49 CFR 191-192
Regulatory Overview
Historical Overview

- 1968 – Natural Gas Pipeline Safety Act
  - Basis of current Part 192 code
  - Amended 118 times, to correct, modify, and add requirements

PROMOTES PUBLIC SAFETY
Office of Pipeline Safety (OPS) was established to administer requirements of Natural Gas Pipeline Safety Act. The Act covers all aspects of pipelines that deliver natural or other gases. OPS only focuses on gas transmission, distribution, and certain gathering lines as defined in Part 192.
Overview

- DOT – PHMSA – OPS
  - Relates to public safety, governs materials, design, construction, operations and maintenance
  - Applies to either transmission, distribution or jurisdictional production/gathering
PIPELINE CODES

49 CFR 190 – Enforcement
49 CFR 191 – Reporting Requirements
49 CFR 192 – Gas Pipelines
49 CFR 193 – LNG
49 CFR 194 – Emergency Response Oil
49 CFR 195 – Hazardous Liquids
49 CFR 199 – Drug Testing
OTHER DOCUMENTS

- PHMSA Code Interpretations
- PHMSA Alert or Advisory Bulletins
- PHMSA Waivers or Special Permits
- PHMSA Enforcement Documents
- Preambles to Amendments
- FAQ’s
OTHER DOCUMENTS

- GPTC (Gas Piping Technology Committee)
- ASME B31.8
- Association standards
  - NACE, ASTM, API
OTHER DOCUMENTS

- Pipeline Safety - http://www.phmsa.dot.gov/pipeline
- GPTC - http://www.aga.org/committees/gotocommitteepages/gaspiping/
PIPELINE CODES

Part

example - 49 CFR 192 – Gas Pipelines

Part 192 is divided into subparts to address general topics.

example – Subpart N – Operator Qualification

Subparts are then further divided into specific topics by numbered section,

Example - §192.807 - Recordkeeping
Each section is typically written with paragraphs and subparagraphs to break down the subjects more specifically into individual requirements.

Example - §192.619(a)(iv) – establishes MAOP by maximum safe pressure as determined by the operator
PIPELINE CODES

- For complete understanding and application of a particular section, the section must be read in its entirety, from start to finish, noting punctuation.

- The operator is required to follow only those sections that are going to be specific to the type of pipeline he installs and operates.
49 CFR 190 – Enforcement

- Inspections and investigations
- PHMSA Notices
  - Warning Letter
  - Notice of Probable Violation
  - Notice of Amendment
  - Compliance Orders
  - Safety Orders
  - Penalties (Fines)
Pipeline Codes

**CODE = LAW**

Non compliance = $$$$$$$
49 CFR 191 – Reporting

- Reporting Requirements
  - Annual Reports
  - Incident Reports
  - Safety Related Conditions
  - Off shore condition Reports
  - Electronic reporting
49 CFR 192

Transportation of Natural or Other Gases by Pipeline: Minimum Federal Safety Standards

- Section of code that governs design, operation, maintenance, and construction of gas pipelines

**MINIMUM STANDARDS**

- States may have additional regulations above those requirements
49 CFR 192
Transportation of Natural or Other Gases by Pipeline: Minimum Federal Safety Standards

- Divided into 16 different subparts with 4 appendices
  - Nine Non-retroactive subparts
  - Seven Retroactive Subparts
- Retroactivity based on §192.13
§192.13 What general requirements apply to pipelines regulated under this part?

(a) No person may operate a segment of pipeline that is readied for service listed in the first column that is readied for service after the date in the second column, unless

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore Gathering Line</td>
<td>July 31, 1977</td>
</tr>
<tr>
<td>Regulated onshore gather line to which this part did not apply until April 14, 2006</td>
<td>March 15, 2007</td>
</tr>
<tr>
<td>All other pipelines</td>
<td>March 12, 1971</td>
</tr>
</tbody>
</table>
§192.13 What general requirements apply to pipelines regulated under this part?

unless:

(1) The pipeline has been designed, installed, constructed; initially inspected, and initially tested in accordance with this part; or

(2) The pipeline qualifies for use under this part according to the requirements in §192.14.
§192.13 What general requirements apply to pipelines regulated under this part?

(b) No person may operate a segment of pipeline in the first column that is replaced, relocated, or otherwise changed after the date in the second column, unless that replacement, relocation, or change has been made in accordance with this part.

