressures and other variations from normal operations that may cause pipeline pressures to exceed 80% of the pipeline’s test pressure. Each instance of elevated pressure noted above was directly caused by surge pressures or other variations from normal operations and, therefore, was consistent with PHMSA’s regulations regarding operating pressure. Furthermore, each instance of elevated pressure was still under 110% of each pipeline’s respective MOP and lasted for short periods of time. Therefore, NorthStar respectfully requests that PHMSA withdraw Violation No. 2 and the penalty associated with this alleged violation from the NOPV.

As additional information, NorthStar has provided below an updated version of the chart included with the NOPV that provides a brief description of the cause of the elevated pressure and the length of time the elevated pressure lasted.

East Fairview Regulated Low Pressure						
Location at NorthStar Express Pipeline Stations. Fairview Pipeline Station Analog Points	Month/Year of Pressure Exceedance	Hydrostatic Test Pressure (psi)	80% of Test Pressure	Actual Discharge Pressure (psi)	Cause of Elevated Pressure	Duration of Pressure above 80% but below 110%
PIT-126	Apr/2017	370	296	300.0721	Equalization of station piping	20 seconds
PIT-126	Aug/2017	370	296	307.4821	Thermal expansion triggered temperature safety valve (TSV) per design	2 minutes, 17 seconds
PIT-126	Jan/2018	370	296	317.0023	Equalization of station piping	50 seconds
PIT-126	Feb/2018	370	296	300.2194	Thermal expansion triggered TSV per design	3 minutes, 52 seconds
PIT-030	Jan/2018	370	296	308.0219	Equalization of station piping	28 seconds

With regard to the PIT-126 April 2017 event, there is a short section of pipe upstream of PIT-126 that is rated for higher pressure. When the valve between the two sections of pipeline was opened, the pressure in PIT-126 rose while the upstream pressure dropped until the pressure in the two pipeline sections equalized.

For the PIT-126 August 2017 event, the pressure source feeding into this section of pipe held steady pressure of about 125 psig during the period in question. The pressure on PIT-126 built from 0 to over 300 psig over a two-hour period. When PIT-126 reached the peak pressure at around 1:00 p.m., it dropped, indicating a TSV had opened, reducing the pressure in the pipeline.

For the PIT-126 January 2018 event, NorthStar's records show that the PIT 126 pressure trend was the same pressure as the meter run piping. Both transmitters show the pressure oscillating in a manner that is typical of pipeline surges. The pipeline pressure dropped at the start of the oscillation indicating a valve opened allowing the pipe to equalize with the plant piping and starting the surge event.

NorthStar’s records relating to the PIT-126 February 2018 event show that the pressure upstream of PIT-126 remained steady at about 210 psig. The upstream pipeline did not exceed 240 psig during the event, indicating that the pressure in PIT-126 was caused by a thermal event.

Finally, for the PIT-030 January 2018 event, the piping upstream of PIT-030 is rated for a higher pressure. When the valve between the upstream pipe and PIT-030 was opened, the pressure in the upstream pipe created a surge event.

Each instance of elevated pressure noted above was directly caused by surge pressures or other variations from normal operations, and therefore, was consistent with PHMSA’s regulations regarding operating pressure. Furthermore, each instance of elevated pressure was still under 110% of each pipeline’s respective MOP and lasted for short periods of time. Therefore, NorthStar respectfully requests that PHMSA withdraw Violation No. 2 and the penalty associated with this alleged violation from the NOPV.

