

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-2016-0159
Requested By: Southern Natural Gas Company, LLC
Operator ID#: 18516
Original Date Requested: December 8, 2016
Original Issuance Date: April 11, 2022 to April 11, 2032
Code Section(s): 49 CFR 192.611(a) and (d) and 192.619(a)

Purpose:

The Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS),¹ provides this information to describe the facts of the subject special permit application submitted by Southern Natural Gas Company, LLC (SNG),² to discuss any relevant public comments received with respect to the application, to present the engineering and safety analysis of the special permit application, and to make findings regarding whether the requested special permit should be granted and, if so, under what conditions. SNG requested that PHMSA waive compliance from the 49 Code of Federal Regulations (CFR) 192.611(a) and (d) and 192.619(a) for natural gas transmission pipeline segments, where the class location has changed from Class 1 to a Class 3 location.

Pipeline System Affected:

This special permit application by SNG requests a waiver from the class location change requirements in 49 CFR 192.611(a) and (d) and 192.619(a) for approximately 0.089 miles of the

¹ Throughout this special permit the usage of “PHMSA” or “PHMSA OPS” means the U.S. Department of Transportation’s Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety.

² SNG is a wholly owned subsidiary of Kinder Morgan, Inc.

26-inch diameter Main Pass Franklinton 2nd Loop Line Pipeline located in Saint Tammany Parish, Louisiana.

Pipe specifications including outside diameter, year installed, seam type, coating type, pipe grade, wall thickness, maximum allowable operating pressure (MAOP), minimum pressure test pressure, and pressure test factor based on the minimum test pressure are detailed in **Table 1 – Pipe Specifications by Line Name**.

Table 1 – Pipe Specifications by Line Name									
Line Name	Outside Diameter (inches)	Year Installed	Seam Type	Coating Type	Grade	Wall Thickness (inches)	MAOP (psig)	Min Test Pressure (psig)	Pressure Test Factor
Main Pass Franklinton 2 nd Loop Line	26	1967	SAW	Coal tar enamel	X60	0.375	1,200	1,681	1.40

Note: SAW is submerged arc welded longitudinal seam pipe.

Without this special permit, 49 CFR 192.611(a) would require SNG to replace the *special permit segments* with stronger pipe or reduce the pipeline MAOP for a Class 1 to Class 3 location change.

Special Permit Request:

On December 8, 2016, SNG applied to PHMSA for a special permit seeking relief from 49 CFR 192.611(a) and (d) and 192.619(a) for the below-listed *special permit segment*, where a class location change occurred from the original Class 1 to a Class 3 on the 26-inch diameter Main Pass Franklinton 2nd Loop Line Pipeline located in Saint Tammany Parish, Louisiana.

SNG’s special permit applies to the *special permit segment* and *special permit inspection area* described and defined as follows, using the SNG survey station references:

Special Permit Segment:

This proposed special permit applies to the *special permit segment* in **Table 2 – Special Permit Segment** and is identified using the SNG milepost and station references.

Table 2 – Special Permit Segment

Special Permit Segment Number ³	Outside Diameter (inches)	Line Name	Length (feet)	Start Survey Station MP - Station	End Survey Station MP - Station	Parish, State	No. Dwellings	Year Installed	Seam Type	MAOP (psig)
424	26	Main Pass Franklinton 2 nd Loop Line	468.89	0091 – 473	0091 – 942	Saint Tammany Parish, LA	2	1967	SAW	1,200

Special Permit Inspection Area:

The *special permit inspection area* is defined as the area that extends 220 yards on each side of the centerline as listed in **Table 3 – Special Permit Inspection Area**.

