



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

1200 New Jersey Avenue SE  
Washington DC 20590

## 2021 Gas State Program Evaluation

for

MISSOURI PUBLIC SERVICE COMMISSION

### Document Legend

#### PART:

- O -- Representative, Dates and Title Information
- A -- Progress Report and Program Documentation Review
- B -- Program Inspection Procedures
- C -- State Qualifications
- D -- Program Performance
- E -- Field Inspections
- F -- Damage prevention and Annual report analysis
- G -- Interstate Agent/Agreement States



# 2021 Gas State Program Evaluation -- CY 2021

Gas

**State Agency:** Missouri

**Agency Status:**

**Date of Visit:** 08/02/2022 - 08/04/2022

**Agency Representative:** Kathleen McNelis, Pipeline Safety Program Manager, MOPSC  
Clinton Foster, Associate Engineer, MOPSC

**PHMSA Representative:** David Lykken, Transportation Specialist, PHMSA State Programs Division

**Commission Chairman to whom follow up letter is to be sent:**

**Name/Title:** Mr. Ryan A. Silvey, Chairman

**Agency:** Missouri Public Service Commission

**Address:** 200 Madison, Suite 900

**City/State/Zip:** Jefferson City, MO 65101

**Rating:**

**60105(a):** Yes **60106(a):** No **Interstate Agent:** No

## INSTRUCTIONS:

Complete this evaluation in accordance with the Evaluator Guidance for conducting state pipeline safety program evaluations. The evaluation should generally reflect state program performance during CY 2021 (not the status of performance at the time of the evaluation). A deficiency in any one part of a multiple-part question should be scored as "Needs Improvement." Determine the answer to the question then select the appropriate point value. If a state receives less than the maximum points, include a brief explanation in the appropriate notes/comments section. If a question is not applicable to a state, select NA. Please ensure all responses are COMPLETE and ACCURATE, and they OBJECTIVELY reflect the state's program performance for the question being evaluated. Increasing emphasis is being placed on how the state pipeline safety programs conduct and execute their pipeline safety responsibilities (their performance). This evaluation, together with selected factors reported in the state's annual progress report attachments, provide the basis for determining the state's pipeline safety grant allocation.

## Scoring Summary

### PARTS

### Possible Points Points Scored

- A Progress Report and Program Documentation Review
- B Program Inspection Procedures
- C State Qualifications
- D Program Performance
- E Field Inspections
- F Damage prevention and Annual report analysis
- G Interstate Agent/Agreement States

0  
15  
10  
50  
15  
10  
0

0  
15  
10  
50  
15  
10  
0

### TOTALS

**100 100**

### State Rating

**100.0**

## PART A - Progress Report and Program Documentation Review

Points(MAX)    Score

- 1    Were the following Progress Report Items accurate? (\*items not scored on progress report)    Info Only    Info Only
- Info Only = No Points
- a.    Stats On Operators Data - Progress Report Attachment 1
  - b.    State Inspection Activity Data - Progress Report Attachment 2
  - c.    List of Operators Data - Progress Report Attachment 3\*
  - d.    Incidents/Accidents Data - Progress Report Attachment 4\*
  - e.    Stats of Compliance Actions Data - Progress Report Attachment 5\*
  - f.    List of Records Kept Data - Progress Report Attachment 6 \*
  - g.    Staff and TQ Training Data - Progress Report Attachment 7
  - h.    Compliance with Federal Regulations Data - Progress Report Attachment 8
  - i.    Performance and Damage Prevention Question Data - Progress Report Attachment 10\*

### Evaluator Notes:

a: Operator/Inspection Unit totals on Attachment 1 are consistent with the Operator/Inspection Unit totals on Attachment 3. No jurisdiction over LPG operators. b. No issues. c: No issues. Breakdown of Operators consistent with information found in the PDM. d. PDM shows 1 GD incidents reported. Matches PR under Attachment 4. e The program references state rules in their count. Suggested they make a note under attachment 5 denoting this practice. f. No issues. g. Information verified through T&Q Blackboard training site. No issues. h. Current rulemaking underway to adopt Gas Pipeline Regulatory Reform amendments. Progress Report scoring -2 for no LPG Jurisdiction, -4 Points for civil penalties deficiency. Currently penalties at \$20K/\$200K. 44 of possible 50 pts scored. i: No issues.