**3. § 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.**

**Alleged Violation:** PHMSA alleges that NorthStar failed to provide adequate controls and protective equipment to limit pressures during surges or other variations from normal operations by exceeding 110% of MOP in the following instances:

East Fairview Regulated Low Pressure				
Location at Northstar Express Pipeline. Stations. Fairview Pipeline. Station Analog Points.	Month/Year of Pressure Exceedance	MOP	110% MOP	Actual Discharge Pressure (psi)
PIT-030	Mar/2017	285-ANSI 150	313.5	659.04
PIT-030	Nov/2017	285-ANSI 150	313.5	1112.031
PIT-030	Dec/2017	285-ANSI 150	313.5	394.6846
PIT-030	Mar/2018	285-ANSI 150	313.5	526.7396

Regulated High Pressure				
Location at NorthStar Express Pipeline Stations. Fairview Pipeline Station Analog Points.	Month/Year Of Pressure Exceedance	MOP	110% MOP	Actual Discharge Pressure (psi)
PIT-019	Jun/2018	1480-ANSI 600	1628	2590.989
PIT-019	Jul/2018	1480-ANSI 600	1628	2590.989
PIT-019	Aug/2018	1480-ANSI 600	1628	2576.025
PIT-217	Mar/2017	1480-ANSI 600	1628	2501.186

**Response:** In reviewing the data for PIT 019 and PIT 217 NorthStar determined that the data it had previously submitted to PHMSA for these points was inaccurate. NorthStar has attached accurate data that demonstrates that PIT-019 and PIT-217 did not exceed 110% of their respective MOPs (see **Attachment B**). The correct data shows that the actual discharge pressure for PIT-019 was 701.831 in June 2018, 976.246 in July 2018, and 1034.391 in August of 2018. Therefore, PIT-019 did not exceed its MOP during the alleged periods of violation or 110% of its MOP. Similarly, the correct data shows that the actual discharge pressure for PIT-217 in March of 2017 was 1250.907, far below its MOP.

NorthStar respectfully requests that the alleged violations associated with PIT-019 and PIT-217 and the penalty associated with these alleged violations be withdrawn from the NOPV.

With regard to PIT-030, NorthStar does not contest the alleged exceedance of 110% of the MOP. NorthStar is working to correct the issue which caused the over-pressure events and has taken steps to ensure this pipeline segment is operated in compliance with operating pressure regulations in the interim. Specifically, NorthStar will only allow transfers from Alexander to Fairview to be conducted by gravity flow. The pumps at Alexander will not be used to pump to Fairview which will limit the pipeline pressure to 285 psig during transfers to Fairview.

Based on the corrected data submitted for PIT-019 and PIT-217 and the corrective actions taken with regard to PIT-030, NorthStar respectfully requests that the penalty associated with Violation No. 3 be reduced from \$87,700 to \$43,900.

**4. § 195.420 Valve maintenance.**

(a) . . .

**(b) Each operator shall, at intervals not exceeding 7 ½ months, but at least twice each calendar year, inspect each mainline valve to determine that it is functioning properly.**

**Alleged Violation:** PHMSA alleges that NorthStar failed to inspect each mainline valve to determine whether it was functioning properly at intervals not exceeding 7 ½ months per § 195.420(b). It is PHMSA’s position that NorthStar provided Form 18.10 Valve Inspection Form dated April 19, 2018, for Motor Operated Valves 001 East and West Yellowstone River, indicating that both of these river valves were operated during the inspection on that date, but that NorthStar’s SCADA data only showed that the West River Valve was operated. PHMSA alleges that the SCADA data provided no indication that the East River Valve was operated on this day and therefore, NorthStar failed to properly inspect this mainline valve.

**Response:** NorthStar’s test documentation shows that the East River valve was operated and tested on April 19, 2018. In fact, the test form includes specific notes pertaining to the East River valve. That being said, NorthStar has already implemented changes to improve the test forms which now include verification that limit switches can be seen in the control room.

**5. § 195.428 Overpressure safety devices and overflow protection systems.**

- (a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year ... inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.**

**Alleged Violation:** PHMSA alleges that NorthStar failed to inspect and test a total of 21 overpressure protection devices at intervals not exceeding 15 months, but at least once each calendar year. Specifically, the devices that PHMSA alleges were not timely inspected are:

Device number	Date of Device Inspection	Device Set Date and initial Inspection
4728	4/23/2018	3/7/2016
4729	4/23/2018	3/4/2016
4730	4/23/2018	3/4/2016
4731	4/23/2018	3/18/2016
4732	4/23/2018	3/18/2016
4733	4/23/2018	8/15/2016
4734	4/23/2018	3/18/2016
4735	4/23/2018	3/18/2016
4736	4/23/2018	3/17/2016
4744	4/23/2018	3/17/2016
4745	4/23/2018	3/18/2016
4746	4/23/2018	3/17/2016