Table 3 – Special Permit Inspection Area

Special Permit Inspection Area Number	Special Permit Segment(s) Included	Outside Diameter (inches)	Line Name	Start Survey Station MP - Station	End Survey Station MP - Station	Length ⁴ (miles)
1	424	26	Main Pass Franklinton 2 nd Loop Line	0064 – 1254	0092 – 2518	27.21

The *special permit inspection areas* are in Saint Bernard, Saint Tammany, and Orleans Parishes, Louisiana.⁵

Public Notice:

On May 5, 2017, PHMSA posted a notice of this special permit request in the Federal Register (82 FR 21298) with a closing date of June 5, 2017. PHMSA received one (1) public comment concerning this special permit request through June 5, 2017.

PHMSA received one (1) comment from the Pipeline Safety Trust (PST) on this application. The comment disagrees with SNG that avoidance of a blowdown due to pipe replacement should be considered a safety or environmental benefit of granting a special permit. PST argues avoidance of a pipeline blowdown should not justify an operator not replacing noncompliant pipe. PST states that pipeline segment blowdown avoidance should not be a deciding factor in

³ On February 3, 2022, SNG rescinded requested *special permit segments number 425 and 426*. These segments were withdrawn at the request of PHMSA.

⁴ If the *special permit inspection area* footage does not extent from launcher to receiver then the *special permit inspection area* would need to be extended.

⁵ The *special permit inspection area* includes the *special permit segment*.

whether to waive important safety regulations like pipe wall thickness dimensions and strength. PST next argues the draft environmental assessment (DEA) included with the application does not provide a complete comparison of the effects of granting or denying the permit. Next, PST states that the special permit application fails to provide an explanation of the unique circumstances that make the regulation necessary or inappropriate. Finally, PST states that the operator has not provided rationale for the continuous requests for special permits and at what point pressure reduction or pipe replacement to comply with 49 CFR 192.611 should be required.

PHMSA agrees that the requirements regarding pipe wall thickness dimensions and strength are important safety requirements. PHMSA uses strict criteria when determining whether class location waivers (special permits) will provide an equivalent level of safety to people and the environment as the pipeline safety regulations, and that criteria does not include the consideration of avoidance of blowdowns.⁶ Please see the Federal Register Notice, “Pipeline Safety: Development of Class Location Change Waiver Criteria,” (69 FR 38948) for detailed description of the criteria, as well as the unique circumstances class changes present for pipeline operators that warrant waivers.

PHMSA has reviewed this special permit application to ensure the special permit conditions address pipeline safety and integrity threats to the pipeline in the *special permit segment* and *special permit inspection area*. Based on that analysis, PHMSA has determined that the operator has documentation supporting suitability for continued pipeline operations to remain in service and will be subject to the pressure testing, material documentation, and other additional safety conditions of the permit. The special permit conditions require that SNG provide a systematic program to review and remediate the pipeline for safety concerns in its Operations and Maintenance (O&M) Manual and procedures.

PHMSA also notes that SNG must follow current Federal, state, and local regulations for emissions mitigation, including for natural gas (methane) emissions when integrity assessments, repairs, or pressure testing is required on the *special permit segment*.

⁶ See Pipeline Safety: Development of Class Location Change Waiver Criteria, 69 FR 38948, June 29, 2004.

The Final Environmental Assessment (FEA) addresses PST's argument that the DEA⁷ was not complete. Finally, 49 CFR 190.341 does not limit an operator to how many miles of pipe that it can submit for special permit consideration, which includes a Class 1 to Class 3 location change.

The SNG special permit application letter, Federal Register notice, FEA, Finding of No Significant Impact, and all other pertinent documents are available for review in Docket No. PHMSA-2016-0159 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 applications for class location change waivers, now being granted or denied through a special permit. First, certain threshold requirements should be met on a pipeline *special permit segment* for a class location change special permit to be granted. 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 No. PHMSA–RSPA-2004-17401. Third, special permits will only be granted when pipe conditions and active integrity management provide a level of safety greater than or equal to a pipe replacement or pressure reduction. The operator's Federal pipeline safety regulation compliance history is also evaluated as part of the criteria matrix for acceptability prior to issuance of a special permit.

