



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

901 Locust Street, Suite 480
Kansas City, MO 64106

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

VIA ELECTRONIC MAIL TO: stanley_chapman_iii@tcenergy.com ,
wendy_west@tcenergy.com , erik_hughes@tcenergy.com , and
lee_romack@tcenergy.com

March 12, 2021

Stanley Chapman
Executive VP and President US Natural Gas Pipelines
TC Energy - ANR
700 Louisiana Street
Suite 700
Houston, TX 77002
stanley_chapman_iii@tcenergy.com

CPF 3-2020-1012

Dear Mr. Chapman:

From April 17, 2018 to August 24, 2018, 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 ANR Pipeline Company's (ANR) records and natural gas facilities in Wisconsin, and Illinois, in Waukesha and Kankakee Areas of the Heartland Region along with records in Houston, Texas.

Additionally, from December 3, 2018 through June 7, 2019, OPS representatives inspected ANR's records and natural gas facilities in the St. Joseph and Dodge City Areas in the Heartland Region of Oklahoma, Kansas, Missouri, and Iowa, as well as ANR's records in Omaha, Nebraska and Houston, Texas.

As a result of these inspections, 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. § 192.163 Compressor stations: Design and construction.

(a)

(d) *Fenced areas.* Each fence around a compressor station must have at least two gates located so as to provide a convenient opportunity for escape to a place of safety, or have other facilities affording a similarly convenient exit from the area. Each gate located within 200 feet (61 meters) of any compressor plant building must open outward and, when occupied, must be openable from the inside without a key.

ANR failed to ensure that each gate within 200 feet of a compressor plant building was openable from the inside without a key when occupied. PHMSA's inspectors discovered during the inspection that the fence around the Marshfield compressor station in the Waukesha Area had a locked man gate within the main roller gate that was not openable from the inside without a key. The main roller gate was located within 200 feet of a compressor plant building. In subsequent discussions, ANR stated that it has corrected the non-compliance.

2. § 192.603 General provisions.

(a)

(b) Each operator shall keep records necessary to administer the procedures established under § 192.605.

ANR failed to maintain records for maintenance and construction projects on its Heartland pipeline system as required by § 192.603(b). During a teleconference with ANR on January 9, 2019, PHMSA inquired about instances of reconfiguration of any pipeline segments within the past five years. ANR informed PHMSA on February 20, 2019 during a follow-up teleconference of specific activities in Iowa concerning a project that was described as having pipe reconfiguration in 2014. PHMSA confirmed the request for these records during the headquarters inspection on April 11, 2019, and followed up by sending a formal Request For Specific Information (RFSI) on April 29. Although ANR did not provide the requested records within 30 days as required by the RFSI, ANR did respond after the 30 days by electronically submitting a short description of the project, but no actual records, as required under § 192.603(b).

3. **§ 192.605 Procedure 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.

ANR failed to prepare and follow a procedure for defining rate of pressure drop (RoPD) line-break devices at the time of the inspection. Upon questioning, ANR confirmed that it did not have a procedure in place at the time of the inspection for this activity. ANR has since updated its procedures to correct this noncompliance.

4. **§ 192.609 Change in class location: Required study.**
Whenever an increase in population density indicates a change in class location for a segment of an existing steel pipeline operating at a hoop stress that is more than 40 percent of SMYS, or indicates that the hoop stress corresponding to the established maximum allowable operating pressure for a segment of existing pipeline is not commensurate with the present class location, the operator shall immediately make a study to determine;
- (a) The present class location for the segment involved.
 - (b) The design, construction, and testing procedures followed in the original construction, and a comparison of these procedures with those required for the present class location by the applicable provisions of this part.
 - (c) The physical condition of the segment to the extent it can be ascertained from available records;
 - (d) The operating and maintenance history of the segment;
 - (e) The maximum actual operating pressure and the corresponding operating hoop stress, taking pressure gradient into account, for the segment of pipeline involved; and,
 - (f) The actual area affected by the population density increase, and physical barriers or other factors which may limit further expansion of the more densely populated area.

ANR failed to immediately make studies to determine the present class locations of the 301, 1-301, 2-301, 100, and the 1-100 pipeline segments in the Kankakee and Waukesha Areas, when increases in population density occurred along the existing steel pipelines operating at a hoop stress of more than 40 percent of the specified minimum yield strength (SMYS).

Class locations are defined by § 192.5, and include areas such as playgrounds and campgrounds. Specifically, a Class 3 locations is defined, in relevant part as follows: “[a]n area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation center, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and months need not be consecutive.)”

