



# WinDOT The Pipeline Safety Encyclopedia

MICHIGAN PIPELINE SAFETY CONFERENCE

OCTOBER 10, 2019

# WinDOT Features



Consolidated



Integrated



Searchable



Enriched



Updated



Accessible

# Consolidated

- ▶ Federal Gas, Liquid, and Drug & Alcohol Regulations
- ▶ State Regulations
- ▶ GPTC Guide
- ▶ Amendments and includes final rules
- ▶ PHMSA Interpretations & Guidance Materials
- ▶ PHMSA Alerts, Advisory Bulletins & Special Permits
- ▶ PHMSA Enforcement Actions
- ▶ PHMSA Forms, such as Pipeline Reporting, Inspection, & Registry
- ▶ Complete history of the regulations
- ▶ Technical Standards, AGA, ASME, NACE, and NFPA
- ▶ TSA Notices
- ▶ NTSB Investigations
- ▶ Coast Guard



-   **Government Regulations**
  -  [Part 190 Pipeline Safety Enforcement and Regulatory Procedures](#)
  -  [Part 191 Transportation of Natural and other Gas by Pipeline; Reports](#)
  -  [Part 192 Transportation of Natural and other Gas by Pipeline; Minimum Federal Safety Standards](#)
  -  [Part 193 Liquefied Natural Gas Facilities: Federal Safety Standards](#)
  -  [Part 194 Response Plans for Onshore Oil Pipelines](#)
  -  [Part 195 Transportation of Hazardous Liquids by Pipeline](#)
  -  [Part 196 Protection of Underground Pipelines from Excavation Activity](#)
  -  [Part 198 Regulations for Grants to Aid State Pipeline Safety Programs](#)
  -  [Parts 199 and 40; Drug & Alcohol Testing](#)
  -  [History of the Regulations, Gas](#)
  -  [History of the Regulations, Liquid](#)
  -  [Selected Coast Guard regulations](#)
  -  [Central region state regulations \(IL, IN, IA, KS, MI, MN, MO, NE, ND, SD, WI\)](#)
  -  [Eastern region state regulations \(CT, DC, DE, ME, MD, MA, NH, NJ, NY, OH, PA, RI, VT, VA, WV\)](#)
  -  [Southern region state regulations \(AL, FL, GA, KY, MS, NC, SC, TN, PR\)](#)
  -  [Southwest region state regulations \(AR, LA, NM, OK, TX\)](#)
  -  [Western region state regulations \(AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY\)](#)
-   **American Gas Association**
-   **American Petroleum Institute**
-   **American Society of Mechanical Engineers**
-   **National Association of Corrosion Engineers**
-   **National Fire Protection Association**

# Integrated

- ▶ 10,000 man hours invested in hyperlinking and grouping documents
  - ▶ Interpretations
  - ▶ Amendments
  - ▶ Advisories
  - ▶ Guidance
  - ▶ Special Permits
- ▶ Organized into tables of contents



- transmission lines.
- §192.709 Transmission lines: Record keeping.
- §192.710 Transmission lines: Assessments outside of high consequence areas. [Eff. 7/1/2020]
- §192.711 Transmission lines: General requirements for repair procedures.
- §192.712 Analysis of predicted failure pressure. [Eff. 7/1/2020]
- §192.713 Transmission lines: Permanent field repair of imperfections and damages.
- §192.715 Transmission lines: Permanent field repair of welds.
- §192.717 Transmission lines: Permanent field repair of leaks.
- §192.719 Transmission lines: Testing of repairs.
- §192.720 Distribution systems: Leak repair.
- §192.721 Distribution systems: Patrolling.
- §192.723 Distribution systems: Leakage surveys.
- §192.725 Test requirements for reinstating service lines.
- §192.727 Abandonment or deactivation of facilities.
- §192.729 [Removed]



-Search-

## §192.713 Transmission lines: Permanent field repair of imperfections and damages.



[Related Info: PHMSA Enforcement Cases / Docket History](#)



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- (a) Each imperfection or damage that impairs the serviceability of *pipe* in a *steel transmission line* operating at or above 40 percent of *SMYS* must be-
- (1) Removed by cutting out and replacing a cylindrical piece of pipe; or
  - (2) Repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe.
- (b) Operating *pressure* must be at a safe level during repair operations.