Device number	Date of Device Inspection	Device Set Date and initial Inspection
4747	4/23/2018	8/15/2016
4748	4/23/2018	3/17/2016
4749	4/23/2018	8/15/2016
4762	4/19/2018	3/18/2016
4763	4/19/2018	3/18/2016
4764	4/19/2018	3/18/2016
4765	4/19/2018	3/18/2016
4766	4/19/2018	3/17/2016
4767	4/19/2018	3/18/2016

PHMSA also alleges that NorthStar failed to inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment for 29 devices. PHMSA provided the table below showing the 28 devices for which it alleges NorthStar failed to provide sufficient documentation to determine the pressure at which the devices activated. In addition, PHMSA alleges that one device listed below exceeded its pressure relieving set point when tested, but the record provided does not indicate that the device was inspected such that this was corrected during the inspection and proved to be reliable.

Device number	Release Pressure documented (Yes/No)	Record documentation	Location
4728	No	Incomplete	Alex
4729	No	Incomplete	Alex
4730	No	Incomplete	Alex
4731	No	Incomplete	EFV
4732	No	Incomplete	EFV
4733	No	Incomplete	EFV
4734	No	Incomplete	EFV
4735	No	Incomplete	EFV
4736	No	Incomplete	EFV
4737	No Exceeded pressure	Incomplete	AJ
4738	No	Incomplete	AJ
4739	Yes	Incomplete	AJ



Device number	Release Pressure documented (Yes/No)	Record documentation	Location
4740	Yes	Incomplete	AJ
4741	Yes	Incomplete	AJ
4742	Yes	Incomplete	AJ
4743	Yes	Incomplete	AJ
4744	Yes	Incomplete	EFV
4745	Yes	Incomplete	EFV
4746	Yes	Incomplete	EFV
4748	Yes	Incomplete	EFV
4749	Yes	Incomplete	EFV
4758	Yes	Incomplete	Alex
4759	Yes	Incomplete	Alex
4762	No	Incomplete	EFV
4763	Yes	Incomplete	EFV
4764	Yes	Incomplete	EFV
4765	Yes	Incomplete	EFV
4766	Yes	Incomplete	EFV
4767	Yes	Incomplete	EFV

**Response:** The pump stations were not placed into service until March of 2017. The devices were initially tested and set by the manufacturer at the time of purchase in March or August of 2016, and were demonstrated to be functioning properly. In addition, all of the safety devices listed in the tables above were tested within 15 months of the March 2017 startup. NorthStar will continue to develop process improvements to ensure testing is timely and that documentation is complete and accurate.

Based on the timely testing NorthStar conducted to demonstrate that the safety devices were functioning properly, NorthStar respectfully requests that the penalty associated with Violation No. 5 be withdrawn from the NOPV.

6. § 195.446 Control room management.

(a) ...

(c) ***Provide adequate information.*** Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(1) ...

(2) **Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays;**

**Alleged Violation:** PHMSA alleges that NorthStar failed to conduct point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays. A total of three alleged violations were identified.

It is PHMSA's contention that the pipeline became operational on November 16, 2016, but NorthStar has not to date provided commissioning records or other records providing verification that point-to-point was conducted for point(s) that impact safety when the system was originally validated to the SCADA system. The point-to-point record dated January 31, 2018 did not include confirmation that each point that can impact safety was verified to the relevant SCADA displays.

PHMSA also alleges that field values and SCADA values recorded have considerable variability without sufficient reconciliation in the records or comments including missing calibration ranges and that SCADA and field related values were present in NorthStar's records but did not include explanations or identify corrective actions.

**Response:** NorthStar did conduct UAT (see **Attachment A**) and point-to-point verifications through which all critical safety points were properly reviewed, prior to startup. It is correct that the point-to-point documents do not show that fire, gas, or H<sub>2</sub>S detectors were verified; however, these values were verified in the UAT for the station PLC, which holds all of the safety programming.