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore Gathering Line</td>
<td>July 31, 1977</td>
</tr>
<tr>
<td>Regulated onshore gather line to which this part did not apply until April 14, 2006</td>
<td>March 15, 2007</td>
</tr>
<tr>
<td>All other pipelines</td>
<td>November 12, 1970</td>
</tr>
</tbody>
</table>
49 CFR 192

Non-Retroactive Subparts

- Only apply from 1970 forward
- Cannot apply to pre-existing pipelines, only facilities installed after March 12, 1971
- Govern design, materials, construction and testing requirements for pipelines installed after March 12, 1971 (or offshore - installed after July 31, 1977)
49 CFR 192
Non-Retroactive Subparts

- Subpart B – Materials
- Subpart C – Pipe Design
- Subpart D – Design of Pipeline Components
- Subpart E – Welding of Steel in Pipelines
- Subpart F – Joining of Materials other than by Welding
49 CFR 192
Non-Retroactive Subparts

- Subpart G – General Construction Requirements for Transmission Lines
- Subpart H – Customer Meter, Services, Regulators, and Service Lines
- Subpart J – Test Requirements
- Subpart N – Qualification of Pipeline Personnel
49 CFR 192
Retroactive Subparts

- Are retroactive in scope
- Applied to all existing pipelines, regardless of the date of construction
- Govern operations and maintenance of pipeline facilities
49 CFR 192

Retroactive Subparts

- Subpart K – Uprating
- Subpart I – Requirements for Corrosion Control
- Subpart L – Operations
- Subpart A – General
- Subpart M – Maintenance
- Subpart O – Pipeline Integrity Management
- Subpart P – Distribution Integrity Management
49 CFR 192
Retroactive Subparts

Remember

K I L A M O P

for retroactive subparts
SUBPART A - General

192.13(c)

Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

MOST CITED SECTION OF CODE FOR NON-COMPLIANCE
49 CFR 192 Language

As defined in §192.15,

if regulations say:

“this part” referring to all of 192

If regulations say

“this subpart” referring to subpart only, not all of 192
SUBPART A – General

Regulation language

**SHALL, WILL or MUST**
mandatory, imperative, required, must perform, no wiggle room

**SHOULD, COULD or MAY**
is permitted to, authorized to, strong recommendation, but not required

Look for same convention in O&M documents
SUBPART A – General

Regulation language

Includes

Means including but not limited to
Regulations are either

SPECIFICATION or

PRESCRIPTIVE

Or

PERFORMANCE
SPECIFICATION REGULATION

Example – Once per calendar year not to exceed 15 months

Advantages:
- Easy to determine compliance
- Easy to determine course of action
- Give uniform means of compliance
Example – Once per calendar year not to exceed 15 months

Disadvantages:

- Does not allow for variation in environment, operating or physical characteristics
- Does not state safety level
- May require unnecessary cost
Example – Odorization of gas

Advantages:
- Allows adaptation to individual situations
- Encourages development of new equipment
- Most economical solution to achieve the desired level of safety
- Promotes safety and not letter of law
PERFORMANCE REGULATION

Example – Odorization

Disadvantages:

- Difficult to determine compliance
- Operators may not understand what is needed
- May create improper solutions and safety problems
Operator – person or company who engages in the transportation of gas
192.7 - Incorporation by Reference

- Used to be Appendix A

Any document or portions thereof incorporated by reference are included as though set out in full. When only a portion is referenced, the remainder is not incorporated.
INCORPORATED REFERENCE

- List of standards
- Must follow standards as if specifically written in code
- Updated versions in 2010
- Must be same edition as code references
  - i.e. – ANSI/NFPA 70 – “National Electrical Code”, 2008
SUBPART L - Operations

192.605 Procedural Manual for Operations, Maintenance, and Emergencies

“Each operator shall prepare and follow... a manual of written procedures for conducting operations and maintenance activities, and for emergency response”

REASON FOR OPERATIONS AND MAINTENANCE (O&M) MANUAL
SUBPART L - Operations

192.605 is reason for O&M Manual

- Company interpretation and implementation of code
- Provides uniform standard
- First reference on **WHAT** to do
- Auditable procedures
- Must follow plans and procedures as outlined in O&M Manual
SUBPART L - Operations

Part 192 - Minimum Safety Standards

- Operators must comply with
  - Minimum standards from code or
  - Minimum standards from state

- Can voluntarily exceed minimum standards

- Intervals of Inspection
  - Can do early, but not late
  - Many once per calendar year, not to exceed 15 months
SUBPART L - Operations

O&M Manual standards are audit standards and are enforceable.
SUBPART L - Operations

192.603(b) – Each Operator shall keep records necessary to administer the procedures established under 192.605

Record keeping section of code.
Records prove compliance with standards.
Records

- Two types of records
  - Life of facility
    - Include construction, materials, repairs, and MAOP information
    - Retain for as long as facility is in active service
  - Transient Records
    - Includes tests, inspections, patrols, or surveys which prove compliance with 49 CFR 192
    - Retain for 5 years plus current year
Documentation

- Documentation one of biggest problems
- Need to improve documentation and records
- Timing of remediation
  - Usually by the time of the next patrol or inspection
- Retention intervals – especially with integrity management
Record Keeping

NO RECORDS = DID NOT DO WORK
CODE OVERVIEW

QUESTIONS?