Total points scored for this section: 0  
Total possible points for this section: 0



## PART B - Program Inspection Procedures

Points(MAX) Score

- |   |   |   |   |
|---|---|---|---|
| 1 | Do written procedures address pre-inspection, inspection and post inspection activities for each of the following inspection types: Chapter 5.1<br>Yes = 5 No = 0 Needs Improvement = 1-4   | 5 | 5 |
|   | <ul style="list-style-type: none"><li>a. Standard Inspections, which include Drug/Alcohol, CRM and Public Awareness Effectiveness Inspections</li><li>b. TIMP and DIMP Inspections (reviewing largest operator(s) plans annually)</li><li>c. OQ Inspections</li><li>d. Damage Prevention Inspections</li><li>e. On-Site Operator Training</li><li>f. Construction Inspections (annual efforts)</li><li>g. LNG Inspections</li></ul> |   |   |

### Evaluator Notes:

No change from prior year. Latest revision is Rev. 9 dated 3/24/2022. a. Standard inspection procedure - Section 4.2.1 of MO Pipeline Safety Program Plan. Section 4.2.2 O&M and Emergency Plans, Section 4.2.3 Public Awareness. D&A Section 4.2.6, CRM Section 4.2.7. Pre-inspection activities for all inspection types addressed under Section 5 "Conducting Inspection's. Post Inspection activities under Section 5.6. b: Pipeline Safety Program Plan Section 4.2.5. Pre-inspection activities for all inspection types addressed under Section 5 "Conducting Inspections". Post Inspection activities under Section 5.6. c: Pipeline Safety Program Plan Section 4.2.4. Pre-inspection activities for all inspection types addressed under Section 5 "Conducting Inspections". Post Inspection activities under Section 5.6. d: Pipeline Safety Program Plan Section 10 Damage Prevention Program and One-Call Notification. e: Pipeline Safety Program Plan Section 5.5.16 Onsite Operator Training Provided by MO PSC. f: Pipeline Safety Program Plan Section 4.2.9. g: Pipeline Safety Program Plan Section 4.2.11. Denotes requirement to conduct Standard Inspections within a 3-year time interval. Also Section 5.5.11 for "Temporary/Mobile" facilities.

- |   |   |   |   |
|---|---|---|---|
| 2 | Do written procedures address inspection priorities of each operator, and if necessary each unit, based on the following elements and time frames established in its procedures? Chapter 5.1<br>Yes = 4 No = 0 Needs Improvement = 1-3  | 4 | 4 |
|   | <ul style="list-style-type: none"><li>a. Length of time since last inspection</li><li>b. Operating history of operator/unit and/or location (includes leakage, incident and compliance activities)</li><li>c. Type of activity being undertaken by operators (i.e. construction)</li><li>d. Locations of operator's inspection units being inspected - (HCA's, Geographic area, Population Centers, etc.)</li><li>e. Process to identify high-risk inspection units that includes all threats - (Excavation Damage, Corrosion, Natural Forces, Outside Forces, Material and Welds, Equipment, Operators and any Other Factors)</li><li>f. Are inspection units broken down appropriately?</li></ul> |   |   |

### Evaluator Notes:

One change from prior year. Pipeline Safety Program Plan (Rev 9 3/24/2022) Section 4 - Inspection Planning. Inspection Priorities - Section 4.2 identifies riskier and problematic aspects for each operator for determining inspection priorities. Time Intervals for Inspections under Section 4.2. The program's Priority List accounts for large operators with multiple units to insure an adequate rotation is performed. Unit breakdown for Spire East & West broken down by Inspection Checklist Parts 1 thru 4. New this year. MO PSC intends to use the Date-to-Date planning approach in CY2022 with a Calendar Year Planning with Grace Period Approach for extreme circumstances (Detailed under Section 4.2 Footnote 4)with potential scenarios.

- |   |   |   |   |
|---|---|---|---|
| 3 | (Compliance Procedures) Does the state have written procedures to identify steps to be taken from the discovery to resolution of a probable violation? Chapter 5.1<br>Yes = 3 No = 0 Needs Improvement = 1-2  | 3 | 3 |
|   | <ul style="list-style-type: none"><li>a. Procedures to notify an operator (company officer) when a noncompliance is identified</li><li>b. Procedures to routinely review progress of compliance actions to prevent delays or breakdowns</li><li>c. Procedures regarding closing outstanding probable violations</li></ul> |   |   |

### Evaluator Notes:

No changes from prior year. Rev. 9 3/24/2022. a: Procedure to notify company officer contained in section 2.5.5. b: Section 5.6.1 (Post Inspection Process) contains process for reviewing progress of and documenting of compliance actions (POV's and AOC's). c: Sections 5.6.2 (Follow-up Procedures), 5.6.3 (Further Enforcement), 5.6.4 (Complaints and Penalties) contain process regarding closing outstanding probable violations.

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- 4** (Incident/Accident Investigations) Does the state have written procedures to address state actions in the event of an incident/accident? 3 3  
Yes = 3 No = 0 Needs Improvement = 1-2
- a. Mechanism to receive, record, and respond to operator reports of incidents, including after-hours reports
  - b. If onsite investigation was not made, do procedures require on-call staff to obtain sufficient information to determine the facts to support the decision not to go on-site.

Evaluator Notes:

No changes from prior year. Rev. 9 3/24/2022. Yes, Section 6 - Failure Investigation and Safety Related Conditions. Appendix G - MOPSC Staff Notification Procedures for NG Incidents. Minimum PHMSA Incident Report Form, "Staff Records" and PHMSA Failure Investigation Report (FIR) template. Appendix I. b: Yes, Section 6 - Failure Investigation and Safety Related Conditions.

