



REGULATORY UPDATE 2019

PHMSA





PIPES ACT OF 2016

The **Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016**, was passed by Congress and signed into law on June 22, 2016

- It authorizes funding for PHMSA from 2016 to 2019

<https://www.phmsa.dot.gov/pipes-act>





Rulemaking Acronyms

- ANPRM – Advance Notice of Proposed Rulemaking
 - Used to gather information
- NPRM – Notice of Proposed Rulemaking
 - Defines intent and scope of proposed regulations
- SNPRM – Supplemental Notice of Proposed Rulemaking
 - Additions to, or changes in, intent or scope





Rulemaking Acronyms

- IFR – Interim Final Rule
 - Typically used for an identified safety issue
- FR – Final Rule
 - Implementation date, depending on significance of regulation and time to implement
- DFR – Direct Final Rule
 - Used for non-controversial issues





Where can I find information on the Status of Significant rulemakings?

– DOT

- Report on DOT Significant Rulemakings (Monthly reports)

- <http://www.dot.gov/regulations/report-on-significant-rulemakings>

– OMB

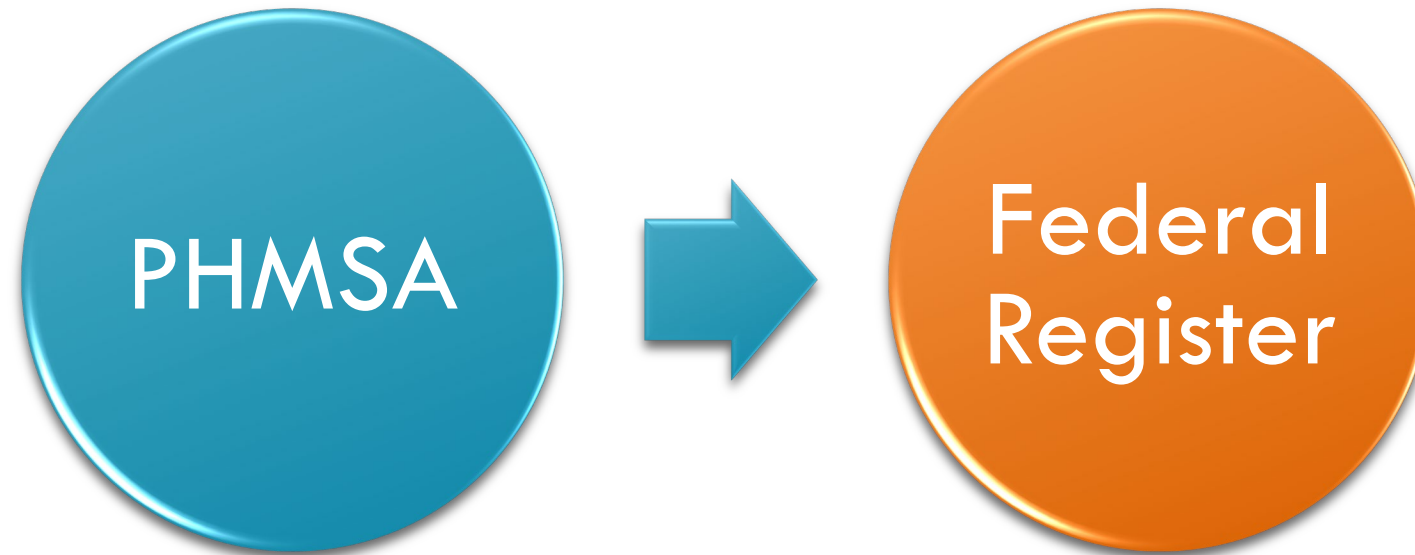
- www.reginfo.gov



Significant Rules



Non-significant Rules



OMB Determines what rules are Significant





Upcoming Rule Making

The timeline for all future rulemaking is pending Departmental determinations on implementing and maintaining compliance with the applicable Executive Orders and Memorandums.





