



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

901 Locust Street, Suite 480
Kansas City, MO 64106

NOTICE OF AMENDMENT

VIA ELECTRONIC MAIL TO: cynthia.hansen@enbridge.com;
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July 1, 2025

Ms. Cynthia Hansen
President / Chief Operating Officer
Texas Eastern Transmission, LP
915 North Eldridge Parkway
Houston, TX 77079

CPF 3-2025-028-NOA

Dear Ms. Hansen:

For the weeks of May 13, June 3, and June 24, 2024, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), conducted an inspection of Texas Eastern Transmission, LP's procedures for the new gas integrity rule¹ in Houston, Texas.

As a result of the inspection, PHMSA has identified the apparent inadequacies found within Texas Eastern Transmission LP's (TET) plans or procedures. The items inspected and the alleged inadequacies and proposed revisions are described below:

1. § 192.607 Verification of Pipeline Material Properties and Attributes: Onshore steel transmission pipelines.

(a)

¹ Docket No. PHMSA-2011-0023; Amdt. Nos. 191-26; 192-125 Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments

(c) Verification of material properties and attributes. If an operator does not have traceable, verifiable, and complete records required by paragraph (b) of this section, the operator must develop and implement procedures for conducting nondestructive or destructive tests, examinations, and assessments in order to verify the material properties of aboveground line pipe and components, and of buried line pipe and components when excavations occur at the following opportunities: Anomaly direct examinations, in situ evaluations, repairs, remediations, maintenance, and excavations that are associated with replacements or relocations of pipeline segments that are removed from service.

TET's procedure PI-01.001 – Material Verification Procedure did not consider an opportunistic dig as an excavation that did not excavate the full circumference of the pipe. Specifically, Section 4.1 of the procedure only considers an opportunistic dig to occur where the full circumferential extents of the segment will be exposed. Even if the pipe is not fully excavated, there are opportunities to get missing attributes that do not require the entire pipe circumference to be exposed. The Final Rule specifically addresses this as a response to industry comments regarding the number of test points for non-destructive testing. PHMSA reduced the number of test points from four quadrants to two quadrants to allow for material verification on the top half of the pipe and avoid the need to access the bottom half of the pipe when a repair or maintenance activity would not require it.² Therefore, TET did not have adequate procedures for § 192.607(c) as required by § 192.605(a).

2. § 192.607 Verification of Pipeline Material Properties and Attributes: Onshore steel transmission pipelines.

(a)

(e) Sampling multiple segments of pipe. To verify material properties and attributes for a population of multiple, comparable segments of pipe without traceable, verifiable, and complete records, an operator may use a sampling program in accordance with the following requirements:

(1) The operator must define separate populations of similar segments of pipe for each combination of the following material properties and attributes: Nominal wall thicknesses, grade, manufacturing process, pipe manufacturing dates, and construction dates. If the dates between the manufacture or construction of the pipeline segments exceeds 2 years, those segments cannot be considered as the same vintage for the purpose of defining a population under this section. The total population mileage is the cumulative mileage of pipeline segments in the population. The pipeline segments need not be continuous.

TET's procedure PI-01.500 – *Populations of Similar Segments Guide* indicated in Appendix A that the commissioning pressure test (construction date) could be used as a proxy for the manufacturing date which § 192.607(e)(1) does not allow. Construction dates cannot be used as a

² Docket No. PHMSA–2011–0023; Amdt. Nos. 191–26; 192–125; Pages 52194–52195; Section 3: PHMSA Response

proxy for manufacturing date because material attributes are directly tied to the manufacturing date. Therefore, TET did not have adequate procedures for § 192.607(e)(1) in accordance with § 192.605(a).

3. § 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.

TET's procedure OC-52.202 - *Class Determination Procedure*, did not contain enough specificity in their class analysis review to meet the requirements in § 192.609(a) – (f). Section 8.3.2.4 of the class analysis review section referenced sections § 192.609(a), (b), (e), and (f), but did not provide any guidance on how to fulfill the requirements and how that review would be documented. TET personnel indicated that § 192.609(c) and (d) were completed by their Encroachment group, but the procedures made no mention of that work group and what they were expected to do and document. Additionally, the procedure did not specify that the class analysis must be done when the pipeline is operating above 40% SMYS or when the pipeline's MAOP is not commensurate with the current class location. The procedure appeared to be focused on Class 3 and 4 areas but did not direct personnel to conduct the study if these conditions occur in a Class 1 or 2 area. Therefore, TET did not have adequate procedure for § 192.609(a)–(f) as required by § 192.605(a).

4. § 192.613 Continuing surveillance.

(a) Each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operating and maintenance conditions.

TET's Procedure 50.201 – *Field Surveillance and Monitoring Process* did not provide enough guidance with regards to monitoring their facilities in order to take appropriate action concerning changes in class locations. Specifically, Table 3 – *Surveillance and Monitoring Descriptions* described categories for damage prevention and then provided guidance on how to address that category for continuing surveillance. In the category *Land Use and Landownership Monitoring*, one of the bulleted guidance items stated that personnel “periodically review and assess the land use adjacent to the GTM asset”. The procedure did not define periodically (how often they were to conduct the review), nor did it define how personnel were going to assess the facilities adjacent to GTM assets, such as identified Class 3 and High Consequence Area sites. During the records review, two examples were noted where buildings next to GTM assets were not correctly identified as occupied sites with one resulting in a missed Class 3 site. Therefore, TET did not have adequate procedures for § 192.613 as required by § 192.605(a).