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- 5** General Comments: Info Only Info Only  
Info Only = No Points

Evaluator Notes:

No issues. No point deductions under Part B.

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Total points scored for this section: 15  
Total possible points for this section: 15



## PART C - State Qualifications

Points(MAX) Score

- |   |   |   |   |
|---|---|---|---|
| 1 | Has each inspector and program manager fulfilled training requirements? (See Guidelines Appendix C for requirements) Chapter 4.3<br>Yes = 5 No = 0 Needs Improvement = 1-4  | 5 | 5 |
|   | <ul style="list-style-type: none"><li>a. Completion of Required OQ Training before conducting inspection as lead</li><li>b. Completion of Required DIMP/IMP Training before conducting inspection as lead</li><li>c. Completion of Required LNG Training before conducting inspection as lead</li><li>d. Root Cause Training by at least one inspector/program manager</li><li>e. Note any outside training completed</li><li>f. Verify inspector has obtained minimum qualifications to lead any applicable standard inspection as the lead inspector (Reference State Guidelines Section 4.3.1)</li></ul> |   |   |

**Evaluator Notes:**

Yes. a thru c: Inspectors who performed PAPEI, OQ, DIMP/TIMP & LNG inspections as lead have completed the necessary T&Q training required for each. d: PM and six inspectors have completed the Root Cause training. e: Program staff attended various self-improvement training in CY2021 including Mega Rule, Cross Bore, PAPEI, and Locating QA Workshop. f: Inspectors performing Standard inspections as lead have the necessary core T&Q training.

- |   |  |   |   |
|---|--|---|---|
| 2 | Did state records and discussions with state pipeline safety program manager indicate adequate knowledge of PHMSA program and regulations?<br>Yes = 5 No = 0 Needs Improvement = 1-4 | 5 | 5 |
|---|--|---|---|

**Evaluator Notes:**

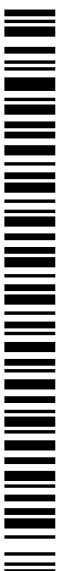
Yes. As in past evaluation years, Kathleen has demonstrated adequate knowledge of PHMSA program and regulations. Kathleen has been with the pipeline safety program in 2008.

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|---|--|-----------|-----------|
| 3 | General Comments:<br>Info Only = No Points | Info Only | Info Only |
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**Evaluator Notes:**

No issues. No point deductions under Part C.

Total points scored for this section: 10  
Total possible points for this section: 10



## PART D - Program Performance

Points(MAX) Score

- |   |   |   |   |
|---|---|---|---|
| 1 | Did state inspect all types of operators and inspection units in accordance with time intervals established in written procedures? Chapter 5.1<br>Yes = 5 No = 0 Needs Improvement = 1-4  | 5 | 5 |
|   | <ul style="list-style-type: none"><li>a. Standard (General Code Compliance)</li><li>b. Public Awareness Effectiveness Reviews</li><li>c. Drug and Alcohol</li><li>d. Control Room Management</li><li>e. Part 193 LNG Inspections</li><li>f. Construction (did state achieve 20% of total inspection person-days?)</li><li>g. OQ (see Question 3 for additional requirements)</li><li>h. IMP/DIMP (see Question 4 for additional requirements)</li></ul> |   |   |

**Evaluator Notes:**

Yes. No issues noted. All inspection types completed within established timeframes. The program's DT&C days were 22.53% of SICT total estimated inspection person-days. Refer to random list of operators for details.

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|---|---|----|----|
| 2 | Did inspection form(s) cover all applicable code requirements addressed on Federal Inspection form(s)? Did State complete all applicable portions of inspection forms? Chapter 5.1. Do inspection records indicate that adequate reviews of procedures, records and field activities, including notes and the appropriate level of inspection person-days for each inspection, were performed?<br>Yes = 10 No = 0 Needs Improvement = 1-9 | 10 | 10 |
|   | <ul style="list-style-type: none"><li>a. Standard (General Code Compliance)</li><li>b. Public Awareness Effectiveness Reviews</li><li>c. Drug and Alcohol</li><li>d. Control Room Management</li><li>e. Part 193 LNG Inspections</li><li>f. Construction</li><li>g. OQ (see Question 3 for additional requirements)</li><li>h. IMP/DIMP (see Question 4 for additional requirements)</li></ul>  |    |    |

**Evaluator Notes:**

As previously noted, the program utilizes a combination of PHMSA legacy inspection forms for most inspection types which are reviewed and updated annually to ensure minimum content. Updated information on recent PHMSA Advisory Bulletins as well as IA question consideration content are also incorporated. For construction - one form is utilized for Plastic installation and one for Steel installations.