Reminder

- The following PHMSA regulatory updates are simply an overview
- Details can be found in the Federal Register postings

<https://www.federalregister.gov>





Damage Prevention Programs (Excavation Enforcement)

- Docket No. PHMSA-2009-0192

<https://www.federalregister.gov/documents/2012/05/30/2012-13025/pipeline-safety-pipeline-damage-prevention-programs>



Key Dates

Publication Date:

July 23, 2015

January 1, 2016

Effective Date:



Final Rule Summary

The
final
rule
creates:

Part 198, Subpart D – Criteria for adequate state damage prevention enforcement programs and process for assessment

Administrative procedures for states to contest a notice of inadequacy



Final Rule Summary

New Part 196 – Standards for excavators digging near pipelines

Adjudication process for excavators cited by PHMSA – Same as for operators cited by PHMSA for violations of pipeline safety regulations



Policies – Criteria and Enforcement

The preamble outlines two policies:

How the state program evaluation criteria will be applied

How the excavator enforcement standard will be applied

The policies are not part of the rule; they are flexible and can evolve as the rule is implemented





Federal Standard for Excavators

- Call 811 before excavating
- Wait for pipeline operators to establish and mark the location of underground pipelines before excavating
- Excavate with proper regard for the marks, take all practicable steps to prevent excavation damage
- Make additional use of one-call as necessary





Federal Standard for Excavators

- Any contact with pipelines must be reported to operator at earliest practical moment
- If there is a release, excavator must call 911

NOTE: There are no exemptions in the rule. PHMSA will be considerate of exemptions in state laws when undertaking Federal enforcement action.





Operator Qualification, Cost Recovery, Accident and Incident Notification, and Other Changes

- Docket: PHMSA-2013-0163

<https://www.phmsa.dot.gov/regulations-fr/rulemaking/2016-31461>





Note:

Many provisions related to OQ were discussed in the NPRM but were not carried through to the final rule.

However, the Agency may decide to initiate a rulemaking re-proposing similar provisions at a later date.



Key Dates

Publication Date

23 Jan. 2017

24 Mar. 2017

Effective Date



Summary of Final Rule

Specifies an operator's accident and incident reporting time to within 1 hour.

Sets up a cost recovery fee structure for design review of new gas and hazardous liquid pipelines.

Provides a renewal procedure for expiring special permits.



Summary of Final Rule

Requires operator to contact NRC within 48 hours to revise or confirm the initial telephone report

Amount of product lost

Estimate number of fatalities and injuries

Known significant facts that are relevant to the cause of the incident or extent of damage

If there is no change from original report, the operator must confirm



Summary of Final Rule

Excludes farm taps from the DIMP requirements, but adds regulator and overpressure testing requirements.

Requiring pipeline operators to report to PHMSA a change in product (e.g., from liquid to gas, from crude oil to highly volatile liquids (HVL)) or a permanent reversal of flow that lasts more than 30 days.



Summary of Final Rule

Requires electronic reporting of drug and alcohol testing results in part 199, and modifying the criteria used to make decisions about conducting post accident drug and alcohol tests.

Adds a procedure to request PHMSA keep submitted information confidential.



Summary of Final Rule

Adds reference to Appendix B of API 1104 related to in-service welding in parts 192 and 195.

Provides methods for assessment tool selection by incorporating consensus standards by reference in part 195 for stress corrosion cracking direct assessment.

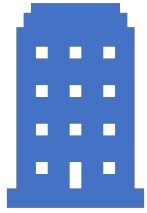


Summary of Final Rule

Develops and clarifies requirements for team training of control center staff involved in pipeline operational decisions.

Develops requirements for team training of control center staff involved in pipeline operations similar to those used in other transportation modes.





Excess Flow Valves (EFV) for Multi-Residential and Commercial Applications

- Docket No. PHMSA-2011-0009
- <https://www.phmsa.dot.gov/regulations-fr/rulemaking/2011-30330>



Key Dates

Publication Date

14 Oct. 2016

14 Apr. 2017

Effective Date



Final Rule – EFVs Required

§ 192.383(b)

Operators must install an EFV on new or replaced service lines that:

Branch to an Single Family Residence

Serve multifamily residences where the known load is $\leq 1,000$ SCFH

Serve single, small commercial customers where the known load is $\leq 1,000$ SCFH

Exceptions: < 10 psig, contaminants in gas stream, interference with O&M activities, EFV unavailable



Final Rule – EFVs Required

§192.383(d) Existing customers have a right to request EFV installation

§192.383(e) Operators must notify customers of their right to request EFVs & this notice must be available for PHMSA inspection