On August 22, 2018, ANR provided a document to PHMSA titled “Identified Sites, Proximity Sites/HCA, Class Location Determination Request For Information – Prefacing Commentary” that identified that the Timber Campground (Campground) and the playground north of the Gary D. Wright Elementary School met the criteria for Class 3 locations. The studies were not completed until April 2017, despite evidence of population density changes indicating a change in class location occurring as early as 2010 and continuing each year thereafter.

Timber Campground

The Timberland Campground was originally built in the 1960s and expanded to its current configuration in 2011. The owner of the campground confirmed with ANR in April 2017 that the Campground had over 100 campsites and saw significant seasonal usage from April to October. Prior to 2017, the Campground was classified as a Class 1 location, however, on April 26, 2017, ANR completed the required study and identified the Campground as a “New Proximity Site” that met the Class 3 location criteria. The known seasonal usage of the campground between April and October since at least 2010 through April 2017 required ANR to complete a class location study in this area prior to its April 2017 study. ANR acknowledged during the inspection that there was an issue with their process in identifying campgrounds as warranting a change in class location and that the problem has been addressed by use of a different contractor to perform the requisite population density analysis and subsequent class location studies, if applicable.

Playground North of the Gary D. Wright Elementary School

In early 2017, after a review of construction plans for an expansion of the Gary D. Wright Elementary School, ANR noted that there was a playground north of the school, despite the fact that the playground had been present in that location since 2010. Similar to the campground, there was evidence of a possible change in population density due to the presence of the playground since at least 2010 that indicated a possible change in class location. Notwithstanding the presence of this playground since 2010, ANR did not complete the requisite class location study until April 19, 2017, the result of which was to confirm that the playground met the criteria for a Class 3 location.

ANR’s document demonstrated that ANR failed to immediately make studies to determine the class locations for segments located in the areas of the Gary D. Wright Elementary School playground and the Timber Campground prior to April 2017 when

there was evidence of an increase in population density that indicated a change in class location.

5. § 192.705 Transmission lines: Patrolling.

(a) Each operator shall have a patrol program to observe surface conditions on and adjacent to the transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation.

ANR failed to observe surface conditions over its right-of-way when conducting aerial patrols of its Heartland pipeline system. During the field inspection PHMSA observed overgrown areas of trees and brush obscuring the aerial view of the right-of-way in 23 locations. No ground patrols were conducted at these locations.

Locations observed in the Flint Hills and Tri State Areas:

1. Approximately 1000 feet of tree cover southwest of Wreford, Kansas (MP 304)
2. Approximately 150 feet of dense overgrowth on the south side of Marysville, Missouri Meter Station (MP 351)
3. Approximately 250 feet of overgrowth on the Burlington Lateral right-of way on the north side of the Western Pines, Iowa Mobile Home Park HCA area.
4. Approximately 1,900 feet of tree cover over the main line east of the Middletown, Iowa Meter Station

Locations observed in the Kankakee and Waukesha Areas:

5. Overgrown brush on the 100 and 1-100 pipelines near the Fox River crossing in Illinois (MP 796.81)
6. Tree cover over the exposed segment of the 2-301 pipeline in Little Rock Creek in Illinois (MP 1.6)
7. Overgrown brush on the 237 pipeline, west of the intersection of S County Line Road and Hansen Road on the Oneida Reservation in Wisconsin
8. Tree cover over the 226 pipeline, near County Roads T&V in Wisconsin
9. Tree cover over the 226 pipeline, west of MLV 5 (MP 34.2) in Wisconsin.
10. Tree cover over the 226 pipeline, west of the Appleton Meter Station in Wisconsin (MP 92)
11. Tree cover over the 226 pipeline, northeast of the Appleton Meter Station in Wisconsin (MP 92)
12. Tree cover over the 366 pipeline, east of the Mosinee Meter Station (MP 2.83) in Wisconsin
13. Tree cover over the 366 pipeline, north of the Mosinee Tap (MP 12.54)
14. Tree cover over the 227 pipeline, west of Geulig Road in Wisconsin
15. Tree cover over the exposed 257 pipeline in the Eau Claire River (MP 19.1)
16. Tree cover over the 227 pipeline, north of the Oconto River in Wisconsin (MP 52.7)
17. Overgrown brush on the 227 pipeline, west of King's Buffet in Marinette, Wisconsin

