# U.S. DEPARTMENT OF TRANSPORTATION
# PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
## Special Permit Analysis and Findings
## Class 1 to 3 Location

**Special Permit Information:**

| | |
|---|---|
| **Docket Number:** | PHMSA-2016-0004 |
| **Requested By:** | Tennessee Gas Pipeline Company, LLC |
| **Operator ID#:** | 19160 |
| **Original Date Requested:** | January 11, 2016 |
| **1st Renewal Issuance Date:** | March 17, 2023 |
| **Code Section(s):** | 49 CFR 192.611(a) and (d), 192.619(a), and 192.5 |

**Purpose:**

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides this information to describe the facts of the subject special permit application submitted by Tennessee Gas Pipeline Company LLC[1] (TGP), to discuss any relevant public comments received with respect to the application, to present the engineering/safety analysis of the special permit application, and to make findings regarding whether the requested renewal of this existing special permit should be granted, and if so, under what conditions. TGP requests that PHMSA waive compliance from 49 Code of Federal Regulations (CFR) 192.611(a) and (d), 192.619(a), and 192.5 for 162 segments and 36.901 miles of natural gas transmission pipeline segments.

**Pipeline System Affected**:

This special permit renewal request applies to 162 ***special permit segments*** and 36.901 miles of natural gas transmission pipeline operated by TGP and located in the states of Kentucky, Louisiana, Mississippi, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas, and West Virginia where a change has occurred from an original Class 1 location to a Class 3 location.

[1] Tennessee Gas Pipeline Company LLC is owned by Kinder Morgan, Inc.

This special permit allows TGP to continue to operate the 162 ***special permit segments*** at their current maximum allowable operating pressure (MAOP).

**Special Permit Request:**

TGP submitted an application to PHMSA on March 4, 2021, for a special permit renewal seeking relief from the Federal pipeline safety regulations in 192.611(a) and (d), 192.619(a), and 192.5 for 162 ***special permit segments*** and 36.901 miles of natural gas transmission pipeline. The ***special permit segments*** are located in the states of Kentucky, Louisiana, Mississippi, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas and West Virginia.

***Special permit segments*** are divided into two (2) categories: ***Type A special permit segments*** and ***Type B special permit segments***.

- ***Type A special permit segments*** include those ***special permit segments*** as described in **Attachment A - Type A Special Permit Segments and Inspection Areas**, where there is a cluster, as described in 49 CFR 192.5(c), of more than 10 buildings intended for human occupancy in a "class location unit" and for which the MAOP has not been confirmed in accordance with 49 CFR 192.611(a) or where the pipe installed has been identified to have a seam type or manufacturer type that is problematic for maintaining pipeline integrity. ***Type A special permit segments*** total approximately 10.192 miles (53,813.09 feet) of pipe in this proposed special permit renewal. ***Type A special permit segments*** must meet **Condition 1(d)** and **Conditions 8(b)(i)** and **(c)** of the Special Permit Conditions.
- ***Type B special permit segments*** include those ***special permit segments*** where there is a cluster, as described in 49 CFR 192.5(c), of 10 or fewer buildings intended for human occupancy in a "class location unit" and for which the MAOP has not been confirmed in accordance with 49 CFR 192.611. ***Type B special permit segments*** total approximately 26.348 miles (139,115.00 feet) of pipe as described in **Attachment A – Type B Special Permit Segments and Inspection Areas.**
- ***Special permit inspection areas*** are defined as a one (1) mile continuous segment on both sides of the ***special permit segment*** (Type A and Type B) plus the footage in the ***special permit segment***. **Attachment A** lists the boundaries for the ***special permit inspection area*** associated with each ***special permit segment.***

Subsequent to the issuance of this special permit, those ***special permit segments*** that have been pressure tested or replaced such that the MAOP has been made commensurate with the present class location as defined in 49 CFR 192.611 would no longer be included in this special permit.

This special permit allows TGP to continue to operate the pipeline segments at their current maximum allowable operating pressure (MAOP) until either replaced, hydrostatically tested, or operated in accordance with the special permit conditions. The Federal pipeline safety regulations in 49 CFR 192.611(a) require natural gas pipeline operators to confirm or revise the MAOP of a pipeline segment after a change in class location. A special permit would allow TGP to continue to operate each of the 162 special permit segments at their existing MAOP's despite a change in class location for the special permit specified time interval.

**Public Notice:**

On May 27, 2022, PHMSA posted a notice of this special permit request in the Federal Register (87 FR 32227) with a closing date of June 27, 2022. PHMSA has reviewed all public comments received for Docket Number PHMSA-2016-0004. PHMSA received public comments concerning this special permit request that have been addressed in the Final Environmental Assessment and Finding of No Significant Impact (FEA and FONSI).

The TGP special permit application letter, Federal Register notice, Final Environmental Assessment, Finding of No Significant Impact, and all other pertinent documents are available for review in Docket No. PHMSA-2016-0004 in the Federal Docket Management System (FDMS) located at www.Regulations.gov.

**Analysis:**

Background: On June 29, 2004, PHMSA published in the Federal Register (69 FR 38948) the criteria it uses for the consideration of class location change waivers, now being granted through special permits. First, certain threshold requirements must be met for a pipeline section to be further evaluated for a class location change special permit. Second, the age and manufacturing process of the pipe; system design and construction; environmental, operating and maintenance histories; and integrity management program elements are evaluated as significant criteria. These significant criteria are presented in matrix form and can be reviewed in the FDMS, Docket

Number PHMSA–RSPA-2004-17401. Third, such special permits will only then be granted when pipe conditions and the operator's integrity management program provides a level of safety equal to a pipe replacement or pressure reduction.

Threshold Requirements: Each of the threshold requirements published by PHMSA in the June 29, 2004, Federal Register notice is discussed below in regards to the TGP special permit petition.

1) No pipeline segments in a class location changing to Class 4 location will be considered. This special permit request is for 162 ***special permit segments*** on the TGP pipeline system where a class location change has occurred from Class 1 to Class 3 locations as defined in49 CFR 192.5(c) for cluster locations and segments outside the cluster (and inside the sliding mile for the class location) where an additional dwelling(s) have been identified. TGP has met this requirement.
2) No bare pipe will be considered. These TGP ***special permit segments*** are coated with an external protective coating. TGP has met this requirement.
3) No pipe containing wrinkle bends will be considered. There are no wrinkle bends in the ***special permit segments***. TGP has met this requirement.
4) No pipe segments operating above 72% of the specified minimum yield strength (SMYS) will be considered for a Class 3 special permit. The ***special permit segments*** operate at or below 72% SMYS. TGP has met this requirement.
5) Records must be produced that show a hydrostatic test to at least 1.25 x maximum allowable operating pressure (MAOP). TGP will pressure test any segments that do not meet this requirement through the special permit conditions.
6) In-line inspection (ILI) must have been performed with no significant anomalies identified that indicate systemic problems. TGP will meet this requirement through the special permit conditions.
7) Criteria for consideration of class location change waiver, now being granted through special permits, published by PHMSA in the Federal Register (69 FR 38948), define a *waiver inspection area (**special permit inspection area**)* as up to 25 miles of pipe either side of the *waiver segment (**special permit segment**).* The ***special permit inspection area*** must be inspected according to TGP's integrity management program and periodically inspected with

an in-line inspection technique. The ***special permit inspection area*** extends one-mile out from either side of the special permit segments long. This additional length was used since the Type B areas that are not being replaced are locations with 10 or fewer buildings intended for human occupancy in a "class location unit" and are outside the original "cluster area". This special permit is contingent upon TGP's incorporation of each of the ***special permit segments*** in its written integrity management program as a *"covered segment"* in a *"high consequence area"* (HCA) per 49 CFR 192.903.

Criteria Matrix: The original and supplemental data submitted by TGP for the ***special permit segments*** have been compared to the class location change special permit criteria matrix. The ***special permit segments*** fall in the probable acceptance column of the criteria matrix for all criteria except for:

- Possible acceptance – pipe manufacture and pipe material
- Requires substantial justification – pipe coating, Stress Corrosion Cracking Direct Assessment (SCCDA), and several leaks within 20-miles of the ***special permit segment***.