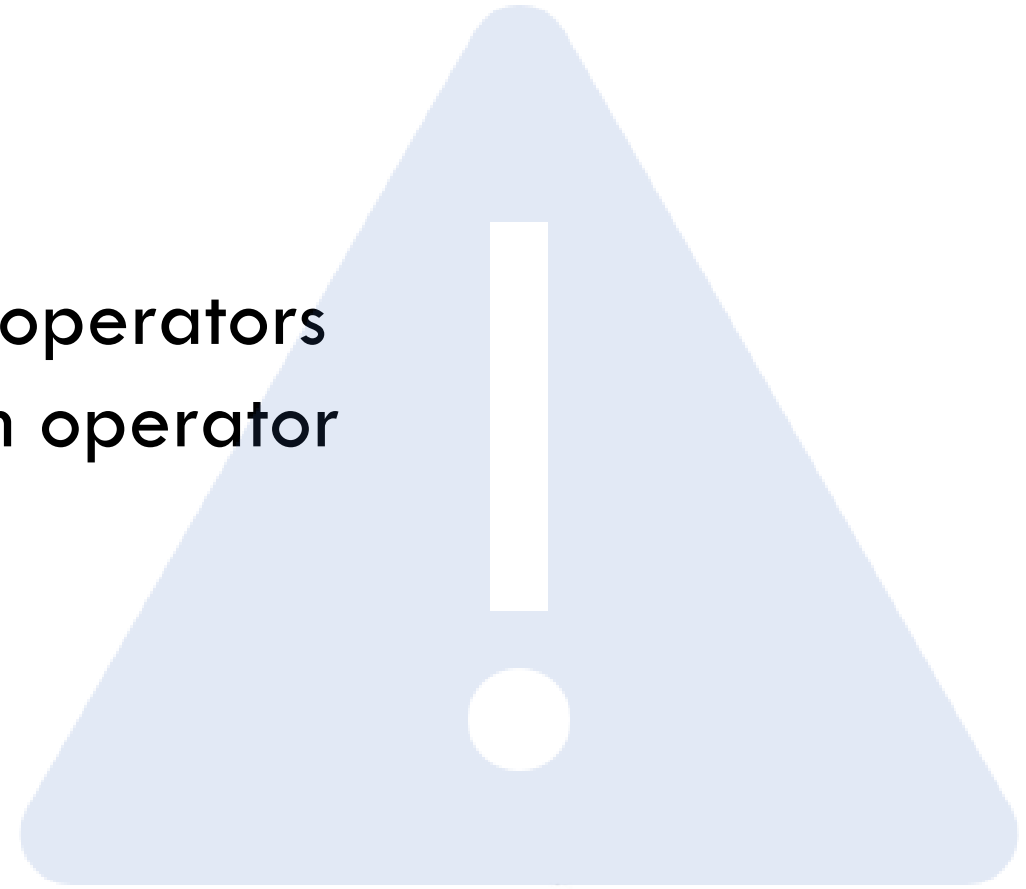
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Final Rule Provisions

Except for master-meter and LPG operators w/fewer than 100 customers, each operator must report EFVs in Annual Report



Final Rule Provisions

§ 192.385 Each operator must install either a manual shut-off valve or, if possible and based on sound engineering analysis, an EFV, on new or replaced service lines $> 1,000$ SCFH

§ 192.385 Manual shut-off valves must be installed to allow accessibility during emergencies & are subject to maintenance consistent with the valve manufacturer's specification





Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments

- Docket ID PHMSA-2011-0023

<https://www.federalregister.gov/documents/2011/11/16/2011-29497/pipeline-safety-safety-of-gas-transmission-pipelines>



Purpose

The purpose of this final rule is to increase the level of safety associated with the transportation of gas.



Scope

While the NPRM addressed 16 major topic areas, PHMSA believes the most efficient way to manage the proposals in the NPRM is to divide them into three rulemaking actions.



Three Phases

Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments

A second rulemaking to address the topics regarding repair criteria in HCAs and the creation of new repair criteria for non-HCAs, requirements for inspecting pipelines following extreme events, updates to pipeline corrosion control requirements, codification of a management of change process, clarification of certain other IM requirements, and strengthening IM assessment requirements.

A third rulemaking is expected to address requirements related to gas gathering lines that were proposed in the NPRM.