Threshold Requirements: Each of the threshold requirements published by PHMSA in the June 29, 2004, Federal Register notice is discussed below regarding the SNG special permit request.

- 1) No pipeline segments in a class location changing to Class 4 location will be considered.
 - This special permit request is for one (1) *special permit segment* on SNG's 26-inch diameter Main Pass Franklinton 2nd Loop Line Pipeline located in Saint Tammany Parish, Louisiana, where a change has occurred from a Class 1 location to a Class 3 location.

⁷ The DEA and FEA can be found under Docket No. PHMSA-2016-0158 on www.regulations.gov.

- SNG meets this requirement.
- 2) No bare pipe will be considered.
 - The *special permit segment* is externally coated with coal tar enamel.
 - SNG meets this requirement.
 - 3) No pipe containing wrinkle bends will be considered.
 - There are no reported wrinkle bends in the *special permit segment*.
 - SNG meets 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 segment* operates at or below 72% SMYS.
 - SNG meets this requirement.
 - 5) Records must be produced that show a hydrostatic test to at least 1.25 x MAOP. The records should include test pressure, year of the test, test duration, and pressure test percent of MAOP for each pipeline:
 - The *special permit segment* was pressure tested to 1,681 psig in 1967 for the 1,200 psig MAOP, which is a pressure test factor of 1.40.
 - SNG meets this requirement.
 - 6) Inline inspection (ILI) must have been performed with no significant anomalies identified that indicate systemic problems such as SCC.
 - SNG ran a high-resolution magnetic flux leakage (HR-MFL) ILI for corrosion and deformation ILI for denting.
 - SNG has met this requirement.
 - 7) Criteria for consideration of a class location change waiver, being considered through the special permit, 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 on either side of the *waiver segment (special permit segment)*.
 - A special permit would be contingent upon SNG's incorporation of the *special permit segment* in its written integrity management program as a covered segment in a high consequence area in accordance with 49 CFR 192.903.

Criteria Matrix: The data submitted by SNG for the *special permit segment* has been compared to the class location change special permit criteria matrix.

- The *special permit segment* falls in the *probable acceptance* column of the criteria matrix for:
 - Design stress, depth of pipe cover, test pressure, test failures, local geology, type of service, pressure fluctuations, safety related conditions, direct assessment, ILI type, and damage prevention program.
- The *special permit segment* falls in the *possible acceptance* column of the criteria matrix for:
 - Pipe manufactured in 1967, pipe material and toughness, pipe coating type (may shield cathodic protection (CP)), CP, HCA program, welds, and ILI program.
- The *special permit segment* falls in the *requires substantial justification* column of the criteria matrix for:
 - The *special permit segment* has coal tar enamel coating which may shield CP when disbonded, causing SCC.⁸

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 segment* and *special permit inspection area*. 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, CP 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 CP

⁸ Two (2) types of SCC are found on pipelines: High pH (9 to 11) SCC and near-neutral pH (6 to 8) SCC. Coal tar and asphalt coatings that are disbonded are more prone to have SCC.

system to be ineffective. PHMSA has carefully designed a comprehensive set of conditions that SNG must implement to comply with this special permit.

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

From January 1, 2011, through January 31, 2022, SNG was cited in four (4) enforcement actions with a total of \$72,900 in assessed civil penalties. PHMSA issued one (1) Notice of Amendment, one (1) Notice of Probable Violation, and two (2) Warning Letters to SNG. **Tables 4 and 5** below show PHMSA’s enforcement actions and civil penalties for SNG:

Table 4: SNG Enforcement Matters from January 1, 2011, through January 31, 2022						
Status	Corrective Action Order	Notice of Amendment	Notice of Probable Violation	Safety Order	Warning Letter	Total
CLOSED	0	1	1	0	2	4
OPEN	0	0	0	0	0	0
Total	0	1	1	0	2	4