The data findings below fall within the "probable acceptance" or the "requires substantial justification" columns of the criteria matrix:

1) Pipe design and construction, including pipe manufacture, material and design stress:
    - TGP pipeline special permit segments have:
        - Pipe manufactured with the following pipe seams: low-frequency electric resistance welded, flash welded, double submerged arc welded, seamless, and electric welded pipe seams.
        - Pipe coatings included: coal tar enamel, hot applied wax, fusion bonded epoxy, and tape.
        - Pipe design stress was 72% specified minimum yield strength or lower.
2) Pipe coating, SCCDA, and several leaks: TGP will be required to conduct a stress corrosion cracking assessment (SCCDA) of *the* ***special permit segments*** to evaluate where the risk of stress corrosion cracking (SCC) is present. TGP will be required to implement a plan to improve cathodic protection reliability and perform inspections for SCC during excavations.

- To further address pipe manufacturing, material, construction, pipe coating, SCCDA, and possible pipe leak issues, this special permit will include conditions requiring TGP to treat all ***special permit segments*** as "covered segments" in an HCA per 49 CFR 192.903.
- TGP will also be required to perform ILI assessments, anomaly repairs, close interval surveys, identify any pipeline segment that may be susceptible to pipe seam issues because of the vintage of the pipe, the manufacturing process of the pipe, or other issues and stress corrosion cracking direct assessment (SCCDA) along the entire length of the ***special permit inspection areas*** and ***special permit segments*** according to the requirements of 49 CFR 192.929 after the grant of this special permit.
- This special permit will include a condition that TGP must continue to operate each ***special permit segment*** at or below its existing MAOP.

PHMSA has determined that imposing the special permit conditions will address these concerns and provide equivalent safety for these areas.

## Operational Integrity Compliance:

To inform PHMSA's decision about whether a special permit could provide a level of safety greater than or equal to a pipe replacement or pressure reduction and is consistent with pipeline safety, PHMSA reviewed this special permit request to understand the known type of integrity threats that are in the ***special permit segments*** and ***special permit inspection areas***. This integrity information was used to consider special permit conditions to provide a systematic program to review and remediate the pipeline for safety concerns. Additional operational integrity review and remediation requirements are required by this special permit to ensure that the operator has an ongoing program to locate and remediate safety threats. These threats to integrity and safety include any issues with the pipe coating quality, cathodic protection effectiveness, operations damage prevention program, pipe depth of soil cover, weld seam and girth weld integrity, anomalies in the pipe steel and welds, and material and structures either along or near the pipeline that could cause the cathodic protection system to be ineffective. PHMSA has carefully designed a comprehensive set of conditions that TGP must implement to comply with this special permit.

## Past Enforcement History – January 1, 2011 through July 31, 2022:

During January 1, 2011 through July 31, 2022, TGP was cited in 27 enforcement actions with a total of $257,600 in assessed civil penalties. PHMSA issued four (4) Corrective Action Order, six (6) Notice of Amendments, 10 Notice of Probable Violations, one (1) Safety Order, and six (6) Warning Letters to TGP. **Tables 1 and 2** below shows PHMSA's enforcement actions and civil penalties for TGP:

**Table 1: TGP Enforcement Matters from January 1, 2011 through July 31, 2022**

| Status | Corrective Action Order | Notice of Amendment | Notice of Probable Violation | Safety Order | Warning Letter | Total |
|---|---|---|---|---|---|---|
| CLOSED | 3 | 6 | 10 | 1 | 6 | **26** |
| OPEN | 1 | 0 | 0 | 0 | 0 | **1** |
| **Total** | **4** | **6** | **10** | **1** | **6** | **27** |

**Table 2: TGP Enforcement Civil Penalty Status January 1, 2011 through July 31, 2022**

| Proposed | Awaiting Order | Assessed | Withdrawn/Reduced | Collected |
|---|---|---|---|---|
| $384,200 | | $257,600 | $126,600 | $257,600 |

**Summary of Enforcement Findings for TGP includes**:

- **Atmospheric Corrosion Control**: General and Monitoring; **Construction:** Compliance with Standards; **Control Room Management**: Alarm Management, Fatigue Mitigation, and Roles and Responsibilities; **External Corrosion Control**: Protective Coating and Test Stations; **Integrity Management**: Continual Process Evaluation and Assessment and High Consequence Area Identification; **Maintenance**: Compressor Stations-Gas Detection, Compressor Stations-Storage of Combustible Materials, Leak Surveys, Permanent Field Repair of Damage, Pressure Limiting and Regulating Stations Inspection and Testing, Relief Devices, Patrolling, Record Keeping, and Valve Maintenance; **OME Procedural Manual**: Emergency Plans, General, and Maintenance and Normal Operations; **Operations**: Continual Surveillance, Emergency Plans, General, and MAOP; **Operator Qualification**: Qualification Program; **Public Awareness**: General; **Reporting**: Incident Reports, Construction, and Pipeline Condition Report; **Welding**: Limitations on Welders and Procedures.
- 49 CFR 191.15, 191.22, 191.27, 192.225, 192.229, 192.303, 192.361, 192.461, 192.469,

192.479, 192.481, 192.603, 192.605, 192.613, 192.615, 192.616, 192.619, 192.631, 192.705, 192.706, 192.709, 192.713, 192.735, 192.736, 192.739, 192.743, 192.745, 192.805, 192.905, 192.921, and 192.937.

**Table 3** below shows PHMSA's enforcement actions and civil penalties for TGP and the specific 49 CFR Parts 191 and 192 violations:

| Table 3: Summary of Enforcement Findings from TGP<br>January 1, 2011 to July 31, 2022 | | | | | |
|---|---|---|---|---|---|
| **Notice of Amendment** | | | | | |
| Construction | 1 | Control Room Management | 3 | OME Procedural Manual | 2 |
| Operation and/or Maintenance | 2 | Reporting | 2 | Welding of Steel in Pipelines | 1 |
| | | | | **Notice of Amendment Total:** | **11** |
| **Notice of Probable Violation** | | | | | |
| Control Room Management | 1 | Corrosion Control | 3 | Integrity Management | 3 |
| OME Procedural Manual | 6 | Operation and/or Maintenance | 3 | Operator Qualification | 2 |
| Public Awareness | 1 | Reporting | 1 | Welding of Steel in Pipelines | 1 |
| | | | | **Notice of Probable Violation Total:** | **21** |
| **Warning Letter** | | | | | |
| OME Procedural Manual | 3 | Operation and/or Maintenance | 9 | Operator Qualification | 1 |
| Reporting | 1 | | | | |
| | | | | **Warning Letter Total:** | **14** |
| | | | | | |
| | | | | **Grand Total:** | **46** |

**Summary of Enforcement Findings for the Kinder Morgan Gas Pipelines Companies - CIG, EPNG, NGPL, SNG, Tejas, and TGP:**

From January 1, 2011, through July 31, 2022, Kinder Morgan, the operator of SNG, was cited in 64 enforcement actions with a total of $1,077,800 in assessed civil penalties on its Colorado Interstate Gas Company (CIG), El Paso Natural Gas Company (EPNG), Natural Gas Pipeline of America (NGPL), Southern Natural Gas Company (SNG), Tejas Pipeline (Tejas), and Tennessee Gas Pipeline Company (TGP) pipeline systems. PHMSA issued seventeen (17) Notice of Amendments, twenty-two (22) Notices of Probable Violations, twenty-two (22) Warning Letters, one (1) Safety Order, and nine (9) Corrective Action Orders to Kinder Morgan.

**Tables 4 and 5** below show PHMSA's enforcement actions and civil penalties for Kinder Morgan on these pipeline systems – CIG, EPNG, NGPL, SNG, Tejas, and TGP - with operator identification numbers (OPID#) 2564, 4280, 13120, 18516, 4900, and 19160.

