


Iowa Pipeline Safety Update

Kevin Yearington, Safety and Engineering Manager
Sanel Lisinovic, Utilities Regulation Engineer 3




February 8, 2022

Outline

- Staff
- Infrastructure
- Inspection Process
- Funding
- Rule Making
- Incidents

Iowa Utilities Board Pipeline Staff


- Manager - Kevin Yearington
- Attorney - Carter Wright
- Engineers - Sanel Lisinovic, Alek Milewski
- Inspectors - Dan O'Connor, Dave McCann, Darin Tolzin, Paul Hansen, Wayne Andersen
- One Call Investigator - Natasha Welch
- Administrative Clerk - Jessi Myers


3

2022 Pipeline Operators


Operator Type	Utilities	Inspection Units
Investor-Owned or Private	7	36
Municipal Gas	50	50
LPG (propane)	2	2
Intrastate Transmission	41*	68
Interstate Gas Pipelines	5	13
Intrastate LNG	2	5
Interstate LNG	1	1
GRAND TOTAL	108	175

* Many are distribution operators and the pipelines are associated with distribution systems, but PHMSA considers separate inspection units.


4


Iowa Pipeline Infrastructure 2020

Type		Miles
Distribution	Main	18,936.5
	Services	15,088.0
Transmission	Interstate	6,345.7
	Intrastate	1,846.3
LPG (Propane)		4.0
Hazardous Liquids		4,447.9
Gathering		0.0
LNG Plants		Interstate
		1
		Intrastate
		5
Total		6


5

Iowa Distribution Pipeline Miles by Material 2020

Pipe Material	Mains		Services	
	Total Miles	% of Miles	Total Miles	% of Miles
Steel	7,512.0	39.67	4,242.9	28.12
Plastic	11,423.9	60.33	10,598.0	70.24
Other	0.5	0.00	241.7	1.60
Iron	0.0	0.00	0.0	0.00
Copper	0.0	0.00	5.5	0.04


6

Inspection Methods

Historical

- Used PHMSA and IUB Forms

Current

- Inspection Assistant
- Risk-based, integrated inspections



7

Historic Inspection Schedule


- Standard
 - One Inspection Unit, every 2 years
 - Two Inspection Units, one per year
 - Three Inspection Units or more – all in 3 years
- O&M Plan – every three years
- PAP, IMP – every four years



8

Historic Inspection Schedule

- LNG – every 2 years
- Permitted pipelines – at time of permit renewal
- Additional/other/follow-up inspections – as needed
- Review of Annual and Incident Reports – as filed


9

Inspection Confirmation

Gas Inspection Confirmation

Company/Utility	Utility Name		
Docket Number	RG-XXXX - OPID - XXXXX		
Inspection Unit	Inspection Unit		
Inspection Type	Inspection Type		
Method of Inspection	Virtual <input type="checkbox"/>	In Person <input type="checkbox"/>	Both <input type="checkbox"/>
Type of Visit	Office <input type="checkbox"/>	Field <input type="checkbox"/>	Both <input type="checkbox"/>
Inspection Date(s)	Starting Date – Ending Date		

Name of Company/Utility Representative	First Name Last Name
Company/Utility Representative Email	UtilityRep@Utility.com
Company/Utility Representative Phone No.	XXX-XXX-XXXX

IUB Lead Inspector	Lead Inspection
IUB Additional Staff	Additional Staff

Comments:

If you have any questions or concerns, please call me at (515) XXX-XXXX or email at First.Last@iub.iowa.gov

Sincerely,
/s/ Inspector
 Inspector
 Utilities Regulation Inspector
 Safety and Engineering Section


10

Inspection Schedule Modifications

- Risk-based Inspections
 - Highest 10% risk, inspected twice as often
 - Future: Lowest 10%, reduced frequency
- Construction Inspections
- Monthly Probable Violation Follow-up



11

Risk-based Inspections: Risk Factors

1. Inspector input/knowledge obtained from prior inspections.
2. Prior compliance performance of operators (both number and severity of prior non-compliances)
3. Data from annual reports
 - a) Prior incident history
 - b) Prior leak history
 - c) Mileage and HCA mileage
 - d) Pipe diameter
 - e) Age of pipe
 - f) Coating and Cathodic Protection
 - g) Type of pipe



12

Risk-based Inspections: Risk Factors

4. Time since previous inspection
5. Number, nature, and age of outstanding compliance items that remain open
6. Pipeline system expansion (e.g., new construction, acquisitions, etc.)