NorthStar also maintains a point-to-point document that is a live document that is updated on a regular basis. Please reference the attached Point-to-Point 3/4/17 for information on the safety related points tested prior to startup (see **Attachment C**). At this time, NorthStar is working to modify its point-to-point testing to include a demonstration that fire, gas, and H<sub>2</sub>S detection is properly read in the SCADA.

Additionally, PHMSA noted certain examples where field values and SCADA values had variability without sufficient reconciliation in the records. Based on NorthStar's records review, TIT-109 was properly checked and represented in the point-to-point. While the original values were incorrectly displayed as pressure readings, NorthStar corrected this during the checkout and changed this to temperature recording displays as shown on the point-to-point checkout form.

As for other points referenced points by PHMSA in Alleged Violation No. 6, NorthStar does agree that documentation improvements are needed and will be pursued. NorthStar respectfully requests that no fines be assessed in conjunction with similar points as they are not safety related points.

In addition, NorthStar respectfully requests that the penalty associated with Violation No. 6 be removed from the NOPV.

**7. § 195.446 Control room management.**

**(a) ...**

**(e) Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to:**

**(1) ...**

**(3) Verify the correct safety-related alarm set-point values and alarm descriptions when associated field instruments are calibrated or changed and at least once each calendar year, but at intervals not to exceed 15 months;**

**Alleged Violation:** PHMSA alleges that NorthStar failed to provide records that demonstrate compliance with § 195.446(e)(3) for verification of correct safety-related alarm set point values and alarm descriptors when associated field instruments are calibrated or changed at least once each calendar year, but at intervals not to exceed 15 months. PHMSA identified three alleged violations.

More specifically, PHMSA notes that the Form 11-12 submitted by NorthStar only confirms that a review was performed once each calendar year, at intervals that did not exceed 15 months. PHMSA alleges that records were not available to demonstrate the correct alarm set point values or correct alarm descriptors at the time of the review, nor were records available to demonstrate how the correct alarm set point values and alarm descriptors were confirmed, as required by § 195.446(e)(3). In addition, the operator failed to produce documentation that safety alarm set-point values and alarm descriptors were verified when field instruments were calibrated or changed.

**Response:** Form 11-12 has supporting documentation that shows the alarms, set points and descriptions (see **Attachment D**). Therefore, NorthStar respectfully requests that the penalty associated with Alleged Violation No. 7 be removed from the NOPV.

**8. § 195.452 Pipeline integrity management in high consequence areas.**

(a) ...

(b) *What program and practices must operators use to manage pipeline integrity? Each operator of a pipeline covered by this section must:*

(1) ...

(2) **Include in the program an identification of each pipeline or pipeline segment in the first column of the following table not later than the date in the second column:**

<b>Pipeline</b>	<b>Date</b>
<b>Category 1</b>	<b>December 31, 2001.</b>
<b>Category 2</b>	<b>November 18, 2002.</b>
<b>Category 3</b>	<b>Date the pipeline begins operation.</b>

**Alleged Violation:** PHMSA alleges that NorthStar failed to identify each pipeline segment that could affect an HCA prior to beginning pipeline operations. PHMSA contends that the earliest information provided by NorthStar identifying pipeline segments that could affect an HCA was dated June 29, 2018. PHMSA also notes that according to NorthStar’s website, the commissioning of the pipeline was more than two years earlier on November 16, 2016. During its September 2018 inspection, PHMSA determined that the Alexander Junction pump station was in a could-affect HCA, which was not reflected in NorthStar’s report.

**Response:** NorthStar completed its Initial HCA Analysis on February 29, 2016, which is included as **Attachment E**. While NorthStar did identify each pipeline segment that could affect an HCA prior to beginning pipeline operations, this analysis was not submitted to PHMSA.