[[Part - 192 - Org](#), Aug. 19, 1970, as amended by [Amdt. 192-27](#), 41 FR 34598, Aug. 16, 1976; [Amdt 192-88](#), 64 FR 69660, Dec 14, 1999]

# Searchable

- ▶ Advanced search capabilities
  - ▶ Boolean AND, OR, and NOT functions
  - ▶ All words, some words, exact or partials words
- ▶ Results are identified by the source
  - ▶ Regulation
  - ▶ Guides
  - ▶ Amendments
  - ▶ Interpretations
  - ▶ Special Permits



## §192.723 Distribution systems: **Leakage surveys.**



[Related Info: PHMSA Enforcement Cases / NTSB and PHMSA Accident Investigations / Docket History.](#)



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[Oct 6, 00](#)  
[Feb 26, 06](#)

- (a) Each *operator* of a distribution system shall conduct periodic **leakage surveys** in accordance with this section.
- (b) The type and scope of the leakage control program must be determined by the nature of the operations and the local conditions, but it must meet the

§192.723 Distribution systems: **Leakage surveys.**



"leakage surveys"

Show results that include all search words

179 result(s) found for ""leakage surveys""

§192.706 Transmission Lines: Leakage Surveys, Compliance

§192.706 Transmission Lines: Leakage Surveys, Compliance Enforcement Guidance O& ...

Part 192 Enforcement > Subpart M - Maintenance Guidance Compliance

Guide material 192.723 Distribution systems: Leakage surveys

Guide material 192.723 Distribution systems: Leakage surveys 1 FREQUENCY 1.1 Business distric ...

GPTC Guide for Gas Transmission, Distribution, and Gathering Piping Systems > Subpart M - Maintenance

§192.723 Distribution systems: Leakage surveys.

§192.723 Distribution systems: Leakage surveys. Related Info: PHMSA Enforcement Cases / NTSB a ...

Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards > SubPart M - Maintenance

§192.706 Transmission lines: Leakage surveys.

§192.706 Transmission lines: Leakage surveys. Related Info: PHMSA Enforcement Cases / Docket ...

Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards > SubPart M - Maintenance

Guide material 192.706 Transmission lines: Leakage surveys

# Enriched

- ▶ Context sensitive glossary with clickable key words in the text
- ▶ History of the regulations
  - ▶ Historical changes of Gas and Liquid Regulations since adoption
  - ▶ Shows the complete text of all regulations after every amendment
  - ▶ Old text is shown as ~~strikeout~~ and the new text is in **bold underline**
- ▶ Rapid Update Service
  - ▶ Mailing list to receive push of the updates
  - ▶ Website to review current and historical updates



# History of the Gas Regulations

- Reconstruction of the History of the Gas Regulations
- How do I use the Regulations History?
- 49 CFR Part 191
- 49 CFR Part 192
  - 49 CFR 192 Transportation Of Natural And Other Gas By Pipeline: Minimum Federal Safety Standards
    - Part 192 By Amendment Number
    - Part 192 By Section/Effective Date
- 49 CFR Part 193
- Parts common to transportation of gas/liquids by pipeline



-Search-

## **§192.619 Maximum allowable operating pressure: Steel or plastic pipelines**

~~(a) No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:~~

**(a) No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure (MAOP) determined under paragraph (c), (d), or (e) of this section, or the lowest of the following:**

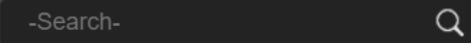
- (1) The design pressure of the weakest element in the segment, determined in accordance with subparts C and D of this part. However, for steel pipe in pipelines being converted under §192.14 or uprated under subpart K of this part, if any variable necessary to determine the design pressure under the design formula (§192.105) is unknown, one of the following pressures is to be used as design pressure:
  - (i) Eighty percent of the first test pressure that produces yield under section N5 of Appendix N of ASME B31.8 (incorporated by reference, see §192.7), reduced by the appropriate factor in paragraph (a)(2)(ii) of this section; or
  - (ii) If the pipe is 12 3/4 in. (324 mm) or less in outside diameter and is not tested to yield under this paragraph, 200 p.s.i. (1379 kPa).
- ~~(2) The pressure obtained by dividing the pressure to which the segment was tested after construction as follows:~~
  - ~~(i) For plastic pipe in all locations, the test pressure is divided by a factor of 1.5.~~

49 CFR 192 Effective Date July 1, 2020 per Amdt 192-125



# Updated

- ▶ We search daily for you
  - ▶ Federal Regulations
  - ▶ State Regulations
  - ▶ GPTC Addendums
  - ▶ Notices, Advisories, Interpretations, Special Permits
  - ▶ Amendments
- ▶ WinDOT is updated within one business day
- ▶ Web delivery means you are automatically up-to-date



- ▶ ViaData Links
- ▼ Rapid Update Service
  - WinDOT Rapid Update Service
  - All, by Date
  - WinDOT-on-the-Web
  - Federal Regulations
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  - Drugs and Alcohol
  - Current List of Laboratories

## [State Regulations: Proposed Rules and Pending Bills](#)

### WinDOT Updates

The updates shown below will be incorporated into WinDOT on the Web, usually within one to two days after posting here.