**Table 4: Kinder Morgan Enforcement Matters from January 1, 2011 through July 31, 2022**

| Status | Corrective Action Order | Notice of Amendment | Notice of Probable Violation | Safety Order | Warning Letter | Total |
|---|---|---|---|---|---|---|
| CLOSED | 5 | 17 | 22 | 1 | 22 | **67** |
| OPEN | 4 | 0 | 0 | 0 | 0 | **4** |
| **Total** | **9** | **17** | **22** | **1** | **22** | **71** |

**Table 5: Kinder Morgan Enforcement Civil Penalty Status January 1, 2011 through July 31, 2022**

| Proposed | Awaiting Order | Assessed | Withdrawn/Reduced | Collected |
|---|---|---|---|---|
| $1,461,500 | $0 | $1,077,800 | $383,700 | $1,077,800 |

The type of 49 CFR Part 192 enforcement violations against Kinder Morgan on these six (6) pipeline systems from January 1, 2011 through July 31, 2022 were as follows:

**Summary of Enforcement Findings for CIG, EPNG, NGPL, SNG, Tejas, and TGP includes:**

- **Atmospheric Corrosion Control**: General and Monitoring; **Construction**: Compliance with Standards; **Control Room Management**: Alarm Management, Fatigue Mitigation, and Roles and Responsibilities; **Design**: Compressor Station Design and Construction, Pressure Relieving and Limiting Stations, and Supports and Anchors; **External Corrosion Control**: Cathodic Protection, Examination of Buried Pipe, Maintenance and Normal Operations, Monitoring, Protective Coating, and Test Stations; **Gas Transportation**: Conversion of Service, and Underground Natural Gas Storage; **Internal Corrosion Control**: General, Inspection Internal Surface, and Records; **Integrity Management**: Addressing Integrity Issues, Continual Process Evaluation and Assessment, High Consequence Area Identification, Preventative and Mitigative Measures, Program Elements, and Threat Identification; **Maintenance**: Compressor Stations-Gas Detection, Compressor Stations-Inspection and Testing of Relief Devices, Compressor Stations-Storage of Combustible Materials, Leak Surveys, Line Markers, Permanent Field Repair of Damage, Pressure

Limiting and Regulating Stations Inspection and Testing, Relief Devices, Patrolling, Record Keeping, and Valve Maintenance; **OME Procedural Manual**: Emergency Plans, General, Maintenance and Normal Operations, Safety Related Conditions Reporting (SRCR); **Operations**: Change in Class Location, Continual Surveillance, Emergency Plans, General, MAOP, Odorization of Gas, and Overpressure Safety Devices; **Operator Qualification**: Qualification Program and Recordkeeping; **Public Awareness**: Develop and Implement Public Awareness and Documentation; **Reporting**: Incident Reports, Immediate Reporting Incident, Filing SRCR, Offshore Pipeline Condition Report; **Welding**: Limitations on Welders, Procedures, and Qualifications.

- 49 CFR 191.3, 191.5, 191.15, 191.22, 191.23, 191.25, 191.27, 191.605, 192.3, 192.12, 192.14, 192.161, 192.163, 192.199, 192.201, 192.225, 192.227, 192.229, 192.303, 192.436, 192.459, 192.461, 192.463, 192.465, 192.469, 192.475, 192.479, 192.481, 192.491, 192.603, 192.605, 192.611, 192.613, 192.615, 192.616, 192.619, 192.625, 192.631, 192.705, 192.706, 192.707, 192.709, 192.713, 192.731, 192.735, 192.736, 192.739, 192.743, 192.745, 192.805, 192.807, 192.905, 192.911, 192.917, 192.921, 192.933, 192.935, and 192.937.

**Table 6** below gives a complete summary of the findings and the specific 49 CFR Parts 191 and 192 violations:

| Table 6: Summary of Enforcement Findings for CIG, EPNG, NGPL, SNG, Tejas, and TGP January 1, 2011 through July 31, 2022 | | | | | |
|---|---|---|---|---|---|
| **Notice of Amendment** | | | | | |
| Construction | **1** | Control Room Management | **4** | Integrity Management | **10** |
| OME Procedural Manual | **11** | Operation and/or Maintenance | **2** | Operator Qualification | **3** |
| Public Awareness | **8** | Reporting | **3** | Transportation of Gas | **5** |
| Welding of Steel in Pipelines | **3** | | | | |
| | | | | **Notice of Amendment Total:** | **50** |
| **Notice of Probable Violation** | | | | | |
| Control Room Management | **1** | Corrosion Control | **13** | Design | **2** |
| Integrity Management | **10** | OME Procedural Manual | **14** | Operation and/or Maintenance | **26** |
| Operator Qualification | **7** | Public Awareness | **2** | Reporting | **5** |
| Welding of Steel in Pipelines | **1** | | | | |
| | | | | **Notice of Probable Violation Total:** | **81** |

| Table 6: Summary of Enforcement Findings for CIG, EPNG, NGPL, SNG, Tejas, and TGP January 1, 2011 through July 31, 2022 | | | | | |
|---|---|---|---|---|---|
| **Warning Letter** | | | | | |
| Corrosion Control | **11** | Design | **1** | Integrity Management | **1** |
| OME Procedural Manual | **10** | Operation and/or Maintenance | **31** | Operator Qualification | **2** |
| Public Awareness | **4** | Reporting | **1** | Transportation of Gas | **1** |
| | | | | **Warning Letter Total:** | **62** |
| | | | | | |
| | | | | **Grand Total:** | **193** |

**Findings:**

Based on the information submitted by TGP and PHMSA's analysis of the technical, operational, and safety issues, PHMSA finds that granting this special permit with conditions that requires TGP to operate the 162 ***special permit segments*** on the 20-inch diameter, 24-inch diameter, 26-inch diameter, 30-inch diameter, 31-inch diameter, and 36-inch diameter Pipelines located in Kentucky, Louisiana, Mississippi, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas, and West Virginia at their current MAOP for a Class 1 to Class 3 location change segment is not inconsistent with pipeline safety.

PHMSA has designed the special permit conditions to effectively assess and remediate threats to the ***special permit segments*** and ***special permit inspection areas***, including pressure testing, obtaining pipe material records, and conducting assessments to evaluate pipe girth welds that have not been non-destructively tested, any pipe with missing material records, and SCC. To ensure TGP properly implements the special permit conditions, TGP will be required to give PHMSA an annual review of their compliance with the special permit.

PHMSA finds the issuance and full implementation of this special permit that waives the requirements of 49 CFR 192.611(a) and (d) and 192.619(a) for a class location change to a Class 3 location is not inconsistent with pipeline safety. This special permit requires TGP to implement the special permit conditions that include safety requirements on the operations, maintenance, and integrity management of the ***special permit segments*** and the ***special permit inspection areas***. TGP will be required to implement the special permit conditions along the

***special permit segments*** and ***special permit inspection areas*** in pipeline segments that are not high consequence areas and would not normally be required by 49 CFR Part 192 to be assessed on a periodic interval for threats.