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| 3 | Is state verifying monitoring (Protocol 9/Form15) of operators OQ programs? This should include verification of any plan updates and that persons performing covered tasks (including contractors) are properly qualified and requalified at intervals established in the operator's plan. 49 CFR 192 Part N<br>Yes = 2 No = 0 Needs Improvement = 1 | 2 | 2 |
|---|--|---|---|

**Evaluator Notes:**

Yes. 47.5 days devoted to OQ activities. Protocol 9 inspections typically done as part of standard inspections, and during larger construction projects. Reviewed both OQ plan review and Protocol 9 field verification inspection documentation.

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|---|---|---|---|
| 4 | Is state verifying operator's integrity management Programs (IMP and DIMP)? This should include a review of plans, along with monitoring progress. In addition, the review should take in to account program review and updates of operator's plan(s). 49 CFR 192 Subparts O and P<br>Yes = 2 No = 0 Needs Improvement = 1  | 2 | 2 |
|   | <ul style="list-style-type: none"><li>a. Are the implementation plans of the state's large/largest operators(s) being reviewed annually to ensure they are completing full cycle of the IMP process?</li><li>b. Are states verifying with operators any plastic pipe and components that have shown a record of defects/leaks and mitigating those through DIMP plan?</li></ul> |   |   |

- c. Are the states verifying operators are including low pressure distribution systems in their threat analysis?

Evaluator Notes:

Yes. 60 days devoted to TIMP/DIMP activities. Reviewed the nine DIMP and nine TIMP plan and field implementation inspections conducted in CY2021. As noted in prior years, per state law operators are required to submit plan changes no later than 20 days after the change is made. B. Yes. c: Yes. No changes. Letter sent to operators in 2020 advising them and providing copies of PHMSA Advisory Notices ADB-2020-01 (Inside Meters) and ADB-2020-02 (Low Pressure Systems). Also these items incorporated into inspection checklists.

5	Did the state review the following (these items are NTSB recommendations to PHMSA that have been deemed acceptable response based on PHMSA reviewing these items during the evaluation process): Chapter 5.1 Yes = 2 No = 0 Needs Improvement = 1	2	2
	a. Operator procedures for determining if exposed cast iron pipe was examined for evidence of graphitization and if necessary remedial action was taken;		
	b. Operator procedures for surveillance of cast iron pipelines, including appropriate action resulting from tracking circumferential cracking failures, study of leakage history, or other unusual operating maintenance condition? (Note: See GPTC Appendix G-18 for guidance);		
	c. Operator emergency response procedures for leaks caused by excavation damage near buildings and determine whether the procedures adequately address the possibility of multiple leaks and underground migration of gas into nearby buildings Refer to 4/12/01 letter from PHMSA in response to NTSB recommendation P-00-20 and P-00-21;		
	d. Operator records of previous accidents and failures including reported third-party damage and leak response to ensure appropriate operator response as required by 192.617;		
	e. Directional drilling/boring procedures of each pipeline operator or its contractor to determine if they include actions to protect their facilities from the dangers posed by drilling and other trench less technologies;		
	f. Operator procedures for considering low pressure distribution systems in threat analysis?		
	g. Operator compliance with state and federal regulations for regulators located inside buildings?		

Evaluator Notes:

Yes to all. Covered under O&M Procedures Review, Standard Inspection, O&M & Emergency Plan inspection forms. Have previously reviewed the 10/06/2020 letter to operators advising them and providing copies of PHMSA Advisory Notices ADB-2020-01 (Inside Meters) and ADB-2020-02 (Low Pressure Systems). The program has a checklist for both Distribution & Transmission operators for reviewing operator annual reports accuracy and for analyzing that data for trends and operator issues. The program also sends out a Annual Operator letter covering the above items and other items of interest or focus including new PHMSA advisory bulletins, new Federal and State Rulemakings, upcoming inspections, etc.

6	Did the State verify Operators took appropriate action regarding advisory bulletins issued since the last evaluation? (Advisory Bulletins Current Year) Yes = 1 No = 0 Needs Improvement = .5	1	1
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Evaluator Notes:

Yes, as previously noted under questions D-2 and D-5. ADB's incorporated into the program's inspection forms and included in the annual operator letter. No new Advisory bulletins issued in Cy2021.

7	(Compliance Activities) Did the state follow compliance procedures (from discovery to resolution) and adequately document all probable violations, including what resolution or further course of action is needed to gain compliance? Chapter 5.1 Yes = 10 No = 0 Needs Improvement = 1-9	10	10
	a. Were compliance actions sent to company officer or manager/board member if municipal/government system?		
	b. Were probable violations documented properly?		
	c. Resolve probable violations		
	d. Routinely review progress of probable violations		
	e. Did state issue compliance actions for all probable violations discovered?		