After completing the Initial HCA Analysis, NorthStar determined that a written integrity management program was required for those pipeline segments that could affect an HCA. The first integrity management program was drafted in February of 2016 and included a preliminary HCA determination (see Appendix B to the Integrity Management Program in **Attachment F**).

A subsequent Liquid HCA Analysis Report was completed on June 29, 2018. This Report was submitted to PHMSA. Alexander Junction (synonymous with Alexander Junction Pump Station) was identified as having the potential to have an “indirect impact” on an HCA on page 10 of the Report. This could also be described as a pipeline that “could affect an HCA.” Alexander Junction was also specifically listed in the table on page 6 of the Report.

Because NorthStar did identify each pipeline segment that could affect an HCA in February of 2016, prior to beginning operations, which specifically identified Alexander Junction pump station as a pipeline segment which could affect an HCA, NorthStar respectfully requests that PHMSA withdraw the alleged violation for failure to identify each pipeline segment that could affect an HCA prior to beginning pipeline operations.

9. § 195.452 Pipeline integrity management in high consequence areas.

(a) ...

(g) ***What is an information analysis?*** In periodically evaluating the integrity of each pipeline segment (paragraph (j) of this section), an operator must analyze all available information about the integrity of the entire pipeline and the consequences of a failure. This information includes:

(1) ...

(2) **Data gathered in conjunction with other inspections, tests, surveillance and patrols required by this Part, including, corrosion control monitoring and cathodic protection surveys;<sup>a</sup>**

**Alleged Violation:** PHMSA alleges NorthStar failed to analyze all available information about the integrity of the entire pipeline and the consequences of a failure.

Specifically, PHMSA alleges NorthStar did not have an information analysis, also referred to as risk analysis or risk model, between November 16, 2016 and September 2018. According to the NOPV, NorthStar completed its risk analysis on September 17, 2018. A risk model for analysis relevant to the baseline assessment did not exist.

PHMSA also alleges that during the inspection it determined that the risk model had not been updated with all available information, such as third-party digs near the asset, changes in land use, geotechnical hazards, corrosion data, etc.

Finally, PHMSA contends that information that could change the reassessment interval had not been integrated into the risk model at the time of inspection. PHMSA alleges that the risk model was reviewed and did not incorporate the following identified corrosion datum:

1. A CP system was designed. Proposal/Design dated 4/4/2016;
2. Two CP systems were installed, MATCOR installed Final GB installed on 4/3/2017;
3. A Native Survey was performed before any of the CP systems were energized. Surveyed this line between 06/09/2017 to 06/11/2017;
4. The CP systems were energized shortly after the Native Survey was performed;
5. A polarized potential test point survey was performed. Annual Survey finished on 11/2/2017; and
6. Rectifier Survey finished on 5/16/2018.

PHMSA determined that the pump station located at Alexander Junction at the time of the inspection was in a no flow operating condition. However, the risk analysis or risk model did not consider the elevated threat of internal corrosion due to no or low flow operating conditions.

**Response:** NorthStar does not contest the allegation that it did not have a risk analysis prior to September 2018. All of the data described above was utilized in the risk assessment completed in September 2018 and such data will be explicitly noted in future revisions to the model.

**10. § 195.452 Pipeline integrity management in high consequence areas.**

(a) . . .

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

(1) . . .

(3) *Leak detection.* An operator must have a means to detect leaks on its pipeline system. An operator must evaluate the capability of its leak detection means and modify, as necessary, to protect the high consequence area. An operator's evaluation must, at least, consider the following factors-length and size of the pipeline, type of product carried, the pipeline's proximity to the high consequence area, the swiftness of leak detection, location of nearest response personnel, leak history, and risk assessment results.

**Alleged Violation:** PHMSA alleges that NorthStar failed to adequately include a means to evaluate the capability of its leak detection in its Integrity Management Program between November 16, 2017 and September 10, 2018. PHMSA notes that NorthStar used the original hydrotest as the integrity program baseline assessment, which is not a monitoring system as required by the regulation. PHMSA also notes that Section 7.5 – Leak Detection Capability was modified in NorthStar's IMP as of September 10, 2018. The Annual Evaluation Report of the IMP dated March 31, 2018 identified the need for this correction.