**Completed in Washington DC on:** March 17, 2023.
**Prepared By:** PHMSA – Engineering and Research Division

## Attachment A – Special Permit Segments and Special Permit Inspection Areas

| Type A Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Segment Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 1 (KM 69) | 24 | 100-1 | 526.27 | 102-1A - 68947 | 102-1A - 69473 | 102-1A - 63667 | 102-1A - 74753 | 2.10 | Madison, KY | 3 | 1971 | FW | 750 |
| 3 (KM 71) | 24 | 100-1 | 168.34 | 102-1A - 77036 | 102-1A - 77204 | 102-1A - 71756 | 102-1A - 82484 | 2.03 | Madison, KY | 1 | 1971 | FW | 750 |
| 4 (KM 72) | 26 | 100-2 | 606.6 | 108-2 - 33270 | 108-2 - 33876 | 108-2 - 27990 | 108-2 - 39156 | 2.11 | Bath, KY | 5 | 1948 | FW | 750 |
| 6 (KM 74) | 26 | 100-2 | 1,515.3 | 108-2 - 40523 | 108-2 - 42039 | 108-2 - 35243 | 108-2 - 47319 | 2.29 | Bath, KY | 3 | 1948 | FW | 750 |
| 7 (KM 75) | 26 | 100-2 | 344.2 | 108-2 - 44555 | 108-2 - 44899 | 108-2 - 39275 | 109-2 - 597 | 2.07 | Bath, KY | 6 | 1948 | FW | 750 |
| 8 (KM 76) | 26 | 100-2 | 252.39 | 109-2 - 1131 | 109-2 - 1384 | 108-2 - 45434 | 109-2 - 6664 | 2.05 | Rowan, KY | 0 | 1948 | FW | 750 |
| 13 (KM 82) | 26 | 100-3 | 1,054.07 | 108-3 - 52941 | 108-3 - 53995 | 108-3 - 47661 | 109-3 - 4870 | 2.20 | Rowan, KY | 6 | 1949 | FW | 750 |
| 14 (KM 83) | 26 | 100-3 | 338.7 | 108-3 - 54035 | 108-3 - 54402 | 108-3 - 48755 | 109-3 - 5277 | 2.06 | Rowan, KY | 4 | 1949 | FW | 750 |
| 15 (KM 84) | 26 | 100-3 | 912.96 | 109-3 - 472 | 109-3 - 1385 | 108-3 - 49597 | 109-3 - 6665 | 2.17 | Rowan, KY | 3 | 1949 | FW | 750 |
| 17 (KM 86) | 26 | 100-3 | 655.37 | 112-3 - 47754 | 112-3 - 48425 | 112-3 - 42474 | 112-3A - 53705 | 2.12 | Boyd, KY | 0 | 1950 | FW | 790 |
| 18 (KM 87) | 26 | 100-3 | 494.4 | 112-3A - 48525 | 112-3A - 49019 | 112-3 - 43245 | 112-3A - 54299 | 2.09 | Boyd, KY | 1 | 1950 | FW | 790 |
| 23 (KM 101) | 24 | 100-1 | 598.4 | 36-1 - 47642 | 36-1 - 48240 | 36-1 - 42362 | 36-1 - 53520 | 2.11 | Sabine, LA | 3 | 1944 | FW | 750 |
| 24 (KM 102) | 24 | 100-1 | 1,118.3 | 39-1 - 57784 | 39-1 - 58902 | 39-1 - 52504 | 39-1 - 64182 | 2.21 | Natchitoches, LA | 6 | 1944 | FW | 750 |
| 29 (KM 109) | 26 | 100-2 | 920.8 | 47-2D - 10183 | 47-2D - 11104 | 47-2D - 4903 | 47-2D - 16384 | 2.17 | Ouachita, LA | 1 | 1947 | FW | 750 |
| 46 (KM 134) | 26 | 100-2 | 112.4 | 53-2B - 95230 | 53-2B - 95230 | 53-2B - 89950 | 53-2B - 100623 | 2.02 | Washington, MS | 1 | 1948 | FW | 750 |
| 47 (KM 135) | 26 | 100-2 | 2,073.94 | 53-2B - 95383 | 53-2B - 97457 | 53-2B - 90103 | 53-2B - 102737 | 2.39 | Washington, MS | 2 | 1948 | FW | 750 |
| 50 (KM 139) | 30 | 500-1 | 1,471.05 | 530-1 - 71188 | 530-1 - 72659 | 530-1 - 65908 | 530-1 - 77939 | 2.28 | Hancock, MS | 2 | 1959 | FW | 936 |
| 51 (KM 140) | 30 | 500-1 | 482.4 | 535-1 - 38349 | 535-1 - 38831 | 535-1 - 33069 | 535-1 - 44111 | 2.09 | Forrest, MS | 2 | 1959 | FW | 936 |
| 52 (KM 141) | 30 | 500-1 | 1,370.49 | 535-1 - 38884 | 535-1 - 40254 | 535-1 - 33604 | 535-1 - 45534 | 2.26 | Forrest, MS | 2 | 1959 | FW | 936 |
| 60 (KM 152) | 36 | 500-2 | 1,488.68 | 530-2 - 71038 | 530-2 - 72527 | 530-2 - 65758 | 530-2 - 77807 | 2.28 | Hancock, MS | 2 | 1965 | FW | 936 |
| 61 (KM 153) | 36 | 500-2 | 1,909.29 | 535-2 – 38304 | 535-2 – 40214 | 535-2 – 33024 | 535-2 – 45494 | 2.36 | Forrest, MS | 2 | 1966 | LF-ERW | 936 |
| 75 (KM 178) | 24 | 200-1 | 654.33 | 236-1 - 13357 | 236-1 - 14012 | 236-1 - 8077 | 236-1 - 19292 | 2.12 | Ontario, NY | 2 | 1951 | FW | 760 |
| 82 (KM 187) | 26 | 200-1 | 2,658.16 | 213-1 - 35693 | 213-1 - 38351 | 213-1 - 30413 | 213-1 - 43631 | 2.50 | Carroll, OH | 5 | 1950 | FW | 790 |
| 83 (KM 188) | 26 | 200-1 | 2,044.66 | 215-1 - 37377 | 215-1 - 39422 | 215-1 - 32097 | 215-1 - 44702 | 2.39 | Columbiana, OH | 8 | 1950 | FW | 790 |

| Type A Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Segment Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 84 (KM 189) | 26 | 200-1 | 1,270.1 | 215-1 - 44383 | 215-1 - 45653 | 215-1 - 39103 | 215-1 - 50933 | 2.24 | Columbiana, OH | 2 | 1950 | FW | 790 |
| 85 (KM 190) | 26 | 200-1 | 1,382.31 | 215-1 - 46382 | 215-1 - 47765 | 215-1 - 41102 | 215-1 - 53045 | 2.26 | Columbiana, OH | 1 | 1950 | FW | 790 |
| 86 (KM 191) | 26 | 200-2 | 1,513.05 | 205-2 - 8795 | 205-2 - 10308 | 205-2 - 3515 | 205-2 - 15588 | 2.29 | Athens, OH | 3 | 1952 | FW | 790 |
| 88 (KM 193) | 26 | 200-2 | 2,680.73 | 213-2 - 35739 | 213-2 - 38419 | 213-2 - 30459 | 213-2 - 43699 | 2.51 | Carroll, OH | 5 | 1952 | FW | 790 |
| 89 (KM 194) | 26 | 200-2 | 1,296.36 | 216-2 - 15651 | 216-2 - 16947 | 216-2 - 10371 | 216-2 - 22227 | 2.25 | Columbiana, OH | 5 | 1954 | FW | 790 |
| 109 (KM 223) | 26 | 100-2 | 554.05 | 82-2C - 49652 | 82-2C - 50206 | 82-2C - 44372 | 82-2C - 55486 | 2.10 | Dickson, TN | 1 | 1948 | FW | 750 |
| 110 (KM 224) | 26 | 100-2 | 177.44 | 82-2C - 59530 | 82-2C - 59708 | 82-2C - 54250 | 83-2 - 2036 | 2.03 | Dickson, TN | 1 | 1948 | FW | 750 |
| 120 (KM 238) | 30 | 500-1 | 9.9 | 562-1 - 1259 | 562-1 - 1269 | 560-1 - 97810 | 562-1 - 6549 | 2.00 | Cheatham, TN | 1 | 1959 | FW | 936 |
| 128 (KM 250) | 36 | 500-2 | 1,318.68 | 560-2 – 37151 | 560-2 – 38470 | 560-2 – 31871 | 560-2 – 43750 | 2.25 | Cheatham, TN | 4 | 1968 | LF-ERW | 936 |
| 129 (KM 251) | 36 | 500-2 | 381.21 | 560-2 – 43790 | 560-2 – 44171 | 560-2 – 38510 | 560-2 – 49451 | 2.07 | Cheatham, TN | 5 | 1968 | LF-ERW | 936 |
| 130 (KM 252) | 36 | 500-2 | 420.56 | 560-2 – 99604 | 560-2 – 100024 | 560-2 – 94324 | 562-2 – 3915 | 2.08 | Cheatham, TN | 1 | 1968 | LF-ERW | 936 |
| 151 (KM 290) | 24 | 100-1 | 1,677.99 | 19-1 - 21876 | 19-1 - 24570 | 19-1 - 16596 | 19-1 - 29850 | 2.32 | Waller, TX | 5 | 1944 | FW | 750 |
| 152 (KM 291) | 24 | 100-1 | 753.7 | 20-1 - 36048 | 20-1 - 36801 | 20-1 - 30768 | 20-1 - 41976 | 2.14 | Harris, TX | 2 | 1944 | FW | 750 |
| 153 (KM 292) | 24 | 100-1 | 675 | 36-1 - 13320 | 36-1 - 13995 | 36-1 - 8040 | 36-1 - 19275 | 2.13 | Sabine, TX | 1 | 1944 | FW | 750 |
| 160 (KM 300) | 30 | 100-3 | 1,531.99 | 19-3 -20924 | 19-3 - 23684 | 19-3 - 15644 | 19-3 - 28964 | 2.29 | Waller, TX | 4 | 1952 | EFW | 750 |
| 161 (KM 301) | 30 | 100-3 | 1,727.52 | 19-3 - 41139 | 19-3 - 42867 | 19-3 - 35859 | 19-3 - 48147 | 2.33 | Waller, TX | 3 | 1952 | EFW | 750 |
| 162 (KM 302) | 30 | 100-3 | 1,024.5 | 19-3 - 48100 | 19-3 - 49125 | 19-3 - 42820 | 20-3 - 5225 | 2.19 | Harris, TX | 7 | 1952 | EFW | 750 |
| 169 (KM 312) | 24 | 409A-100 DONNA LINE | 1,237.01 | 409A-101.1 - 5411 | 409A-101.1 - 6648 | 409A-101.1 - 131 | 409A-101.1 - 11928 | 2.23 | Hidalgo, TX | 76 | 1950 | FW | 933 |
| 171 (KM 316) | 24 | 409A-100 DONNA LINE | 1,523.74 | 409A-102 - 10119 | 409A-102 - 11643 | 409A-102 - 4839 | 409A-102 - 16923 | 2.29 | Hidalgo, TX | 4 | 1950 | FW | 933 |
| 172 (KM 317) | 24 | 409A-100 DONNA LINE | 1,787.31 | 409A-102 - 35417 | 409A-102 - 37204 | 409A-102 - 30137 | 409A-102 - 42484 | 2.34 | Hidalgo, TX | 9 | 1950 | FW | 933 |
| 177 (KM 323) | 24 | 100-2 | 2,657.51 | 115-2 - 18573 | 115-2 - 21231 | 115-2 - 13293 | 115-2 - 26511 | 2.50 | Wayne, WV | 3 | 1948 | FW | 973 |
| 178 (KM 326) | 24 | 100-2 | 1,833.55 | 119-2 - 3970 | 119-2 - 5881 | 118-3 - 65930 | 119-2 - 11161 | 2.35 | Putnam, WV | 3 | 1948 | FW | 938 |
| 181 (KM 329) | 26 | 100-3 | 438.1 | 117-3 - 37414 | 117-3 - 37852 | 117-3 - 32134 | 117-3 - 43132 | 2.08 | Cabell, WV | 2 | 1966 | FW | 910 |
| 185 (KM 335) | 24 | 100-1 | 1,181.7 | 19-1 - 47777 | 19-1 - 48959 | 19-1 - 42497 | 20-1 - 5235 | 2.22 | Harris, TX | 8 | 1944 | FW | 750 |
| 186 (KM 336) | 24 | 100-1 | 1,351.66 | 20-1 - 0034 | 20-1 - 1386 | 19-1 - 43757 | 20-1 - 6666 | 2.26 | Harris, TX | 8 | 1966 | FW | 750 |