#### 2019

Date	Agency	Type	Description	Parts Affected
<a href="#">Oct 8</a>	PHMSA	Notice	Information Collection Activities, Customer Notifications for Installation of Excess Flow Valves	<a href="#">Part 192</a>
<a href="#">Oct 8</a>	TSA	Notice	Extension of Agency Information Collection Activity Under OMB Review: Pipeline Corporate Security Review	<a href="#">All</a>
<a href="#">Oct 1</a>	PHMSA	Final Rule	Safety of Gas Transmission Pipelines	Part 191, 192
<a href="#">Oct 1</a>	PHMSA	Final Rule	Safety of Hazardous Liquid Pipelines	Part 195
<a href="#">Oct 1</a>	PHMSA	Final Rule	Enhanced Emergency Order Procedures	Part 190
<a href="#">Sep 06</a>	SAMHSA	Update	Current List of Laboratories Which Meet Minimum Standards To Engage in Urine Drug Testing for Federal Agencies	Parts 40, 199
<a href="#">Aug 23</a>	PHMSA	Notice	Request for Special Permit Colonial Pipeline Company	Part 195
<a href="#">Aug</a>	ViaData	Updates	State Updates for WinDOT subscribers	Various



All, by Date

**Stay up-to-date with a subscription to WinDOT.**



# Accessible

- ▶ Managed Cloud Delivered Service
- ▶ No software to install, no managing updates
- ▶ Windows or Mac desktops
- ▶ Any smart phone
- ▶ Any tablet, either mobile OS or Windows based
- ▶ Print sections as needed
- ▶ Ability to Cut and Paste



# §192.721 Distribution systems: Patrolling.



[Related Info: PHMSA Enforcement Cases / NTSB and PHMSA Accident Investigations / Docket History.](#)



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(a) The frequency of patrolling mains must be determined by the severity of the conditions which could cause failure or



# Benefits of WinDOT



## Improves Safety

Avoids using out-of-date regulations  
Be in compliance with easier to  
access, use, and understand  
regulations



## Saves Money

Less time wasted distributing and  
updating regulations  
Less time wasted by users searching  
for regulations  
Less effort preparing for audits  
Help avoids risk of fines



## Employee

Removes mundane work of  
searching for the relevant materials  
Great research tool to assist your  
compliance team

# Licensing Model

- ▶ Priced per user, per year, per subscription modules
  - ▶ Federal Gas and Liquid
  - ▶ States are sold in groups, based on PHMSA regions
  - ▶ Coast Guard
  - ▶ Drug & Alcohol
- ▶ Subscription discounts
  - ▶ On bundles for Federal and State regulations
  - ▶ On volume of users
  - ▶ On annual renewals
- ▶ Ability to co-term new users to existing renewal date
- ▶ License for GPTC Guide included at no additional charge
- ▶ Technical Standards purchased as perpetual licenses

# Complimentary (free) Services

- ▶ Rapid Update Service
- ▶ Request demo trial of WinDOT
- ▶ <http://www.viadata.com/contactUs/info.php>
- ▶ Free Basic federal regulations
- ▶ 49cfrpipeline.com



# Let's Go Online

▶ [www.windot.com](http://www.windot.com)



# Research Questions: Hot Taps

- ▶ What is meant by 192.627? Does the entire crew need to be qualified in tapping? How is the term “crew” defined and how did this get into the code? If the entire crew needs to be qualified, that means we need to have a span of control of 1:0. How do you train someone in the field on tapping? This is a difficult task and takes time to learn.
- ▶ **§192.627 Tapping pipelines under pressure.**
- ▶ Each tap made on a *pipeline* under *pressure* must be performed by a crew qualified to make hot taps



# Research Questions: Hot Taps

- ▶ The text of 192.627 is original from 1970, never amended.
- ▶ Source is ASME USAS B31.8 – 1968.
- ▶ 841.274: Hot Taps. All hot taps shall be installed by trained and experienced crews.
- ▶ View PHMSA Compliance Guidance.
- ▶ View Enforcement CPF 5-2009-0015M, NOA and Operator Response.