**Response:** NorthStar agrees that this issue was identified in March of 2018 and resolved in September of 2018 when NorthStar updated its IMP.

**11. § 195.452 Pipeline integrity management in high consequence areas.**

(a) . . .

(l) *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:

(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.

**Alleged Violation:** PHMSA alleges that NorthStar failed to document 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 § 192.452. Specifically, PHMSA alleges NorthStar could not provide documentation indicating why it did not perform a close interval survey (CIS) in calendar years 2017 and 2018. PHMSA also notes that cathodic protection was installed and energized on June 23, 2017.

PHMSA also notes that in 2017 and 2018, a third-party consultant recommended that NorthStar

perform a CIS, but NorthStar has not conducted a CIS or documented justifications or decisions for performance failure cause.

**Response:** NorthStar conducted a CIS of the pipeline on June 22, 2017, consistent with its IMP. A copy of the June 2017 CIS is included as **Attachment G**. NorthStar acknowledges that a third-party consultant recommended that it perform a CIS on the pipeline. NorthStar considers the recommendations made by outside vendors, but does not accept all such recommendations, nor does it provide written responses to every vendor recommendation.

**12. § 195.573 What must I do to monitor external corrosion control?**

(a) . . .

(c) *Rectifiers and other devices.* You must electrically check for proper performance each device in the first column at the frequency stated in the second column.

Device	Check frequency
Rectifier	At least six times each calendar year, but with intervals not exceeding 2 ½ months.
Reverse current switch	
Diode	
Interference bond whose failure would jeopardize structural protection	
Other interference bond	At least once each calendar year, but with intervals not exceeding 15 months.

**Alleged Violation:** PHMSA alleges that NorthStar failed to electrically check rectifiers for proper performance at least six times each calendar year, but with intervals not to exceed 2.5 months. The cathodic protection system was energized on June 23, 2017. PHMSA alleges that three locations were missing three inspection cycles:

Rectifier	Report Inspection Date	Missing	Report Inspection Date	Missing	Missing	Report Inspection Date
Alexander Terminal	6/23/2017	9/6/2017	10/27/2017	1/10/2018	3/26/2018	4/24/2018
Yellow Stone Block Valve	6/23/2017	9/6/2017	10/27/2017	1/10/2018	3/26/2018	4/24/2018
Fairview Rail Terminal	6/23/2017	9/6/2017	10/27/2017	1/10/2018	3/26/2018	4/24/2018

**Response:** NorthStar has conducted a thorough review of its records and has been unable to locate the missing reports. NorthStar will conduct a review of its work orders and documentation retention policies to evaluate and implement potential improvements and to ensure appropriate documentation is maintained moving forward. NorthStar does not contest the penalty associated with Violation No. 12 of the NOPV.

## **II. Proposed Compliance Orders**

- 1. PROPOSED COMPLIANCE ORDER NO. 1:** In regard to Item No. 1 of the Notice pertaining to safety devices, the operator must test each safety device under conditions approximating actual operations to ensure they are functioning as designed. A schedule for testing of safety devices must be submitted to the Director, Central Region within 30 days of the final order. Completion of this testing shall not exceed 6 months from the issuance of the final order.

**Response:** NorthStar conducted UAT on February 4, 2017 with the aid of CSE-Icon and CSD Engineers, prior to placing the pump stations into service in March of 2017. During this testing, the noted safety devices were tested and proven to be in satisfactory working condition as documented starting on page 54 of Attachment A. In addition, NorthStar has continued to test and document the results thereof on a timely basis. Therefore, NorthStar respectfully requests that PHMSA withdraw Proposed Compliance Order No. 1.