18. Tree cover over the 285 pipeline, west of CR EE in Wisconsin (MP 73)
19. Tree cover the 301, 1-301, and the 2-301 pipelines, south of Tan Road in Wisconsin (MP 97)
20. Tree cover the 301 and 1-301 pipelines from Mill Road to Good Hope Road in Wisconsin (MP 112 to MP 113)
21. Overgrown brush on the 301 and 1-301 pipelines near the Community Memorial Hospital Garden (MP 114)
22. Tree cover over the 207 pipeline, west of the Jackson Meter Station in Wisconsin
23. Tree cover over the Milwaukee River crossings of the 301, 1-301, and the 2-301 pipelines in Wisconsin (MP 147)

6. § 192.735 Compressor stations: Storage of combustible materials.

(a) Flammable or combustible materials in quantities beyond those required for everyday use, or other than those normally used in compressor buildings, must be stored a safe distance from the compressor building.

ANR failed to store flammable or combustible materials in quantities beyond those required for everyday use at a safe distance from the compressor buildings in the Kankakee and the Waukesha Areas.

During the field inspections, PHMSA observed the storage of flammable or combustible materials, such as numerous cardboard boxes, wood boxes, and wood pallets, in the Kewaskum, Janesville, and Weyauwega Compressor Station buildings and a large quantity in the valve building in the Mount Compressor Station. Additionally, during the field inspection of the New Windsor Compressor Station, PHMSA observed that the materials used to overhaul a compressor unit were stored in cardboard boxes and wooden crates in the compressor building.

After PHMSA's inspection ANR provided a written response on December 21, 2018, stating: "All of the combustible materials have been removed from the compressor buildings," and provided pictures of the Kewaskum Compressor Building and the Mountain Valve Room showing that combustible materials were cleared.

7. § 192.905 How does an operator identify a high consequence area?

(a)

(b)(1) *Identified sites.* An operator must identify an identified site, for purposes of this subpart, from information the operator has obtained from routine operation and maintenance activities and from public officials with safety or emergency response or planning responsibilities who indicate to the operator that they know of locations that meet the identified site criteria. These public officials could include officials on a local emergency planning commission or relevant Native American tribal officials.

ANR failed to identify two “identified sites” along its pipeline segment in regard to high consequence areas (HCAs) and the implementation of its integrity management plan (IMP). During the records inspection of the Kankakee and Waukesha Areas, ANR provided a written memo that identified the Timber Campground and the playground north of the Gary D. Wright Elementary School as newly “identified sites.” These locations were identified as “identified sites” in 2017 even though they were present at least five years prior. This probable violation is a repeat of the same Code section that was violated in CPF # 3-2018-1001, Item #1.

Timber Campground

ANR failed to identify the Timber Campground (Campground) near the exposed pipeline on the 1-100/100 pipeline segments as an “identified site.”

Prior to 2017, the Campground was classified as a non-HCA. During OPS’ inspection of ANR’s IMP records, ANR provided a memo that noted that they had inspected an exposed pipeline near the Campground on October 17, 2016, but had not identified the Campground as an “identified site.” It was not until 2017 when ANR discovered that the Campground was an “identified site” from conducting a population density survey. On August 22, 2018, during the same OPS inspection, ANR provided a memo titled, “Identified Sites, Proximity Sites/HCA, Class Location Determination Request For Information – Prefacing Commentary.” In this document, ANR indicated that the Campground occupancy and frequency of usage were updated during the 2017 population density survey. In addition, ANR noted in the document, that the Campground was built in the 1960s and that it had over 100 campsites and saw significant seasonal usage from April to October. ANR also stated during the inspection that the Campground owner confirmed the occupancy of the Campground in April 2017.

As a result, ANR identified the Campground as an “identified site” on April 26, 2017. ANR acknowledged during the inspection that there has been an issue with their process in identifying campgrounds as “identified sites.”

Playground North of the Gary D. Wright Elementary School

ANR failed to identify the playground north of the Gary D. Wright Elementary School, near the 301, 1-301, and 2-301 pipeline segments as an “identified site.” ANR identified the Gary D. Wright Elementary School as an identified site on September 6, 2007. Prior to 2017, only the Gary D. Wright Elementary School was used for HCA identification, however, in early 2017, ANR discovered that the playground was an “identified site” after a review of construction plans for an expansion to the elementary school. During its review, ANR confirmed that the playground was constructed in 2010 and therefore met the criteria for an “identified site” at that time. However, ANR did not identify the playground as an “identified site” until April 19, 2017. The Playground extended three existing HCAs.