| Type A Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Segment Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 187 (KM 340) | 24 | 100-2 | 1,233.7 | 121-2 - 54382 | 121-2 - 55616 | 121-2 - 49102 | 121-2 - 60896 | 2.23 | Kanawha, WV | 1 | 1948 | FW | 910 |
| 191 (KM 348) | 36 | 500-2 | 311.51 | 541-2 - 72 | 541-2 - 383 | 540-2 - 81127 | 541-2 - 5663 | 2.06 | Lauderdale, MS | 3 | 1963 | FW | 936 |

**Note**: **FW** is a flash welded pipe longitudinal seam.
**EFW** is electric flash welded pipe longitudinal seam.
**LF-ERW** is low frequency electric welded longitudinal seam pipe.

| Type B Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 2 (KM 70) | 24 | 100-1 | 12.7 | 102-1A – 71157 | 102-1A – 71170 | 102-1A – 65877 | 102-1A – 76450 | 2.00 | Madison, KY | 1 | 1971 | SAW | 750 |
| 10 (KM 78) | 30 | 100-3 | 824.32 | 102-3 – 53270 | 102-3 – 54095 | 102-3 – 47990 | 103-3 – 5236 | 2.16 | Madison, KY | 4 | 1950 | DSAW | 750 |
| 11 (KM 79) | 30 | 100-3 | 536.3 | 103-3 – 1904 | 103-3 – 2440 | 102-3 – 50762 | 103-3 – 7720 | 2.10 | Madison, KY | 1 | 1950 | DSAW | 750 |
| 12 (KM 80) | 30 | 100-3 | 806.72 | 103-3 – 8570 | 103-3 – 9377 | 103-3 – 3290 | 103-3 – 14657 | 2.15 | Madison, KY | 1 | 1950 | DSAW | 750 |
| 19 (KM 88) | 30 | 100-4 | 521.39 | 103-4 – 15933 | 103-4 – 16455 | 103-4 – 10653 | 103-4 – 21735 | 2.10 | Madison, KY | 1 | 1951 | DSAW | 750 |
| 20 (KM 89) | 30 | 100-4 | 607.56 | 103-4 – 17254 | 103-4 – 17861 | 103-4 – 11974 | 103-4 – 23141 | 2.12 | Madison, KY | 2 | 1951 | DSAW | 750 |
| 21 (KM 90) | 36 | 800-2 | 1,690.82 | 874-2 – 69802 | 874-2 – 71493 | 874-2 – 64522 | 874-2 – 76773 | 2.32 | Madison, KY | 3 | 1969 | DSAW | 936 |
| 27 (KM 106) | 30 | 100-2 | 272.2 | 36-2 – 47634 | 36-2 – 47906 | 36-2 – 42354 | 36-2 – 53186 | 2.05 | Sabine, LA | 2 | 1949 | DSAW | 750 |
| 28 (KM 108) | 31 | 100-2 | 1,121.16 | 39-2 – 57758 | 39-2 – 58879 | 39-2 – 52478 | 39-2 – 64159 | 2.21 | Natchitoches, LA | 6 | 1948 | DSAW | 604 |
| 31 (KM 111) | 30 | 100-3 | 740.5 | 36-3 – 47480 | 36-3 – 48221 | 36-3 – 42200 | 36-3 – 53501 | 2.14 | Sabine, LA | 2 | 1951 | DSAW | 750 |
| 32 (KM 113) | 30 | 100-3 | 1,772.33 | 39-3 – 57098 | 39-3 – 58870 | 39-3 – 51818 | 39-3 – 64150 | 2.34 | Natchitoches, LA | 6 | 1951 | DSAW | 750 |
| 33 (KM 115) | 30 | 100-3 | 907.8 | 47-3D – 10212 | 47-3D – 11120 | 47-3D – 4932 | 47-3D – 16400 | 2.17 | Ouachita, LA | 1 | 1949 | DSAW | 750 |
| 34 (KM 116) | 30 | 100-4 | 1,414.14 | 47-4D – 9988 | 47-4D – 11056 | 47-4D – 4708 | 47-4D – 16337 | 2.27 | Ouachita, LA | 1 | 1951 | DSAW | 750 |
| 36 (KM 118) | 24 | 500-1 | 872.7 | 511-1 – 10843 | 511-1 – 11716 | 511-1 – 5572 | 511-1 – 16996 | 2.17 | Vermillion, LA | 8 | 1956 | DSAW | 973 |
| 37 (KM 119) | 24 | 500-1 | 3,005.66 | 511-1 – 15728 | 511-1 – 18734 | 511-1 – 10448 | 511-1 – 24014 | 2.57 | Vermillion, LA | 10 | 1956 | DSAW | 973 |
| 38 (KM 120) | 24 | 500-1 | 858.45 | 512-1 – 45271 | 512-1 – 46129 | 512-1 – 39991 | 512-1 – 51409 | 2.16 | Iberia, LA | 4 | 1956 | DSAW | 973 |
| 41 (KM 124) | 30 | 800-1 | 102.57 | 834-1 – 77999 | 834-1 - 78101 | 834-1 – 72719 | 834-1 – 83381 | 2.02 | Franklin, LA | 0 | 1954 | DSAW | 936 |
| 42 (KM 125) | 30 | 800-1 | 1,259.31 | 834-1 - 78142 | 834-1 - 79401 | 834-1 – 72862 | 834-1 – 84682 | 2.24 | Franklin, LA | 1 | 1954 | DSAW | 936 |
| 43 (KM 126) | 30 | 800-1 | 75.63 | 835-1 – 694 | 835-1 – 797 | 834-1 – 80806 | 835-1 – 6050 | 2.01 | Franklin, LA | 1 | 1954 | DSAW | 936 |
| 44 (KM 131) | 24 | 100-1 | 731.04 | 53-1B1 – 95339 | 53-1B1 – 96070 | 53-1B1 – 90059 | 53-1B1 – 101350 | 2.14 | Washington, MS | 1 | 1944 | SMLS | 750 |
| 45 (KM 132) | 24 | 100-1 | 964.23 | 53-1B1 – 101333 | 53-1B1 – 102270 | 53-1B1 – 96053 | 53-1B1 – 107550 | 2.18 | Washington, MS | 1 | 1944 | SMLS | 750 |
| 48 (KM 136) | 30 | 100-3 | 1,198.98 | 69-3 – 3436 | 69-3 – 4635 | 68-3 – 59355 | 69-3 – 9915 | 2.23 | Benton, MS | 2 | 1949 | DSAW | 750 |
| 49 (KM 137) | 30 | 100-4 | 1,234.46 | 69-4 – 3494 | 69-4 – 4728 | 68-4 – 59426 | 69-4 – 10008 | 2.23 | Benton, MS | 2 | 1952 | DSAW | 750 |
| 53 (KM 142) | 30 | 500-1 | 1,474.9 | 540-1 – 77758 | 540-1 – 79233 | 540-1 – 72478 | 540-1 – 84513 | 2.28 | Lauderdale, MS | 5 | 1959 | SAW | 936 |
| 55 (KM 144) | 30 | 500-1 | 257.2 | 541-1 - 00042 | 541-1 – 00313 | 540-1 – 81096 | 541-1 – 5593 | 2.05 | Lauderdale, MS | 4 | 1959 | DSAW | 936 |
| 58 (KM 148) | 30 | 500-1 | 959.21 | 546-1 – 26190 | 546-1 – 27149 | 546-1 – 20910 | 546-1 – 32429 | 2.18 | Lowndes, MS | 1 | 1959 | DSAW | 936 |
| 59 (KM 150) | 30 | 500-1 | 1,581.69 | 546-1 – 34988 | 546-1 – 36570 | 546-1 – 29708 | 546-1 – 41850 | 2.30 | Lowndes, MS | 3 | 1959 | DSAW | 936 |