# Research Questions: 192.195 Overpressure Protection

- ▶ specifically does an intrastate transmission line, without any regulating equipment, coming off of an interstate transmission line require overpressure protection if the intrastate transmission line has an MAOP equal to or greater than the MAOP of the interstate transmission line?



# Research Questions: 192.195 Overpressure Protection

- ▶ (a) General requirements. Except as provided in §192.197, each *pipeline* that is connected to a *gas source* so that the maximum allowable operating *pressure* could be exceeded as the result of pressure control failure or of some other type of failure, must have pressure relieving or pressure limiting devices that meet the requirements of §192.199 and §192.201.



# Research Questions: 192.195 Overpressure Protection

- ▶ No interpretations.
- ▶ No Compliance Guidance
- ▶ CPF 1-2011-1011 – Shows that upstream MAOP is higher than downstream, OPP is needed.



# Research Questions: Master Meter

- ▶ Any history on Master Meters and where jurisdiction ends (building wall, or inside the building) would be appreciated.



# Research Questions: Master Meter

## ▶ **191.3 Definitions**

- ▶ *Master Meter System* means a pipeline system for distributing gas within, but not limited to, a definable area, such as a mobile home park, housing project, or apartment complex, where the operator purchases metered gas from an outside source for resale through a gas distribution pipeline system. The gas distribution pipeline system supplies the ultimate consumer who either purchases the gas directly through a meter or by other means, such as by rents;



# Research Questions: Master Meter

- ▶ **PI-16-0012 12/6/2016**

- ▶ The definition for a master meter system does not prohibit regulation for non-buried gas pipelines. PHMSA does not regulate gas piping inside a building unless the interior piping is used by the gas pipeline operator to distribute gas. The service risers downstream of the CenterPoint Energy meter are inside the building and are used to deliver metered gas to customers. One of the characteristics of a master meter system that makes it subject to the regulations is a transfer of gas from the operator, in this case the Mall, to other persons (the Mall tenants) who are the ultimate consumers of the gas.



# Research Questions: Master Meter

- ▶ **PI-16-0012 12/6/2016**

- ▶ The Mall is selling gas to others and, therefore, the Mall is engaged in the distribution of gas. In this case, the Mall is subject to the Federal gas pipeline safety regulations as a master meter system operator. The Mall is responsible for compliance with 49 CFR Parts 191 and 192 for the pipeline downstream of CenterPoint's meter as owner of the pipeline and master meter operator. If we can be of further assistance, please contact Tewabe Asebe at 202-366-5523.



# Research Questions: Master Meter

- ▶ **PI-11-0014 3/27/2012**

- ▶ In this case, the apartment complex owners are operating the pipeline which provides gas to their tenants and, therefore, are engaged in the transportation of gas. The pipelines downstream of the master meter used to distribute the gas to the tenants are considered mains and service lines subject to the Federal pipeline safety regulations. We consider the mains and service lines downstream from the LDC master meter (whether or not there are multiple buildings being served by a single meter) to be a distribution system that is subject to the Federal pipeline safety regulations in 49 CFR Parts 191 and 192.



# Research Questions: Master Meter

- ▶ **PI-01-0113** June 25, 2001
- ▶ There is no contention that the AHA facilities are not a pipeline facility. In this case, only the interior piping within the buildings, beyond the first penetration of each building wall is non-jurisdictional.



# Research Questions: Master Meter

- ▶ **PI-01-0113** June 25, 2001
- ▶ And, the tenants are clearly paying a rent for the privilege of occupying a housing unit and receiving utilities, including gas. The fact that they are not billed for the gas and that there are subsidies for utility costs from the government under Department of Housing and Urban Development (HUD) programs are not relevant to the determination that AHA's gas distribution system is subject to the pipeline safety regulations.
- ▶ Therefore, the AHA gas distribution system is a Master Meter System and is subject to the pipeline safety regulations at 49 CFR Parts 191 and 192.



# Research Questions: Master Meter

- ▶ **July 13 1972**
- ▶ You indicated that you have a client that has an apartment project with a master meter. From the master meter, the gas lines go first to a central heating and air conditioning unit; from this point the lines branch out underground to 10 or more service risers with regulators (no meters) downstream of these regulators, and then the lines to gas lights and into the apartments to supply gas for cooking. You ask whether these lines are subject to the Federal safety regulations.
- ▶ Therefore, in the example system you described, the Office of Pipeline Safety considers the pipelines going to each apartment as a distribution system if gas is being provided to each apartment. This jurisdiction extends to the building wall of the apartments, if there are no meters.