- f. Can state demonstrate fining authority for pipeline safety violations?
- g. Does Program Manager review, approve and monitor all compliance actions?  
(note: Program Manager or Senior Official should sign any NOPV or related enforcement action)
- h. Did state compliance actions give reasonable due process to all parties?  
Including "show cause" hearing, if necessary.
- i. Within 30 days, conduct a post-inspection briefing with the owner or operator outlining any concerns
- j. Within 90 days, to the extent practicable, provide the owner or operator with written preliminary findings of the inspection. (Incident investigations do not need to meet 30/90-day requirement)

**Evaluator Notes:**

Yes to all. Correspondence sent to appropriate company officials in all cases reviewed. Violations properly documented in correspondence and match totals note under Attachment 5 of PR. No civil penalties were assessed or collected in CY2021. Last in CY2019. Use of civil penalties evaluated on a case-by-case bases. PM reviews, approves and signs compliance actions taken. Reviewed program's "Attachment 5 backup" spreadsheet used to monitor compliance activities. 41.75 days devoted to compliance follow-up inspections. Program goal is to send out written correspondence within one month of completion of inspection. Actual is usually within one to two weeks.

<b>8</b>	(Incident Investigations) Were all federally reportable incidents investigated, thoroughly documented, with conclusions and recommendations?	10	10
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Yes = 10 No = 0 Needs Improvement = 1-9

- a. Does state have adequate mechanism to receive and respond to operator reports of incidents, including after-hours reports?
- b. Did state keep adequate records of Incident/Accident notifications received?
- c. If onsite investigation was not made, did the state obtain sufficient information from the operator and/or by means to determine the facts to support the decision not to go on site?
- d. Were onsite observations documented?
- e. Were contributing factors documented?
- f. Were recommendations to prevent recurrences, where appropriate, documented?
- g. Did state initiate compliance action for any violations found during any incident/accident investigation?
- h. Did state assist Region Office or Accident Investigation Division (AID) by taking appropriate follow-up actions related to the operator incident reports to ensure accuracy and final report has been received by PHMSA?
- i. Does state share any lessons learned from incidents/accidents?

**Evaluator Notes:**

a: 800 Number or use Telephone Notice of Gas Incidents (staff contact list). b: Yes. Gas Incident Notification Form utilized to document notifications. c: N/A. On-site visit conducted for the one reportable incident in CY2021. d/e: Yes. Reviewed Spire Incident NRC 20220004 including investigation report. f/h: No non-compliance identified. The program has demonstrated maintaining good communications with both AID and CR office. I: State of the State presentation at NAPSR Regional meetings and annual state operator seminar. Also letter to operators on occasions when issue comes up that should communicated.

<b>9</b>	Did state respond to Chairman's letter on previous evaluation within 60 days and correct or address any noted deficiencies? (If necessary) Chapter 8.1	1	1
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Yes = 1 No = 0 Needs Improvement = .5

**Evaluator Notes:**

State Program Director letter out via email on 5/25/21. Chair's response received on 6/9/2021. The agency continues to pursue legislative change to increase maximum civil penalty amounts. Not successful in CY2021 but intends to pursue legislation during next legislative session. Regarding jurisdiction over LPG systems the state's Propane Commission has chosen at this time not to pursue participation in the PHMSA Grant program.

<b>10</b>	Did State conduct or participate in pipeline safety training session or seminar in Past 3 Years? Chapter 8.5 Info Only = No Points	Info Only	Info Only
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**Evaluator Notes:**

The annual Missouri Association of Natural Gas Operators (MANGO) seminar was held 6/29-7/1,2022. Copy of agenda reviewed. None held the prior two years due to Covid-19 restrictions. Also one on-site operator training conducted. City of Plattsburg on 10/18/2021. Reviewed agenda topics.

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|-----------|--|-----------|-----------|
| <b>11</b> | Has state confirmed transmission operators have submitted information into NPMS database along with changes made after original submission?<br>Info Only = No Points | Info Only | Info Only |
|-----------|--|-----------|-----------|

**Evaluator Notes:**

Confirmed under MOPSC Reporting Procedures of the O&M and Emergency Procedures Inspection checklist and MOPSC Gas Safety Standard Inspection Checklist. Verified annually via email request from Program Manager.

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|-----------|--|---|---|
| <b>12</b> | Does the state have a mechanism for communicating with stakeholders - other than state pipeline safety seminar? (This should include making enforcement cases available to public).<br>Yes = 1 No = 0 Needs Improvement = .5 | 1 | 1 |
|-----------|--|---|---|

**Evaluator Notes:**

MOPSC website. All Operators Letter (email). Open and closed cases accessed through the public website Electronic Filing and Information System. Link provided to Missouri One-Call. Also All-Operator letter issued annually.

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|-----------|---|---|---|
| <b>13</b> | Did state execute appropriate follow-up actions to Safety Related Condition (SRC) Reports? Chapter 6.7<br>Yes = 1 No = 0 Needs Improvement = .5 | 1 | 1 |
|-----------|---|---|---|

**Evaluator Notes:**

No SRCR's submitted by operators in CY2021. Verified in WMS and PDM.