| Type B Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 62 (KM 154) | 36 | 500-2 | 1,439.84 | 540-2 – 77710 | 540-2 – 79150 | 540-2 – 72430 | 540-2 – 84430 | 2.27 | Lauderdale, MS | 6 | 1966 | DSAW | 936 |
| 64 (KM 157) | 36 | 500-2 | 1,585.26 | 546-2 – 34989 | 546-2 – 36574 | 546-2 – 29709 | 546-2 – 41854 | 2.30 | Lowndes, MS | 3 | 1964 | DSAW | 936 |
| 65 (KM 158) | 36 | 500-3 | 1,347.37 | 530-3 – 70819 | 530-3 – 72167 | 530-3 – 65539 | 530-3 – 77447 | 2.26 | Hancock, MS | 2 | 1972 | DSAW | 936 |
| 66 (KM 159) | 24 | 300-1 | 2,953.04 | 324-1A - 55004 | 324-1A – 57957 | 324-1A – 49724 | 324-1A - 63237 | 2.56 | Sussex, NJ | 10 | 1955 | SMLS | 1,170 |
| 67 (KM 160) | 24 | 300-1 | 638.57 | 324-1A - 63558 | 324-1A – 64196 | 324-1A – 58278 | 324-1A - 69476 | 2.12 | Sussex, NJ | 1 | 1955 | SMLS | 1,170 |
| 68 (KM 162) | 24 | 300-1 | 471.55 | 325-1 – 16365 | 325-1 – 16837 | 325-1 – 11085 | 325-1A - 22117 | 2.09 | Sussex, NJ | 5 | 1955 | SMLS | 1,170 |
| 69 (KM 163) | 24 | 300-1 | 1,121.11 | 325-1 – 17148 | 325-1 – 18277 | 325-1 – 11868 | 325-1A - 23557 | 2.21 | Sussex, NJ | 8 | 1955 | SMLS | 1,170 |
| 70 (KM 164) | 24 | 300-1 | 811.71 | 325-1A – 38824 | 325-1A – 39635 | 325-1A – 33544 | 326-1 – 3519 | 2.15 | Sussex, NJ | 2 | 1955 | SMLS | 1,170 |
| 71 (KM 166) | 24 | 300-1 | 373.7 | 326-1 – 8209 | 326-1 – 8582 | 326-1 – 2929 | 326-1 – 13862 | 2.07 | Sussex, NJ | 2 | 1955 | SMLS | 1,170 |
| 72 (KM 167) | 24 | 300-1 | 1,729.51 | 326-1 – 11749 | 326-1 – 13479 | 326-1 – 6469 | 326-1 – 18759 | 2.33 | Sussex, NJ | 2 | 1955 | SMLS | 1,170 |
| 77 (KM 180) | 24 | 200-1 | 1,478.51 | 243-1 – 20348 | 243-1 – 21827 | 243-1 – 15068 | 243-1 – 27107 | 2.28 | Madison, KY | 3 | 1951 | DSAW | 760 |
| 79 (KM 182) | 24 | 200-1 | 1,153.88 | 251-1 – 18683 | 251-1 – 19837 | 251-1 – 13403 | 251-1 – 25117 | 2.22 | Albany, NY | 1 | 1951 | DSAW | 760 |
| 80 (KM 183) | 24 | 200-1 | 1,059.96 | 251-1 – 34314 | 251-1 – 35374 | 251-1 – 29034 | 252-1 – 2901 | 2.20 | Albany, NY | 1 | 1951 | DSAW | 760 |
| 90 (KM 195) | 26 | 200-3 | 1,081.17 | 213-3 – 26889 | 213-3 – 27970 | 213-3 – 21609 | 213-3 – 33250 | 2.20 | Carroll, OH | 4 | 1956 | DSAW | 790 |
| 92 (KM 197) | 26 | 200-3 | 974.2 | 213-3 – 35492 | 213-3 – 364478 | 213-3 – 30212 | 213-3 – 41746 | 2.18 | Carroll, OH | 5 | 1956 | DSAW | 790 |
| 94 (KM 200) | 36 | 200-4 | 2,648.75 | 213-4 – 35689 | 213-4 – 38338 | 213-4 – 30409 | 213-4 – 43618 | 2.50 | Carroll, OH | 5 | 1963 | DSAW | 790 |
| 95 (KM 201) | 36 | 200-4 | 1,950.62 | 215-4 – 37485 | 215-4 – 39436 | 215-4 – 32205 | 215-4 – 44716 | 2.37 | Columbiana, OH | 8 | 1963 | DSAW | 790 |
| 96 (KM 202) | 36 | 200-4 | 1,248.52 | 215-4 – 44504 | 215-4 – 45753 | 215-4 – 39224 | 215-4 – 51033 | 2.24 | Columbiana, OH | 2 | 1963 | DSAW | 790 |
| 97 (KM 203) | 36 | 200-4 | 1,358.28 | 215-4 – 46492 | 215-4 – 47844 | 215-4 – 41212 | 215-4 – 53124 | 2.26 | Columbiana, OH | 1 | 1963 | DSAW | 790 |
| 98 (KM 205) | 26 | 200-1 | 1,935.75 | 217-1 – 38468 | 217-1 – 40404 | 217-1 – 33188 | 217-1 – 45684 | 2.37 | Lawrence, PA | 5 | 1950 | DSAW | 790 |
| 99 (KM 206) | 24 | 300-1 | 839.87 | 219-2D – 22733 | 219-2D – 23573 | 219-2D – 17453 | 219-2D – 28853 | 2.16 | Mercer, PA | 2 | 1953 | DSAW | 877 |
| 100 (KM 207) | 24 | 300-1 | 491.7 | 219-2D – 28609 | 219-2D – 29100 | 219-2D – 23329 | 219-2D – 34380 | 2.09 | Mercer, PA | 1 | 1953 | DSAW | 877 |
| 101 (KM 208) | 30 | 300-2 | 875.56 | 219-3 – 22847 | 219-3 – 23723 | 219-3 – 17567 | 219-3 – 29003 | 2.17 | Mercer, PA | 2 | 1965 | DSAW | 877 |
| 102 (KM 209) | 30 | 300-2 | 573.79 | 219-3 – 28627 | 219-3 – 29201 | 219-3 – 23347 | 219-3 – 34507 | 2.11 | Mercer, PA | 1 | 1965 | DSAW | 877 |
| 103 (KM 213) | 24 | 100-1 | 533.33 | 82-1C – 18316 | 82-1C – 18849 | 82-1C – 13036 | 82-1C – 24129 | 2.10 | Dickson, TN | 2 | 1944 | SMLS | 750 |
| 104 (KM 215) | 24 | 100-1 | 2,782.53 | 83-1A – 78304 | 83-1A – 81086 | 83-1A – 73024 | 83-1A – 86366 | 2.53 | Cheatham, TN | 10 | 1944 | SMLS | 750 |