Key Dates

Publication Date

1 Jul. 2020

1 Oct. 2019

Effective Date



Item/Section	Effective Date	Notes
Amendment 192-125	July 1, 2020	(unless listed otherwise below)
§ 192.227(c), Make and retain records demonstrating each individual welder's qualification for a minimum of 5 years following construction.	July 1, 2021	Pipelines installed after date in second column
§ 192.285 Make and retain records demonstrating a person's plastic pipe joining qualifications for a minimum of 5 years following construction.	July 1, 2021	Pipelines installed after date in second column
§ 192.624 Must develop and document procedures for completing all actions required by this section	July 1, 2021	No later than the date in the second column



Item/Section	Effective Date	Notes
§192.624 must complete all actions required by this section on at least 50% of the pipeline mileage	July 1, 2028	No later than the date in the second column
§192.624 Must complete all actions required by this section on 100% of the pipeline	July 1, 2035	As soon as practicable, but not to exceed 4 years after the pipeline segment first meets a condition of § 192.624(a) (e.g., due to a location becoming a high consequence area), whichever is later.



Item/Section	Effective Date	Notes
§ 192.710 Transmission lines: Assessments outside of high consequence areas (Initial Assessment)	July 1, 2034	No later than the date in the second column
§ 192.750 Must equip ILL launchers and receivers with a method to relief the pressure before opening the enclosures. Also install a device to verify the pressure has been relieved or prevent opening of the closure.	July 1, 2021	After the date in the second column



- This change will define this term as it is used throughout part 192.
 - A “**moderate consequence area,**” or **MCA**, will define the subset of non-HCA locations where integrity assessments are required (§ 192.710) and where MAOP reconfirmation is required (§ 192.624).
 - The criteria for determining MCA locations is in that the threshold for buildings intended for human occupancy located within the potential impact radius is 5, and identified sites are excluded.
 - The MCA definition also includes locations where interstate highways, freeways, expressways, and other principal 4-or-more-lane arterial roadways are located within the potential impact radius.

§ 192.3 Definitions



- An “engineering critical assessment,” is a term that will be used in §§ 192.624 and 192.632.
 - The **ECA** is a documented analytical procedure that operators can use to determine the maximum tolerable size for pipeline imperfections based on the MAOP of the particular pipeline segment.
 - Operators can use an ECA in conjunction with an ILI inspection as one of the methods to reconfirm MAOP, if required.

§ 192.3 Definitions



§ 192.5 *Class locations*



This final rule adds a new paragraph, §192.5(d), to require each operator of transmission pipelines to maintain records documenting the current class location of each pipeline segment and demonstrating how an operator determined each current class location in accordance with this section.



§ 192.7 What documents are incorporated by reference partly or wholly in this part?

API STANDARD 1163, “In-Line Inspection Systems Qualification,” Second edition, April 2013, Reaffirmed August 2018, (API STD 1163), IBR approved for § 192.493.

ASME/ANSI B16.5-2003, “Pipe Flanges and Flanged Fittings,” October 2004, (ASME/ANSI B16.5), IBR approved for §§ 192.147(a), 192.279, and 192.607(f).

ASME/ANSI B31G-1991 (Reaffirmed 2004), “Manual for Determining the Remaining Strength of Corroded Pipelines,” 2004, (ASME/ANSI B31G), IBR approved for §§ 192.485(c), 192.632(a), 192.712(b), and 192.933(a).



§ 192.7 What documents are incorporated by reference partly or wholly in this part?

ANSI/ASNT ILI-PQ-2005(2010), "In-line Inspection Personnel Qualification and Certification," Reapproved October 11, 2010, (ANSI/ASNT ILI-PQ), IBR approved for § 192.493.

NACE Standard Practice 0102-2010, "In-Line Inspection of Pipelines," Revised 2010-03-13, (NACE SP0102), IBR approved for §§ 192.150(a) and 192.493.

AGA, Pipeline Research Committee Project, PR-3-805, "A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe," (December 22, 1989), (PRCI PR-3-805 (R-STRENG)), IBR approved for §§ 192.485(c); 192.632(a); 192.712(b); 192.933(a) and (d).



- (a) An operator must provide any notification required by this part by—
 - 1) Sending the notification by electronic mail to InformationResourcesManager@dot.gov; or
 - 2) Sending the notification by mail to ATTN: Information Resources Manager, DOT/PHMSA/OPS, East Building, 2nd Floor, E22-321, 1200 New Jersey Ave. SE., Washington, DC 20590.