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|-----------|---|---|---|
| <b>14</b> | Was the State responsive to:<br>Yes = 1 No = 0 Needs Improvement = .5<br>a. Surveys or information requests from NAPS or PHMSA; and<br>b. PHMSA Work Management system tasks? | 1 | 1 |
|-----------|---|---|---|

**Evaluator Notes:**

The program responded to 8 of 12 survey's sent out in CY2021. No IM notifications issued in CY2021. Verified in WMS and the PDM.

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|-----------|--|---|---|
| <b>15</b> | If the State has issued any waivers/special permits for any operator, has the state verified conditions of those waivers/special permits are being met? This should include having the operator amend procedures where appropriate.<br>Yes = 1 No = 0 Needs Improvement = .5 | 1 | 1 |
|-----------|--|---|---|

**Evaluator Notes:**

Waivers for electrofusion and mechanical fittings noted in MOPSC Gas Safety Inspection Checklist for certain LDC's and municipalities to ensure conditions are being met. Three waivers issued in CY2020 with PHMSA approval. GE-2020-0295 (Farm Tap inspections included in company's DIMP program), GE-2020-0373 (Temporary extension of company atmospheric corrosion inspections and leak surveys by no later than 12/31/20), GE-2020-0373 (granting extension for completing prior corrosion and leak surveys to 3/31/2021), and GE-2020-0373 granting third extension to be completed no later than 7/31/2021. All of these are no longer in effect. Reviewed with the program six waivers posted on the PHMSA web site going back as far as 1996. The program will review and determine if each are still relevant.

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|-----------|---|-----------|-----------|
| <b>16</b> | Were pipeline program files well-organized and accessible?<br>Info Only = No Points | Info Only | Info Only |
|-----------|---|-----------|-----------|

**Evaluator Notes:**

Yes. Documentation readily available. No issues or concerns noted.

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|-----------|---|---|---|
| <b>17</b> | Discussion with State on accuracy of inspection day information submitted into State Inspection Day Calculation Tool (SICT). Has the state updated SICT data?<br>Yes = 3 No = 0 Needs Improvement = 1-2 | 3 | 3 |
|-----------|---|---|---|

**Evaluator Notes:**

Discussed. Tool was updated mid-year CY2021 and again in CY2022. DT&C day estimates meet the 20% of total days estimated.

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- 18** Discussion on State Program Performance Metrics found on Stakeholder Communication Info Only Info Only  
site.\ <http://primis.phmsa.dot.gov/comm/states.htm?nocache=4805>  
Info Only = No Points

Evaluator Notes:

Discussed. Hits per 1000 locates requested down in CY2021 to approximately 3.053. Trend continues down from CY2011. MMO/LPG inspection days up significantly in CY2021 due to inspection focus. Number of MMO's down to six from a previous high of 16 in 2016. Inspector 5-year retention holding at 80% the past two years. Working to replace CI and other suspect pipe subject to leakage continues at a good pace.

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- 19** Did the state encourage and promote operator implementation of Pipeline Safety Management Systems (PSMS), or API RP 1173? This holistic approach to improving pipeline safety includes the identification, prevention and remediation of safety hazards. Info Only Info Only  
Info Only = No Points  
a. <https://pipelinesms.org/>  
b. Reference AGA recommendation to members May 20, 2019

Evaluator Notes:

Yes. Has been discussed at past MANGO seminars. Believes one operator has adopted parts of the RP.

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- 20** General Comments: Info Only Info Only  
Info Only = No Points

Evaluator Notes:

No point deductions under Part D.

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Total points scored for this section: 50  
Total possible points for this section: 50



## PART E - Field Inspections

Points(MAX) Score

- 1 Operator, Inspector, Location, Date and PHMSA Representative (enter specifics into the comments box below) Info Only Info Only

Info Only = No Points

- What type of inspection(s) did the state inspector conduct during the field portion of the state evaluation? (i.e. Standard, Construction, IMP, etc)
- When was the unit inspected last?
- Was pipeline operator or representative present during inspection?
- Effort should be made to observe newest state inspector with least experience

### Evaluator Notes:

a. Observed a ongoing cast iron replacement project in Saint Louis, MO. b. This is an on-going project. Inspections of this operator are frequent to achieve the programs 20% goal. c. These were unannounced construction visits. c. Yes, the company was represented by Spire-East compliance personnel. d. Trevor Rucker has been with the MOPSC safety program for four years.

- 2 Did the inspector use an appropriate inspection form/checklist and was the form/checklist used as a guide for the inspection? (New regulations shall be incorporated) 2 2

Yes = 2 No = 0 Needs Improvement = 1

### Evaluator Notes:

Yes. The inspector utilized the MOPSC's construction form specific to the installation of PE pipe.

- 3 Did the inspector adequately review the following during the inspection 10 10

Yes = 10 No = 0 Needs Improvement = 1-9

- Procedures (were the inspector's questions of the operator adequate to determine compliance?)
- Records (did the inspector adequately review trends and ask in-depth questions?)
- Field Activities/Facilities (did inspector ensure that procedures were being followed, including ensuring that properly calibrated equipment was used and OQ's were acceptable?)
- Other (please comment)
- Was the inspection of adequate length to properly perform the inspection?