| Type B Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 105 (KM 216) | 24 | 100-1 | 1,490.6 | 83-1A – 97294 | 83-1A – 98785 | 83-1A – 92014 | 83-1A - 104065 | 2.28 | Cheatham, TN | 7 | 1944 | SMLS | 750 |
| 106 (KM 217) | 24 | 100-1 | 28.61 | 83-1A – 105135 | 83-1A – 105164 | 83-1A – 99855 | 83-1A - 110444 | 2.01 | Cheatham, TN | 1 | 1944 | SMLS | 750 |
| 107 (KM 220) | 24 | 100-1 | 668.38 | 84-1 – 49147 | 84-1 – 49815 | 84-1 – 438667 | 85-1 – 5224 | 2.13 | Robertson, TN | 5 | 1944 | SMLS | 750 |
| 108 (KM 221) | 24 | 100-1 | 1,953.93 | 85-1 – 150 | 85-1 – 2103 | 84-1 – 44741 | 85-1 – 7383 | 2.37 | Robertson, TN | 10 | 1944 | SMLS | 750 |
| 111 (KM 226) | 30 | 500-1 | 566.83 | 557-1 – 27037 | 557-1 – 27604 | 557-1 – 21757 | 557-1 – 32884 | 2.11 | Lewis, TN | 2 | 1959 | SAW | 936 |
| 112 (KM 227) | 30 | 500-1 | 686.45 | 557-1 – 32179 | 557-1 – 32866 | 557-1 – 26899 | 557-1 – 38146 | 2.13 | Lewis, TN | 1 | 1959 | SAW | 936 |
| 113 (KM 228) | 30 | 500-1 | 1,376.94 | 557-1 – 33305 | 557-1 – 34682 | 557-1 – 28025 | 557-1 – 39962 | 2.26 | Lewis, TN | 3 | 1959 | SAW | 936 |
| 114 (KM 232) | 30 | 500-1 | 732.13 | 560-1 – 37152 | 560-1 – 37885 | 560-1 – 31872 | 560-1 – 43165 | 2.14 | Cheatham, TN | 1 | 1959 | DSAW | 936 |
| 115 (KM 233) | 30 | 500-1 | 1006 | 560-1 – 42304 | 560-1 – 43310 | 560-1 – 37024 | 560-1 – 48590 | 2.19 | Cheatham, TN | 10 | 1959 | DSAW | 936 |
| 116 (KM 234) | 30 | 500-1 | 757.26 | 560-1 – 43428 | 560-1 – 44185 | 560-1 – 38148 | 560-1 – 49465 | 2.14 | Cheatham, TN | 7 | 1959 | DSAW | 936 |
| 117 (KM 235) | 30 | 500-1 | 1,332.21 | 560-1 - 98120 | 560-1 – 99452 | 560-1 – 92840 | 562-1 – 2902 | 2.25 | Cheatham, TN | 1 | 1959 | DSAW | 936 |
| 118 (KM 236) | 30 | 500-1 | 633.98 | 560-1 – 99846 | 560-1 – 100480 | 560-1 – 94566 | 562-1 – 3930 | 2.12 | Cheatham, TN | 2 | 1959 | DSAW | 936 |
| 119 (KM 237) | 30 | 500-1 | 994.45 | 562-1 – 66 | 562-1 – 1061 | 560-1 – 96617 | 562-1 – 6341 | 2.19 | Cheatham, TN | 5 | 1959 | SAW | 936 |
| 121 (KM 239) | 30 | 500-1 | 1,339.84 | 562-1 – 6239 | 562-1 – 7579 | 562-1 – 959 | 562-1 – 12859 | 2.25 | Cheatham, TN | 1 | 1959 | SAW | 936 |
| 122 (KM 240) | 30 | 500-1 | 2,474.52 | 563-1 – 29453 | 563-1 – 31925 | 563-1 – 24173 | 563-1 – 37205 | 2.47 | Robertson, TN | 6 | 1959 | DSAW | 936 |
| 123 (KM 241) | 30 | 500-1 | 4,358.19 | 563-1 – 42160 | 563-1 – 46519 | 563-1 – 36880 | 563-1 – 51799 | 2.83 | Robertson, TN | 10 | 1959 | DSAW | 936 |
| 124 (KM 242) | 30 | 500-1 | 1,929.95 | 564-1 – 14368 | 564-1 – 16298 | 564-1 – 9088 | 564-1 – 21578 | 2.37 | Robertson, TN | 4 | 1959 | DSAW | 936 |
| 125 (KM 243) | 30 | 500-1 | 3,262.84 | 564-1 – 20668 | 564-1 – 23931 | 564-1 – 15388 | 564-1 – 29211 | 2.62 | Robertson, TN | 10 | 1959 | DSAW | 936 |
| 126 (KM 244) | 36 | 500-2 | 469.38 | 557-2 – 27013 | 557-2 – 27483 | 557-2 – 21733 | 557-2 – 32763 | 2.09 | Lewis, TN | 2 | 1964 | DSAW | 936 |
| 127 (KM 245) | 36 | 500-2 | 738.42 | 557-2 – 32134 | 557-2 – 32872 | 557-2 – 26854 | 557-2 – 38152 | 2.14 | Lewis, TN | 1 | 1964 | DSAW | 936 |
| 131 (KM 253) | 36 | 500-2 | 502.7 | 562-2 – 551 | 562-2 – 1054 | 560-2 – 96661 | 562-2 – 6334 | 2.10 | Cheatham, TN | 6 | 1963 | DSAW | 936 |
| 132 (KM 254) | 36 | 500-2 | 16.9 | 562-2 – 1253 | 562-2 – 1270 | 560-2 – 97362 | 562-2 – 6550 | 2.00 | Cheatham, TN | 1 | 1963 | DSAW | 936 |
| 133 (KM 255) | 36 | 500-2 | 2,062.21 | 562-2 – 5535 | 562-2 – 7598 | 562-2 – 255 | 562-2 – 12878 | 2.39 | Cheatham, TN | 2 | 1963 | DSAW | 936 |
| 134 (KM 256) | 36 | 500-2 | 1,001.81 | 563-2 – 29422 | 563-2 – 30424 | 563-2 – 24142 | 563-2 – 35704 | 2.19 | Robertson, TN | 4 | 1965 | DSAW | 936 |
| 135 (KM 257) | 36 | 500-2 | 1,426.43 | 563-2 – 30503 | 563-2 – 31930 | 563-2 – 25223 | 563-2 – 37210 | 2.27 | Robertson, TN | 5 | 1965 | DSAW | 936 |
| 136 (KM 258) | 36 | 500-2 | 303.7 | 563-2 – 42134 | 563-2 – 42438 | 563-2 – 36854 | 563-2 – 47718 | 2.06 | Robertson, TN | 2 | 1965 | DSAW | 936 |
| 137 (KM 259) | 36 | 500-2 | 3,257.08 | 563-2 – 42518 | 563-2 – 46423 | 563-2 – 37238 | 563-2 – 51703 | 2.62 | Robertson, TN | 6 | 1965 | DSAW | 936 |