13

Inspection Results

- Verbal Exit Briefing
- Report Filed in EFS
 - Operator Notified Electronically
 - PHMSA requires notification letter addressed to utility person of authority
- Probable Violations and Advisories
 - Respond in 30 days, encourage visual documentation



14

Utility Response Probable Violations & Advisories

File in the electronic filing system (EFS)

PHMSA encourages utility response to be a formal filing with the IUB that includes:

- Use of operator stationary or letterhead
- At a minimum, the operator should be identified



15

Utility Response Probable Violations & Advisories

Detailed response including:

- List of items corrected, and how
- Visual documentation, if possible
- List of items remaining to be corrected, when and how
- Measures to prevent recurrence



16

IUB Verification Probable Violations & Advisories

- Inspectors' review of utility response and documentation
 - Unacceptable Responses
 - We'll fix it when we get around to it
 - I'm sure we did it, just can't find a record
 - You can't cite me for that; I fixed it before you left
 - I don't like the rule
 - You never cited me for that before
 - Utility X got away with it



17

IUB Verification Probable Violations & Advisories

- Follow-up inspection
 - Timing dependent on violation
- Corrections verified through review process



18

Pipeline Inspection Costs

- Historical
 - PHMSA Base Grant Funding
 - Pipeline Inspection Fees
 - Iowa Code § 479.14 inch-mile removed
 - Iowa Code § 479A.7 inch-mile removed
 - Remainder spread across gas utilities



19

IUB Steps to Control Costs

- Preparation
 - Inspection Assistant Standards
 - Schedule two weeks in advance
 - Inspection questions shared with utility in advance
 - Group inspection types



20

Utility Steps to Control Costs

- Preparation
 - Have records readily available
 - Minimize interruptions
- Inspection Results
 - Respond to notification letter within 30 days
 - Provide visual documentation where possible
 - Develop measures to prevent recurrence



21

IUB Rule Making


- Federal pipeline standards are incorporated by reference in IUB rule chapters 10 and 19
- Industry pipeline standards are incorporated by reference in IUB rule chapters 10 and 19
- Rule making to update references was issued in 2021, Docket No. RMU-2021-0010
- Industry standards editions referenced is consistent with federal rules in 49 CFR 192.7



22

RMU-2021-0010 Amended Code


IAC 199 - 10.2(5)d	The pipeline company shall file prior to the informational meeting an affidavit that describes the good-faith effort the pipeline company undertook to locate the addresses of all affected persons.
IAC 199 - 19.2(3)(a)	Tariff filings must be filed into the IUB's electronic filing system to more accurately reflect the current IUB practice.
IAC 199 - 19.2(5)(g)	Copies of reports that are submitted to the DOT shall be filed with the IUB no more than 10 days after submission.


23

PHMSA 2019 Mega-Rule

October 1, 2019, PHMSA published amendments to 49 CFR Parts 191 and 192 in the Federal Register, issuing Part 1 of the Gas Transmission Mega-Rule.

Mega-Rule I	<ul style="list-style-type: none"> MAOP Reconfirmation (192.619 & 192.624) Material Verification (192.607) Analysis of Predicted Failure Pressure (192.632 & 192.712) MCA's and Expanded Assessment (192.3 & 192.710) Revisions to Transmission Integrity Management Program (TIMP), required new plans, procedures and record requirements
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24

Damage Prevention

Iowa Audit Results

- State Enforcement was Inadequate in 2016, 2017
- State Enforcement was Adequate in 2018, 2019, 2020, and 2021
- Federal law gives PHMSA jurisdiction over excavators and says PHMSA can enforce if state enforcement is “inadequate”
- Inadequate states face federal grant penalties



25

Federal Reportable Incidents

Incident means any of the following events:

- (1) An event that involves a release of gas from a pipeline, gas from an underground natural gas storage facility (UNGSF), liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:



26

Federal Reportable Incidents

- (i) A death, or personal injury necessitating inpatient hospitalization;
- (ii) Estimated property damage of \$122,000 or more, including loss to the operator and others, or both, but excluding the cost of gas lost. For adjustments for inflation observed in calendar year 2021 onwards, changes to the reporting threshold will be posted on PHMSA's website. These changes will be determined in accordance with the procedures in appendix A to part 191; or
- (iii) Unintentional estimated gas loss of three million cubic feet or more.



27

Federal Reportable Incidents

- (2) An event that results in an emergency shutdown of an LNG facility or a UNGSF. Activation of an emergency shutdown system for reasons other than an actual emergency within the facility does not constitute an incident.
- (3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraph (1) or (2) of this definition.



28

2021 Federal Pipeline Incidents

- Three LNG emergency shutdowns
- Two events involving vehicle collisions
 - One struck regulator station
 - One struck meter set

Iowa Reportable Incidents

A utility shall notify the IUB immediately, or as soon as practical, of any incident involving the release of gas, failure of equipment, or interruption of facility operations, if it results in any of the following situations:

Iowa Reportable Incidents

- A death or personal injury necessitating inpatient hospitalization.
- Estimated property damage of \$15,000 or more to the property of the utility and to others, excluding the cost of gas lost.
- Emergency shutdown of a liquefied natural gas facility.
- An interruption of service to 50 or more customers.
- Any other incident considered significant by the utility.



31

2021 Iowa Pipeline Incidents

Six total reportable incidents

- Two events involving vehicle hits
- Three events from construction damage
- One overpressure event

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515-745-2332



32

Assistance from the IUB

IUB website: iub.iowa.gov

See the Pipeline Safety page for Iowa law, IUB rules, Iowa One Call information, instructions on filing inspection and incident reports, results of the 2021 One Call and Damage Prevention survey, and more.

Email: iub@iub.iowa.gov

Call: 515-725-7300



33

Q & A

What questions do you have?



34

Thank you!

We appreciate your attendance!

Thank you for your commitment to
keeping our communities safe!