§ 192.18 How to notify PHMSA



- (b) An operator must also notify the appropriate State or local pipeline safety authority...
- (c)...if the notification is made ...to use a different integrity assessment method, analytical method, sampling approach, or technique (i.e., “other technology”) that differs from that prescribed in those sections, the operator must notify PHMSA **at least 90 days in advance** of using the other technology.

§ 192.18 How to notify PHMSA



§ 192.67 Records: Material properties.

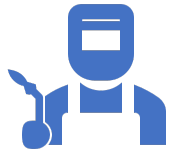
- This final rule moves the original § 192.67 (Storage and handling of plastic pipe) to § 192.69 and adds in its place a **new § 192.67**
- Requires each operator of gas transmission pipelines **installed after July 1, 2020** to collect or make, and retain **for the life of the pipeline**, records that document the physical characteristics of the pipeline, including tests, inspections, and attributes required by the manufacturing specification in effect at the time the pipe was manufactured.



§ 192.67 Records: Material properties.

- The physical characteristics an operator must keep documented include
 - Diameter
 - yield strength
 - ultimate tensile strength
 - wall thickness
 - seam type, and
 - chemical composition.
- These requirements also apply to any new materials or components that are put on existing pipelines.
- For **pipelines installed prior July 1, 2020**, operators are required to retain for the life of the pipeline all such records in their possession as of the effective date of this final rule.

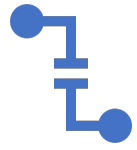




§ 192.227 Qualification of welders
*§ 192.285 Plastic pipe: Qualifying persons to
make joints*

For transmission pipe installed after **1 year after** July 1, 2020, records demonstrating each individual welder/ plastic pipe joining qualifications at the time of construction in accordance with this section must be retained for **a minimum of 5 years** following construction.





§ 192.506 *Transmission lines: Spike hydrostatic pressure test*

- A pressure test that incorporates a short duration “spike” pressure is a proven means to confirm the strength of pipe with known or suspected threats of cracks or crack-like defects (e.g., stress corrosion cracking, longitudinal seam defects, etc.).
- This section codifies the minimum standards for performing spike hydrostatic pressure tests when operators are required to, or elect to, use this assessment method.
- An operator may use other technologies or processes equivalent to a spike hydrostatic pressure test with justification and notification in accordance with §192.18.





§ 192.607 Verification of pipeline material properties and attributes: Onshore steel transmission pipelines

- PHMSA is adding a new § 192.607 that contains the procedure for verifying and documenting pipeline physical properties and attributes that are not documented **in traceable, verifiable, and complete records** and to establish standards for performing these actions.
 - Opportunities to perform material properties verification:
 - excavations associated with the direct examination of anomalies
 - pipeline relocations at road crossings and river or stream crossings
 - pipe upgrades for class location changes
 - pipe cut-outs for hydrostatic pressure tests
 - and excavations where pipe is replaced due to anomalies



§ 192.619
MAOP: Steel or
plastic pipelines

Test pressure factors in §192.619(a)(2)(ii) now correspond to at least 1.25 times MAOP for pipelines installed after the effective date of this rule.

Class location	Installed before (Nov. 12, 1970)	Installed after (Nov. 11, 1970) and before July 1, 2020	Factors, ¹ segment -	
			Installed on or after July 1, 2020	Converted under §192.14
1	1.1	1.1	1.25	1.25
2	1.25	1.25	1.25	1.25
3	1.4	1.5	1.5	1.5
4	1.4	1.5	1.5	1.5



§192.619(c) “The Grandfather Clause”

- It was not removed, instead additional requirements for operators of onshore steel transmission pipelines are now in place under §192.624
 - (e) Notwithstanding the requirements in paragraphs (a) through (d) of this section, operators of onshore steel transmission pipelines that meet the criteria specified in §192.624(a) must establish and document the maximum allowable operating pressure in accordance with §192.624.



§ 192.619
MAOP:
Steel or
plastic
pipelines

- Retention of Records:
 - Pipelines in operation as of July 1, 2020 must retain any existing records establishing MAOP for the life of the pipeline;
 - Pipelines in operation as of July 1, 2020 that do not have records establishing MAOP and are required to reconfirm MAOP in accordance with §192.624, must retain the records reconfirming MAOP for the life of the pipeline; and
 - Pipelines placed in operation after July 1, 2020 must make and retain records establishing MAOP for the life of the pipeline.