- 2. PROPOSED COMPLIANCE ORDER NO. 2:** In regard to Item Nos. 2 and 3 of the Notice pertaining to pipeline being operated at a pressure that exceeded 80% of the test pressure and pipeline exceeding 110% of MOP during surges or other variations from normal operations, the operator must conduct tests, or inspection activities, to confirm that each pipe segment where pressure was exceeded, the pipe integrity has not been compromised and must provide adequate controls and protective equipment to control the pressure within affected segments. This shall include launchers and receivers and associated piping to establish MOP. A new surge analysis to match the configuration of the pipeline shall be completed as part of this action. A plan and associated schedule for completion of activities to confirm pipeline integrity and that adequate controls are performing as designed must be submitted to the Director, Central Region within 30 days of the final order. Completion of the submitted plan shall not exceed 6 months from the issuance of the final order.

**Response:** As it relates to Alleged Violation No. 2, each instance of elevated pressure was directly caused by surge pressures or other variations from normal operations and, therefore, was consistent with regulations regarding operating pressure. Furthermore, for Alleged Violation No. 2, each instance of elevated pressure was below 110% of the MOP and lasted for short periods of time. Therefore, NorthStar respectfully requests that Proposed Compliance Order No. 2 be solely limited to Alleged Violation No. 3. NorthStar requests that the words “2 and” be removed from Proposed Compliance Order No. 2. In addition, the issues around PIT-030 noted in Alleged Violation No. 3 are related to valve sequencing and facility pressure controls. The current surge analysis is adequate and NorthStar respectfully requests that the requirement to perform a new surge analysis be removed.



3. **Proposed Compliance Order No. 3:** In regard to Alleged Violation No. 5 of the Notice pertaining to overpressure safety devices, the operator must inspect and test all applicable devices to determine and document that they are functioning properly, are in good mechanical condition, and are adequate from the standpoint of capacity and reliability of operation. A schedule for testing of overpressure safety devices must be submitted to the Director, Central Region within 30 days of the final order. Completion of this testing shall not exceed 6 months from the issuance of the final order.

**Response:** As described above, the safety devices were initially tested in March or August of 2016 and the devices were demonstrated to be functioning properly. The pump stations began operation in March of 2017. All of the safety devices listed in the tables in Alleged Violation No. 5 were tested within 15 months of the March 2017 startup. That being said, NorthStar is currently in the process of re-testing the pressure safety devices. Therefore, NorthStar does not contest the issuance of Proposed Compliance Order No. 3 and will comply with the proposed requirements.

4. **Proposed Compliance Order No. 4:** In regard to Item Nos. 6 and 7 of the Notice pertaining to point-to-point verification between SCADA displays and related field equipment or field equipment calibration, and verification of correct safety-related alarm set point values and alarm descriptors, the operator must conduct verification to confirm that each safety related alarm set-point value identified in the field is in agreement with the SCADA system and associated display values. A schedule for completion of these actions must be submitted to the Director, Central Region within 30 days of the final order. Documentation that indicates calibration ranges, alarm set-point values, checking through SCADA displays that are position sensitive, and comments associated with reconciliation shall be submitted to the Director, Central Region. Completion of this test shall not exceed 6 months from the issuance of the final order.

**Response:** NorthStar does not contest the issuance of Proposed Compliance Order No. 4 and will comply with the proposed requirements.

5. **Proposed Compliance Order No. 5:** It is requested that NorthStar maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Gregory Ochs, Director, Central 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.

**Response:** NorthStar is committed to operating its facilities in a safe manner and welcomes PHMSA support in accomplishing that result. In this instance, NorthStar does not believe that tracking and reporting costs will enhance safety. NorthStar respectfully requests that Proposed Compliance Order No. 5 be removed. If Proposed Compliance Order No. 5 is not removed,

NorthStar requests that PHMSA apply all costs tracked towards a reduction in fines for the alleged violations.

As noted, NorthStar is fully committed to compliance with all applicable rules and regulations and appreciates PHMSA's consideration in this matter. Once PHMSA has reviewed NorthStar's response, NorthStar would be happy to meet with PHMSA to discuss such responses.

If you have any questions, please contact Jack Hamel, Senior Vice President, Engineering at [jhamel@northstarmidstream.com](mailto:jhamel@northstarmidstream.com) or 713-244-5999.

Sincerely,

Mac Hummel, CEO

NST Express, LLC