ANR provided a document during the inspection entitled “Identified Sites, Proximity Sites/HCA, Class Location Determination Request For Information – Prefacing Commentary” that acknowledged that ANR had failed to identify these two (2) “identified sites” in accordance with §192.905(b)(1) until well after the construction of the Gary D. Wright Elementary School playground in 2010 and the establishment of the Timber Campground by the latest ownership in 2011.

8. § 192.935 What additional preventive and mitigative measures must an operator take?

(a) General requirements. An operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the operator has identified to each pipeline segment. (See § 192.917) An operator must conduct, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S (incorporated by reference, see § 192.7), section 5, a risk analysis of its pipeline to identify additional measures to protect the high consequence area and enhance public safety. Such additional measures include, but are not limited to, installing Automatic Shut-off Valves or Remote Control Valves, installing computerized monitoring and leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional inspection and maintenance programs.

ANR failed to consider additional measures to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a HCA. ANR determined that installing Automatic Shut-off Valves (ASV) or Remote Control Valves (RCV) would not be an efficient means of adding protection to an HCA in the event of a gas release, but did not undertake a compliant analysis to arrive at this determination. The regulation required ANR to determine, through a risk analysis, if additional measures, such as ASVs or RCVs would provide additional measures to protect HCAs.

The factors to be considered in the analysis required by the regulation for installation of ASVs or RCVs to protect HCAs in the event of a gas release is set forth in § 192.935(c), which provides as follows: “[i]f an operator determines based on a risk analysis, that an ASV or RCV would be an efficient means of adding protection to a high consequence area in the event of a gas releases, an operator must install the ASV or RCV. In making that determination, an operator must, at least, consider the following factors – swiftness of leak detection and pipe shutdown capabilities, the type of gas being transported, operating pressure, the rate of potential release, pipeline profile, the potential for ignition, and location of nearest response personnel.”

PHMSA’s integrity management record inspection found that ANR failed to consider the following factors - swiftness of leak detection and pipe shutdown capabilities, the type of

gas being transported, operating pressure, the rate of potential release, pipeline profile, the potential for ignition, and location of nearest response personnel, in determining if an ACV or RSV was an efficient means of protection to 108 HCAs in the Kankakee and Waukesha Areas.

Instead, ANR determined that neither ASVs nor RCVs were an efficient means of adding protection to its HCAs solely on the basis that the pipeline diameter was smaller than 12 inches and did not consider any additional factors. By ANR failing to consider the additional factors listed in the regulation, ANR failed to comply with the requirements of § 192.935(a).

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to 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 documentation involved for the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of \$252,900 as follows:

<u>Item number</u>	<u>PENALTY</u>
3	\$ 46,600
4	\$ 20,600
6	\$ 56,300
7	\$ 65,500
8	\$ 63,900

Proposed Compliance Order

With respect to items 1 and 5 pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to ANR Pipeline Company. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Item

With respect to item 2 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 this item. 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 Compliance 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 3-2020-1012** 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

Copy: Wendy West, VP Safety & Quality & Compliance, 450 – 1st Street SW
Calgary Alberta Canada, T2P 5H1, wendy_west@tcenergy.com
Erik Hughes, US Director of Compliance, TC Energy, erik_hughes@tcenergy.com

Lee Romack, US Director of Compliance, TC Energy, lee_romack@tcenergy.com
Keith Coyle, Outside Counsel, TC Energy, KCoyle@babstcalland.com

PROPOSED COMPLIANCE ORDER

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

1. Regarding Item 1 of the Notice pertaining to fences at compressor stations having at least two gates openable from the inside without a key, ANR must:
 - i. Within 90 days of receipt of the Final Order, provide evidence to the Director, Central Region, that ANR corrected the fencing at the Marshfield compressor station so that at least two gates are openable from the inside without a key.
2. Regarding Item Number 5 of the Notice pertaining to right-of-way patrolling, ANR must:
 - i. Within 60 days of receipt of the Final Order, survey the right-of-way of the 23 locations identified in the Notice for surface conditions that obstruct observation by means of aerial patrol.
 - ii. Within 90 days of receipt of the Final Order, complete patrols of all locations identified in the Notice using means appropriate to the surface conditions.
 - iii. Within 120 days of receipt of the Final Order, furnish to the Director, Central Region, a report summarizing the results of i and ii, above.
3. It is requested (not mandated) that ANR Pipeline Company maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Allan Beshore, 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.