§ 192.624
MAOP
reconfirmation:
Onshore steel
transmission
pipelines

For operators of certain pipelines lacking the necessary records to validate MAOP, PHMSA is also adding § 192.624, which provides operators several methods for reconfirming a pipeline segment's MAOP.



§ 192.624
MAOP
reconfirmation:
Onshore steel
transmission
pipelines

Operators must reconfirm and document MAOP for certain onshore steel gas transmission pipelines located in HCAs or MCAs that meet one or more of the criteria specified in § 192.624(a).



§ 192.624
MAOP
reconfirmation:
Onshore steel
transmission
pipelines

- PHMSA is **NOT** repealing § 192.619(c) for pipeline segments located outside of HCAs, Class 3 or Class 4 locations, or MCAs that can accommodate instrumented ILI tools.
- Previously grandfathered pipelines that reconfirm MAOP using one of the methods of § 192.624 that operate above 72 percent SMYS may continue to operate at the reconfirmed pressure.



§ 192.624
MAOP
reconfirmation:
Onshore steel
transmission
pipelines

- Methods
 - Method 1 – Pressure test
 - Method 2 – Pressure reduction
 - Method 3 – [Engineering critical assessment](#)
 - Method 4 – Pipe replacement
 - Method 5 – Pressure reduction for pipeline segments with small PIR
 - Method 6 – Alternative technology



- 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.

*§ 192.632
Engineering
critical assessment
for MAOP
reconfirmation:
Onshore steel
transmission
pipelines*



§ 192.710
Transmission
lines:
Assessments
outside of high
consequence
areas

- Operators are required to periodically assess Class 3 locations, Class 4 locations, **and MCAs** that can accommodate inspection by means of an instrumented inline inspection tool.
- The periodic assessment requirements under this section apply to pipelines in these locations with MAOPs at or above 30% of SMYS



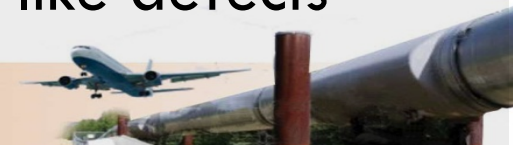
Other Sections

- §192.712
 - New section to address the techniques and procedures for analyzing the predicted failure pressures for pipe with corrosion metal loss and cracks or crack-like defects.
- § 192.750
 - Launcher and receiver safety to require a suitable means to relieve pressure in the barrel and either a means to indicate the pressure in the barrel or a means to prevent opening if pressure has not been relieved.



Integrity Management

- § 192.917
 - revising (a)(3) to include seismicity of the area in evaluating the threat of outside force damage.
 - revising the criteria in (e)(3) for addressing the threat of manufacturing and construction defects
 - (e)(4) has additional requirements for the assessment of low-frequency ERW pipe with seam failures.
 - adding a new paragraph, § 192.917(e)(6), to include specific IM requirements for addressing the threat of cracks and crack-like defects



Integrity Management

- § 192.921
 - Requires that direct assessment only be allowed to assess the threats for which the specific direct assessment process is appropriate.
 - also adds three additional assessment methods for operators to use:
 - A “spike” hydrostatic pressure test
 - Guided wave ultrasonic testing (GWUT), which is particularly appropriate in cases where short pipeline segments
 - Excavation with direct in situ examination



Integrity Management

- § 192.935
 - Revising § 192.935(b)(2) to include seismicity of the area when evaluating preventive and mitigative measures with respect to the threat of outside force damage.
- §192.939
 - Operators may request a 6-month extension of the 7-calendar-year reassessment interval





New Appendix F

Needed to provide specific requirements and acceptance criteria for the use of GWUT as an integrity assessment method.





FOR FURTHER INFORMATION CONTACT:

Technical questions: Steve Nanney, Project Manager, by telephone at 713-272-2855.

General information: Robert Jagger, Senior Transportation Specialist, by telephone at 202-366-4361.



PHMSA Inspector Training & Qualification – Oklahoma City

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Pipeline Safety Specialist/Instructor





How Did We Do?



<https://www.surveymonkey.com/r/2Z96GSD>