### Evaluator Notes:

Yes. Job details were reviewed and associated company written procedures were readily available on job sites. Mr. Rucker ensured that construction personnel were qualified on all tasks observed. The general condition of pipe materials as well as those segments previously installed for proper shading, backfill, depth of cover. Equipment and associated appurtenances were checked for general condition as well as equipment calibration records. Site location visits were of appropriate length to determine compliance. Observation of directional drilling practices to install PE replacement service were conducted as well as the re-location of gas meters to the outside of residences.

- 4 From your observation did the inspector have adequate knowledge of the pipeline safety program and regulations? (Evaluator will document reasons if unacceptable) 2 2

Yes = 2 No = 0 Needs Improvement = 1

### Evaluator Notes:

Mr. Rucker's demonstrated adequate knowledge consummate with the amount of time he has been with the safety program.

- 5 Did the inspector conduct an exit interview, including identifying probable violations? (If inspection is not totally completed the interview should be based on areas covered during time of field evaluation) 1 1

Yes = 1 No = 0 Needs Improvement = .5

### Evaluator Notes:

Yes, a post inspection briefing was conducted at the end of each day. The inspector observed the use of a wrench by construction personnel to tighten caps on 2" and 4" PE tapping tee's. Company construction procedures state that the manufacturer's recommended installation procedures will be followed. Instructions printed on the service tee packaging state that a tool will not be used to tighten caps. Hand tighten only. The contractor was not familiar with the printed instructions.

Mr. Rucker also identified an area where the new PE main was not at proper depth. The company ended up taking measures to lower the main to the proper depth.

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**6** Was inspection performed in a safe, positive, and constructive manner ? Info Only Info Only

Info Only = No Points

- a. No unsafe acts should be performed during inspection by the state inspector
- b. What did the inspector observe in the field? (Narrative description of field observations and how inspector performed)
- c. Best Practices to Share with Other States - (Field - could be from operator visited or state inspector practices)
- d. Other

Evaluator Notes:

Yes, the Mr. Rucker performed the inspection in a safe, positive, and professional manner. He observed the condition of pipeline facilities to assure compliance with both state and federal regulations and did not hesitate to communicate to the operator concerns observed when necessary.

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**7** General Comments: Info Only Info Only

Info Only = No Points

Evaluator Notes:

No issues noted. No point deductions under Part E.

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Total points scored for this section: 15  
Total possible points for this section: 15



**PART F - Damage prevention and Annual report analysis****Points(MAX) Score**

- |   |  |   |   |
|---|--|---|---|
| 1 | Has the state reviewed Operator Annual reports, along with Incident/Accident reports, for accuracy and analyzed data for trends and operator issues.<br>Yes = 2 No = 0 Needs Improvement = 1 | 2 | 2 |
|---|--|---|---|

**Evaluator Notes:**

Yes. No change from prior years. Covered under the program's Annual Report checklist. See Section 4.3.1 of program's written procedures. As noted previously the program reviews trends in data each individual operator reports in PHMSA annual reports, using a spreadsheet that is populated with annual report data from 2010 through most recent PHMSA annual report data. Staff reviews trends in data reported by each operator, including but not limited to excavation damages by root cause. Program staff have developed a new form to further document these reviews.

- |   |  |   |   |
|---|--|---|---|
| 2 | Has the state verified that the operators analyze excavation damages for the purpose of determining root causes and minimizing the possibility of a recurrence? (192.617)<br>Has the state verified that the operators have appropriately identified excavators who have repeatedly violated one-call laws and damaged their facilities. Have the operators taken steps to mitigate that risks? (192.1007)<br>Yes = 2 No = 0 Needs Improvement = 1 | 2 | 2 |
|---|--|---|---|

**Evaluator Notes:**

The program has reviewed the criteria PHMSA added as Part F - Damage Prevention & Annual Report Analysis to the state pipeline safety program evaluation form. Using this criteria as a basis, and per the guidance provided by PHMSA to NAPSR, MO PSC Staff has again sent a questionnaire to the seven MO PSC jurisdictional operators reporting 20 or more excavation damages in calendar year 2021. Same operators but the questions were modified from prior surveys. Reviewed list of questions contained in survey.