| Type B Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 138 (KM 260) | 36 | 500-2 | 1,899.22 | 564-2 – 14427 | 564-2 – 16326 | 564-2 – 9147 | 564-2 – 21606 | 2.36 | Robertson, TN | 4 | 1965 | DSAW | 936 |
| 139 (KM 261) | 36 | 500-2 | 219.1 | 564-2 – 20671 | 564-2 – 20890 | 564-2 – 15391 | 564-2 – 26170 | 2.04 | Robertson, TN | 4 | 1965 | DSAW | 936 |
| 140 (KM 262) | 36 | 500-2 | 2,970.93 | 564-2 – 20965 | 564-2 – 23936 | 564-2 – 15685 | 564-2 – 29216 | 2.56 | Robertson, TN | 6 | 1965 | DSAW | 936 |
| 141 (KM 271) | 30 | 800-1 | 384.62 | 861-1 – 44265 | 861-1 – 44649 | 861-1 – 38985 | 861-1 – 49929 | 2.07 | Cheatham, TN | 1 | 1954 | EW | 936 |
| 142 (KM 272) | 30 | 800-1 | 581.5 | 861-1 – 99945 | 861-1 – 100526 | 861-1 – 94665 | 863-1 – 3910 | 2.11 | Cheatham, TN | 2 | 1954 | EW | 936 |
| 143 (KM 273) | 30 | 800-1 | 1,104.3 | 863-1 – 94 | 863-1 – 1199 | 861-1 – 96711 | 863-1 – 6479 | 2.21 | Cheatham, TN | 6 | 1954 | EW | 936 |
| 144 (KM 275) | 30 | 800-1 | 1,366.34 | 863-1 – 6197 | 863-1 – 7564 | 863-1 – 917 | 863-1 – 12844 | 2.26 | Cheatham, TN | 1 | 1954 | EW | 936 |
| 145 (KM 276) | 30 | 800-1 | 968.97 | 864-1 – 29457 | 864-1 – 30426 | 864-1 – 24177 | 864-1 – 35706 | 2.18 | Robertson, TN | 4 | 1954 | EW | 936 |
| 146 (KM 277) | 30 | 800-1 | 1,797.26 | 864-1 – 30649 | 864-1 – 32446 | 864-1 – 25369 | 864-1 – 37726 | 2.34 | Robertson, TN | 5 | 1954 | EW | 936 |
| 147 (KM 278) | 30 | 800-1 | 4253 | 864-1 – 42177 | 864-1 – 46430 | 864-1 – 36897 | 864-1 – 51710 | 2.81 | Robertson, TN | 10 | 1954 | EW | 936 |
| 148 (KM 279) | 30 | 800-1 | 1,978.36 | 865-1 – 14349 | 865-1 – 16327 | 865-1 – 9069 | 865-1 – 21607 | 2.37 | Robertson, TN | 4 | 1954 | EW | 936 |
| 149 (KM 280) | 30 | 800-1 | 3,133.48 | 865-1 – 20783 | 865-1 – 23888 | 865-1 – 15503 | 865-1 – 29168 | 2.59 | Robertson, TN | 6 | 1954 | EW | 936 |
| 154 (KM 293) | 24 | 100-1 | 1,539.3 | 36-1 – 18211 | 36-1 – 19750 | 36-1 – 12931 | 36-1 – 25030 | 2.29 | Sabine, TX | 8 | 1964 | DSAW | 750 |
| 155 (KM 294) | 24 | 100-1 | 573.4 | 36-1 – 20133 | 36-1 – 20706 | 36-1 – 14853 | 36-1 – 25986 | 2.11 | Sabine, TX | 3 | 1964 | DSAW | 750 |
| 156 (KM 295) | 30 | 100-2 | 1,574.15 | 19-2 – 20806 | 19-2 – 23619 | 19-2 – 15526 | 19-2 – 28898 | 2.30 | Waller, TX | 4 | 1948 | DSAW | 750 |
| 157 (KM 297) | 30 | 100-2 | 1,220.9 | 19-2 – 47755 | 19-2 – 48976 | 19-2 – 42475 | 20-2 – 5205 | 2.23 | Harris, TX | 8 | 1948 | DSAW | 750 |
| 158 (KM 298) | 30 | 100-2 | 1,962.45 | 20-2 – 0048 | 20-2 – 2010 | 19-2 – 43818 | 20-2 – 7290 | 2.37 | Harris, TX | 9 | 1948 | DSAW | 750 |
| 159 (KM 299) | 30 | 100-2 | 2,597.7 | 36-2 – 17089 | 36-2 – 19687 | 36-2 – 11809 | 36-2 – 24967 | 2.49 | Sabine, TX | 7 | 1949 | SAW | 750 |
| 163 (KM 303) | 30 | 100-3 | 217 | 20-3 – 61 | 20-3 – 278 | 19-3 – 43960 | 20-3 – 5558 | 2.04 | Harris, TX | 8 | 1952 | DSAW | 750 |
| 164 (KM 304) | 30 | 100-3 | 1,733.65 | 20-3 – 398 | 20-3 – 2162 | 19-3 – 44297 | 20-3 – 7442 | 2.33 | Harris, TX | 8 | 1952 | DSAW | 750 |
| 165 (KM 306) | 30 | 100-3 | 1,101.34 | 20-3 – 36121 | 20-3 – 37211 | 20-3 – 30841 | 20-3 – 42491 | 2.21 | Harris, TX | 2 | 1952 | DSAW | 750 |
| 166 (KM 307) | 30 | 100-3 | 1,502.4 | 36-3 – 18156 | 36-3 – 19658 | 36-3 – 12876 | 36-3 – 24938 | 2.28 | Sabine, TX | 8 | 1964 | DSAW | 750 |
| 173 (KM 318) | 20 | 100-1 | 1,349.06 | 118-1 – 50528 | 118-1 – 51883 | 118-1 – 45216 | 118-1 - 57075 | 2.26 | Kanawha, WV | 2 | 1984 | DSAW | 910 |
| 174 (KM 319) | 20 | 100-1 | 1,228.73 | 118-1 – 54017 | 118-1 – 55245 | 118-1 – 48737 | 118-1 – 60525 | 2.23 | Kanawha, WV | 3 | 1984 | DSAW | 910 |
| 175 (KM 320) | 20 | 100-1 | 584.46 | 118-1 – 70516 | 118-1 – 70534 | 118-1 – 64688 | 118-1 – 75964 | 2.11 | Kanawha, WV | 1 | 1984 | DSAW | 910 |
| 176 (KM 322) | 20 | 100-1 | 2,249.91 | 121-1 – 19064 | 121-1 – 21305 | 121-1 – 13822 | 121-1 – 26546 | 2.43 | Kanawha, WV | 3 | 1984 | DSAW | 936 |

| Type B Special Permit Segments and Inspection Areas | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Permit Segment Number | Outside Diameter (inches) | Line Name | Length (feet) | Start Survey Station (Valve - SS) | End Survey Station (Valve - SS) | Inspection Area Start SS (Valve – SS) | Inspection Area End SS (Valve – SS) | Inspection Area Length (Miles) | County or Parish, State | No. Dwellings | Year Installed | Seam Type | MAOP (psig) |
| 182 (KM 330) | 30 | 100-3 | 1,415.75 | 118-3 – 25714 | 118-3 – 27130 | 118-3 – 20434 | 118-3 – 32410 | 2.27 | Putnam, WV | 2 | 1972 | DSAW | 910 |
| 183 (KM 331) | 30 | 100-3 | 891.2 | 118-3 – 31972 | 118-3 – 32863 | 118-3 – 26692 | 118-3 – 38143 | 2.17 | Putnam, WV | 2 | 1972 | DSAW | 910 |
| 188 (KM 341) | 30 | 100-4 | 497.5 | 83-4B – 114836 | 83-4B – 115333 | 83-4B – 109556 | 84-4 – 3287 | 2.09 | Cheatham, TN | 7 | 1952 | DSAW | 750 |
| 189 (KM 342) | 30 | 100-4 | 1,342.49 | 103-4 – 7517 | 103-4 – 8889 | 103-4 – 2237 | 103-4 – 14169 | 2.25 | Madison, KY | 1 | 1951 | DSAW | 750 |
| 190 (KM 343) | 30 | 100-4 | 242.74 | 103-4 – 9445 | 103-4 – 9687 | 103-4 – 4165 | 103-4 – 14967 | 2.05 | Madison, KY | 1 | 1951 | DSAW | 750 |

**Note**: **DSAW** is double submerged arc welded pipe longitudinal seam.
**EW** is a submerged arc welded pipe longitudinal seam.
**SAW** is single submerged arc welded pipe longitudinal seam.
**SMLS** is seamless longitudinal seam.