



December 5, 2022

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

Re: Bayou Midstream Bakken, LLC (NST Express, LLC) Written Response to Notice of Probable Violation; CPF 3-2022-056-NOPV

Dear Mr. Ochs:

This letter relates to the Notice of Probable Violation Proposed Civil Penalty and Proposed Compliance Order ("NOPV"), issued by the Pipeline and Hazardous Materials Safety Administration ("PHMSA"), dated November 8, 2022, alleging certain violations at the crude oil pipeline system between East Fairview, MT and Alexander, ND, that was owned and operated by NST Express, LLC ("NorthStar") at the time of inspection and is now owned and operated by Bayou Midstream Bakken, LLC ("Bayou").

Bayou will be making or has already made the following changes to our field operations and Operations and Maintenance Manual as a result of each listed Alleged Inadequacy. We appreciate the Pipeline Hazardous Material Safety Administration working with Bayou Midstream the new owners of the NST Express system.

Additionally, Bayou will be pay the full civil penalty of \$132,100 and will not contest these allegations.

I. Response to Inadequacies

- 1. 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) Develop a written integrity management program that addresses the risks on each segment of pipeline....**
 - (5) Implement and follow the program.**

Alleged Inadequacy: NST failed to follow its integrity management procedure for risk analysis in Section 6 of the Northstar Midstream IMP to evaluate the consequences of a potential pipeline failure, as required by 195.452(f)(3). Specifically, NST failed to evaluate the consequences of a failure at its Alexander Station and Alexander Junction because it did not estimate the extent of dispersion of hazardous materials that could result from a failure of the breakout tanks or station piping. During the inspection covering 2017 through 2020.

Response: NST completed the attached study *HCA Study for Facilities Associated with NSTX Pipeline* issued on 1.5.2022. This study details consideration for spills in facilities associated with the pipeline including the Alexander Station and Alexander Junction. The attached study *Northstar Midstream Services Company, LLC Liquid HCA Analysis* completed on 6.29.2018 details the analysis of a pipeline leak and the impact on HCA areas.

2. **195.507 Recordkeeping. Each operator shall maintain records that demonstrate compliance with this subpart.**
 - (a)
 - (b). **Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.**

Alleged Inadequacy: NST failed to maintain records supporting an individual's current qualification to perform a qualified task. On October 5th, 2021, PHMSA observed an active pipeline excavation site at County Road 13. After PHMSA requested a record of the current qualification of the individual performing the covered task, NST could not provide one. The One Call ticket for the location of the excavation showed that the contractor hired by NST performed the line locate task. A review of additional operations records showed that the contract individual had performed line locate activities for NST since August 2019.

Response: Bayou will ensure all required OQ certificates are in hand prior to work being completed as required as per our OQ Manual.

3. **195.563 Which pipelines must have cathodic protection?**
 - (a) **Each buried or submerged pipeline that is constructed, relocated, replaced, or otherwise changed after the applicable date in 195.401(c) must have cathodic protection. The cathodic protection must be in operation not later than 1 year after the pipeline is constructed, relocated, replaced, or otherwise changed, as applicable.**

Alleged Inadequacy: NST failed to demonstrate that it had a functional cathodic protection (CP) system installed in its terminals within one year of operation for the buried pipeline at Alexander Station and Alexander Junction. During the inspection NST provided a map of existing test points on its mainline pipe; however, there were no test points shown within the station. Additionally, PHMSA found from observation that electrical isolation kits had been installed between the mainline and station piping, indicating that the CP system in place for mainline pipe was not designed for the station piping.

The pipeline was fully operational in 2017, however NST failed to install a CP system within one year of operation and could not provide a justification for not installing CP; therefore, NST was operating without adequate CP.

Response: The attached report *Bayou Midstream Alexander Junction Annual Survey Report 2022 COM PAK* details the cathodic protection (CP) system currently on the Alexander Junction station piping. This survey was completed by Bayou Midstream in July of 2022. There is a CP bond between the NST Express (now called Alexander Connector) pipeline and the Alexander Junction station to supply current to the below grade piping. The annual survey identifies several shorts which four have been corrected and three will be corrected imminently.

The attached report *Bayou Midstream Alexander Annual Survey Report 2022 COM PAK* details the cathodic protection (CP) system currently on the Alexander station pipe and tanks A100 and A200. Similar to the Alexander Junction and the Fairview station, CP is supplied through a bond between the Alexander Station piping and the NST Express (now called Alexander Connector) pipeline. All 28 test points meet the NACE 100mV polarization criteria.

The attached report does recommend that a two-circuit resistive negative bond box be installed at the Alexander station to control current output to the NST Express (now called Alexander Connector) pipe and the Alexander station pipe. Bayou is currently working with WBI Energy to have this installed. The anticipated cost for this bond box addition is ~ \$25k as displayed in option 1 of the *Bayou Alexander Station Bond Box and Negative Lead Install Technical Services Quote* attached.