- |   |   |   |   |
|---|---|---|---|
| 3 | Has the state reviewed the operator's annual report pertaining to Part D - Excavation Damage?<br>Yes = 4 No = 0 Needs Improvement = 1-3 <ol style="list-style-type: none"><li>a. Is the information complete and accurate with root cause numbers?</li><li>b. Has the state evaluated the causes for the damages listed under "One-Call Notification Practices Not Sufficient" (Part D.1.a)?</li><li>c. Has the state evaluated the causes for the damages listed under "Locating Practices Not Sufficient" (Part D.1.b)? For each operator, does the state review the following?</li><li>d. Is the operator or its locating contractor(s) qualified and following written procedures for locating and marking facilities?</li><li>e. Is the operator appropriately requalifying locators to address performance deficiencies?</li><li>f. What is the number of damages resulting from mismarks?</li><li>g. What is the number of damages resulting from not locating within time requirements (no-shows)?</li><li>h. Is the operator appropriately addressing discovered mapping errors resulting in excavation damages?</li><li>i. Are mapping corrections timely and according to written procedures?</li><li>j. Has the state evaluated the causes for the damages listed under "Excavation Practices Not Sufficient" (Part D.1.c)?</li></ol> | 4 | 4 |
|---|---|---|---|

**Evaluator Notes:**

Yes to all. Also, in conjunction with other departments of the MO PSC, Safety Engineering Staff worked to develop the scope for a quality assurance study into pipeline locating practices. This scope was submitted to PHMSA in Missouri's 2020 One Call Grant application. The study has been completed and a report issued and made available via the MO-PSC web site. A copy of the report was reviewed during this program evaluation.

- |   |   |   |   |
|---|---|---|---|
| 4 | Has the agency or another organization within the state collected data and evaluated trends on the number of pipeline damages per 1,000 locate requests?<br>Yes = 2 No = 0 Needs Improvement = 1 <ol style="list-style-type: none"><li>a. What stakeholder group is causing the highest number of damages to the pipelines? Operator, contractor, locating company or public.</li><li>b. Has the state verified the operator is appropriately focusing damage prevention education and training to stakeholders causing the most damages?</li></ol> | 2 | 2 |
|---|---|---|---|

- c. Has the state evaluated which of the following best describes the reason for the excavation damages; i.e., operator or contractor not following written procedures, failure to maintain marks, failure to support exposed facilities, failure to use hand tools were required, failure to test-hole (pot hole), improper backfilling practices, failure to maintain clearance or insufficient excavation practices.
- d. Has the state verified the operator is appropriately focusing damage prevention education and training to address the causes of excavation damages?

Evaluator Notes:

CY2021 preliminary data indicates that locating company and excavator groups continue to be the leading cause of pipeline damages. MO PSC reviews trends in data each individual operator reports in PHMSA annual reports, using a spreadsheet that is populated with annual report data from 2010 through most recent PHMSA annual report data. Staff reviews trends in data reported by each operator, including but not limited to excavation damages by root cause (data reporting began in 2016 for CY 2015 for excavation damage by root cause data). The program presents aggregated damages/1,000 locate request trend data to PHMSA annually during NASPR Central Region meetings. The program discusses results and trends for individual operators during IM/DIMP inspections. Discussed with the program CY2021 results regarding cause codes reported. Four of the state's largest operators reported higher than national average percentage of damages per 1000 tickets, one operator well above national average on One-call notification practices not sufficient, three having higher than average percentages under the 'Other' category, two having higher than average damages related to excavation practices not sufficient, and three not having locating practices not sufficient. Program will have discussions with operators to understand what corrective measures will be implemented to improve in these areas.

**5 General Comments:**

Info Only Info Only

Info Only = No Points

Evaluator Notes:

No point deductions under Part F.

Total points scored for this section: 10  
Total possible points for this section: 10



## PART G - Interstate Agent/Agreement States

Points(MAX) Score

- 1 Were all inspections of interstate pipelines conducted using the Inspection Assistant program for documenting inspections? Info Only Info Only  
Info Only = No Points

Evaluator Notes:

N/A. Does not hold a Interstate Agent or 60106 agreement.

- 2 If inspections were conducted independent of a PHMSA team inspection was notice of all identified probable violations provided to PHMSA within 60 days? Info Only Info Only  
Info Only = No Points

Evaluator Notes:

N/A. Does not hold a Interstate Agent or 60106 agreement.

- 3 If inspections were conducted independent of a PHMSA team inspection was PHMSA immediately notified of conditions which may pose an immediate safety hazard to the public or environment? Info Only Info Only  
Info Only = No Points

Evaluator Notes:

N/A. Does not hold a Interstate Agent or 60106 agreement.

- 4 If inspections were conducted independent of a PHMSA team inspection did the state coordinate with PHMSA if inspections not were not included in the PHMSA Inspection Work Plan? Info Only Info Only  
Info Only = No Points

Evaluator Notes:

N/A. Does not hold a Interstate Agent or 60106 agreement.

- 5 Did the state take direction from and cooperate with PHMSA for all incident investigations conducted on interstate pipelines? Info Only Info Only  
Info Only = No Points

Evaluator Notes:

N/A. Does not hold a Interstate Agent or 60106 agreement.

- 6 General Comments: Info Only Info Only  
Info Only = No Points

Evaluator Notes:

N/A. Does not hold a Interstate Agent or 60106 agreement.

Total points scored for this section: 0  
Total possible points for this section: 0