5. § 192.632 Engineering Critical Assessment for Maximum Allowable Operating Pressure Reconfirmation: Onshore steel transmission pipelines.

When an operator conducts an MAOP reconfirmation in accordance with § 192.624(c)(3) "Method 3" using an ECA to establish the material strength and MAOP of the pipeline segment, the ECA must comply with the requirements of this section. The ECA must assess: Threats; loadings and operational circumstances relevant to those threats, including along the pipeline right-of way; outcomes of the threat assessment; relevant mechanical and fracture properties; in-service degradation or failure processes; and initial and final defect size relevance. The ECA must quantify the interacting effects of threats on any defect in the pipeline.

(a) ECA Analysis.

The material properties required to perform an ECA analysis in accordance with this paragraph are as follows: Diameter, wall thickness, seam type, grade (minimum yield strength and ultimate tensile strength), and Charpy v-notch toughness values based upon the lowest operational temperatures, if applicable. If any material properties required to perform an ECA for any pipeline segment in accordance with this paragraph are not documented in traceable, verifiable and complete records, an operator must use conservative assumptions and include the pipeline segment in its program to verify the undocumented information in accordance with § 192.607. The ECA must integrate, analyze, and account for the material properties, the results of all tests, direct examinations, destructive tests, and assessments performed in accordance with this section, along with other pertinent information related to pipeline integrity, including close interval surveys, coating surveys, interference surveys required by subpart I of this part, cause analyses of prior incidents, prior pressure test leaks and failures, other leaks, pipe inspections, and prior integrity assessments, including those required by §§ 192.617, 192.710, and subpart O of this part.

TET's procedure PI-01.100 – *Field Material Verification Procedure* did not require obtaining the Charpy V-notch toughness values at the lowest operating temperature when being utilized for an Engineering Critical Assessment. Appendix A – *Destructive Testing Test Plan* in section 3c. only indicated that the tests would be performed at 23 degrees F, 50 degrees F, and 75 degrees F. Thus, TET 's procedures for obtaining Charpy V-notch values do not meet the requirements of § 192.632(a)(1) as required by § 192.605(a).

6. § 192.712 Analysis of predicted failure pressure and critical strain level.

(a)

(d) Cracks and crack-like defects

(1)

(3) Cracks that survive pressure testing. For cases in which the operator does not have in-line inspection crack anomaly data and is analyzing potential crack defects that could have survived a pressure test, the operator must calculate the largest potential crack defect sizes using the methods in paragraph (d)(1) of this section. . . .

TET did not have a procedure that would determine the largest potential crack defect to survive a pressure test in accordance with § 192.712(d)(3). This procedure is required to determine the next reassessment interval in accordance with § 192.939 if hydrotesting were to be used as well as conducting remedial actions as required in § 192.933 in the Integrity Management program. Therefore, TET did not have procedures for § 192.712(d)(3) as required by § 192.605(a).

7. § 192.712 Analysis of predicted failure pressure and critical strain level.

(a)

(e) Data. In performing the analyses of predicted or assumed anomalies or defects in accordance with this section, an operator must use data as follows.

(1)

(2) The analyses performed in accordance with this section must utilize pipe and material properties that are documented in traceable, verifiable, and complete records. If documented data required for any analysis is not available, an operator must obtain the undocumented data through § 192.607.

Until documented material properties are available, the operator shall use conservative assumptions as follows:

i.

iii. Pipe dimensions and other data. Until pipe wall thickness, diameter, or other data are determined and documented in accordance with § 192.607, the operator must use values upon which the current MAOP is based.

TET's procedure AI-72.800 – Asset Integrity Risk Algorithm Document Guide did not require the use of the values upon which the current MAOP was based upon as inputs for the risk analysis used to determine the predicted failure pressure. The procedure did not require the use of the

material properties for which the MAOP was based upon if traceable, verifiable, and complete records are unknown. Appendix C – *Default Uncertainty Distributions* of the document contains the default uncertainty values used for the analysis. Table C.4 – *Material Tensile Properties* lists the Specified Minimum Yield Strength (SMYS), the Mean, and the Standard Deviation for the yield strength and tensile strength for each grade of pipe. In the table, PHMSA noted that the mean values taken with the standard deviation would exceed the SMYS value utilized to establish the MAOP. For example, the table indicates for Grade 24000 psi pipe, there is a mean of 26400 psi and a standard deviation as 924 psi. The lowest value that could be used is 25476 psi ($26400 - 924 = 25476$), which is greater than 24000 psi SMYS. During the inspection, TET personnel indicated that the mean values, which all exceed the SMYS, are used as inputs in the analysis. As a result, there appears to be a conflict with PI-04.505 Section 7.3.2.1 which states that the values which the current MAOP is based upon must be used when calculating predicted failure pressures. Therefore, TET's procedure in AI-72.800 did not meet the requirements of § 192.712(e)(2)(iii) as required by § 192.605(a).

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 CFR § 190.206. 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. Be advised that all material you submit in response to this enforcement action is subject to being 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, revised procedures, or a request for a hearing under § 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 an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 CFR § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 90 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Texas Eastern Transmission, LP maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment

(preparation/revision of plans, procedures) and submit the total to the Director, Central Region, Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety. In correspondence concerning this matter, please refer to **CPF 3-2025-028-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

David Barrett
Acting Director, Central Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

cc: Mr. Peter Seydewitz, Director - Operational Excellence
Ms. Salima Abdulla, Manager – Operational Compliance
Mr. Michael McGrath, Strategic Advisor, Operational Compliance

Enclosure: *Response Options for Pipeline Operators in Enforcement Proceedings*