4. **195.573 What must I do to monitor external corrosion control?**
(a) Protected pipelines. You must do the following to determine whether cathodic protection required by this subpart complies with 195.571:
(1) Conduct tests on the protected pipeline at least once each calendar year, but with intervals not exceeding 15 months. However, if tests at those intervals are impractical for separately protected short sections of bare or ineffectively coated pipelines, testing may be done at least once every 3 calendar years, but with intervals not exceeding 39 months.

Alleged Inadequacy: NST failed to conduct cathodic protection tests on its mainline pipeline and breakout tanks in 2019. From a review of records PHMSA found that the monitoring scheduled for the 26 test points on the mainline pipe and two tanks at the Alexander Station were overlooked in 2019 calendar year and not conducted until February 2020.

Response: Bayou acknowledges that no CP tests on the mainline pipeline and breakout tanks have been identified for the calendar year of 2019. Bayou will conduct annual inspections as required moving forward.

5. **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 Inadequacy: NST failed to check the proper performance of an electrical bond located in its Alexander Junction facility. PHMSA found NST pipe electrically bonded to a foreign operator via an above ground jumper wire during the field inspection. NST was aware that the

bond was installed, however they did not check it for performance or have any documentation confirming that a failure of the bond would not jeopardize structural protection.

During the inspection PHMSA requested information about the jumper and whether it was a critical bond for the CP system. NST provided a 2021 annual CP report discussing the bond and the need to possibly disconnect it. NST also provided a 2021 depolarized survey report discussing the bond and that it may be supplying protective electrical current to the Alexander interconnect station. NST could not determine if the bond was required for its CP system and failed to establish the necessary checking frequency as required by 195.573.

Response: The bond was removed by WBI Energy as noted in the *Bayou Midstream Alexander Junction Annual Survey Report 2022 COM PAK*.

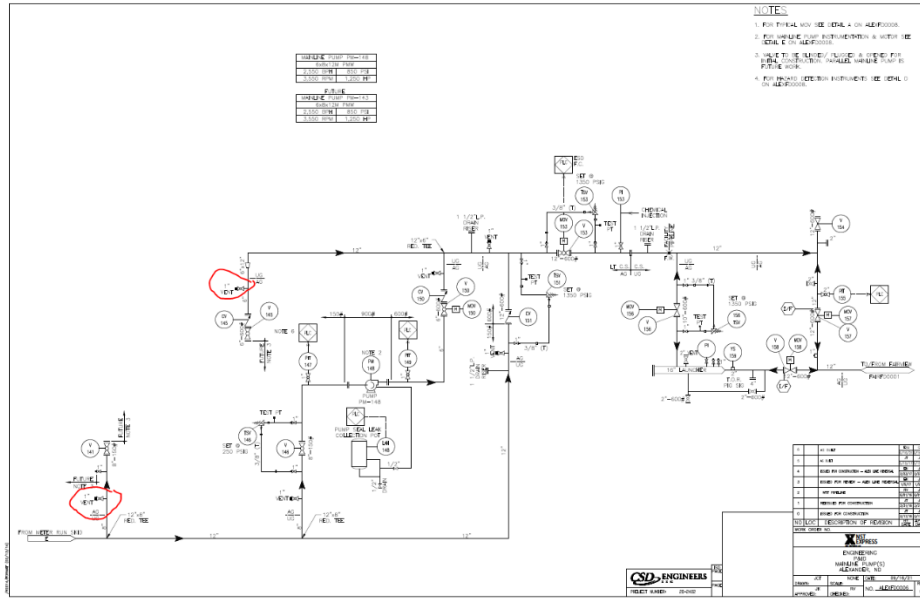
6. **195.579 What must I do to mitigate internal corrosion?**
- (a)
 - (b). **Inhibitors.** If you use corrosion inhibitors to mitigate internal corrosion, you must -
 - (1)
 - (2) **Use coupons or other monitoring equipment to determine the effectiveness of the inhibitors in mitigating internal corrosion; and**

Alleged Inadequacy: NST failed to monitor the effectiveness of internal corrosion control measures in a segment of pipe at its Alexander station. During the field inspection, PHMSA identified a segment of pipe with no flow and without a corrosion coupon. Although NST uses inhibitors to prevent internal corrosion and has coupons in segments with flowing product, it was not able to properly monitor the no-flow segment.

During a review of records and maps of the Alexander Station, PHMSA found that NST built a line segment to accommodate a second pump that was not yet installed. There was no coupon in this section of pipe, and it was not adequately protected or monitored for internal corrosion.

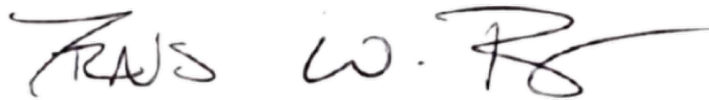
Response: Bayou will install corrosion coupons at the two vents in the line indicated in Inadequacy 6 as shown in the image below. The coupons will be installed in the two circled vents and will be monitored as part of our corrosion coupon monitoring program. The install cost for these two corrosion coupons will be ~\$2,400 each.





Bayou Midstream is committed to full compliance with the requirements of PHMSA. I appreciate your consideration in this matter. Please let me know if you have any questions or require additional information.

Sincerely,



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