Table 5: SNG Enforcement Civil Penalty Status January 1, 2011, through January 31, 2022				
Proposed	Awaiting Order	Assessed	Withdrawn/Reduced	Collected
\$72,900	\$0	\$72,900	\$0	\$72,900

Summary of Enforcement Findings for SNG: SNG had 49 CFR Part 192 enforcement actions that included usage of definitions, supports and anchors, design of pressure relief or limiting devices, external corrosion control monitoring, internal corrosion control, procedures for O&M, patrolling transmission lines, record keeping for transmission lines, compressor stations, valve maintenance, and integrity management. Below are the Part 192 code sections cited in the enforcement actions against SNG.

- 49 CFR 192.3, 192.161, 192.199, 192.465, 192.475, 192.605, 192.705, 192.709, 192.735, 192.745, and 192.911.

Table 6 below shows PHMSA’s enforcement actions and civil penalties for SNG and the specific 49 CFR Part 191 and 192 violations:

Table 6: Summary of Enforcement Findings from SNG January 1, 2011, through January 31, 2022					
Notice of Amendment					
Integrity Management	7	OME Procedural Manual	4		
Notice of Amendment Total:					11
Notice of Probable Violation					
Corrosion Control	2	Operation and/or Maintenance	1	OME Procedural Manual	2
Integrity Management	3	Design	2		
Notice of Probable Violation Total:					10
Warning Letter					
Design	1	Operation and/or Maintenance	2		
Notice of Amendment Total:					3
Grand Total:					24

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

From January 1, 2011 through January 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), Tejas Pipeline (Tejas), Natural Gas Pipeline of America (NGPL), Southern Natural Gas Company (SNG), and Tennessee Gas Pipeline Company (TGP) pipeline systems. PHMSA issued sixteen (16) Notice of Amendments, twenty-one (21) Notices of Probable Violations, twenty (20) Warning Letters, one (1) Safety Order, and six (6) Corrective Action Orders to Kinder Morgan.

Tables 7 and 8 below show PHMSA’s enforcement actions and civil penalties for Kinder Morgan on these pipeline systems – CIG, EPNG, Tejas, NGPL, SNG, and TGP with operator identification numbers (OPID#) 19160, 18516, 2564, 4280, 13120, and 4900.

**Table 7: Kinder Morgan Enforcement Matters from
January 1, 2011, through January 31, 2022**

Status	Corrective Action Order	Notice of Amendment	Notice of Probable Violation	Safety Order	Warning Letter	Total
CLOSED	5	16	21	1	21	64
OPEN	3	1	1	0	0	5
Total	8	17	22	1	21	69

**Table 8: Kinder Morgan Enforcement Civil Penalty Status
January 1, 2011, through January 31, 2022**

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

Summary of enforcement findings for CIG, EPNG, Tejas, NGPL, SNG, and TGP: The type of 49 CFR Part 192 enforcement violations against Kinder Morgan on these six (6) pipeline systems from January 1, 2011 through January 31, 2022 included reporting, design, welding, compliance with specifications or procedures, corrosion control, operations and maintenance procedures, continuing surveillance, public awareness, emergency plans, maximum allowable operating pressure, control room management, relief devices, maintenance of valves, qualification of operating personnel, and integrity management:

- 49 CFR 191.5, 191.14, 191.15, 191.22, 191.25, 191.27, 192.12, 192.14, 192.161, 192.199, 192.225, 192.227, 192.229, 192.303, 192.459, 192.463, 192.465, 192.469, 192.475, 192.479, 192.481, 192.603, 192.605, 192.613, 192.615, 192.616, 192.619, 192.625, 192.631, 192.705, 192.706, 192.707, 192.709, 192.713, 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 9 below gives a complete summary of the findings and the specific 49 CFR Part 191 and 192 violation:

Table 9: Summary of Enforcement Findings for CIG, EPNG, Tejas, NGPL, SNG, and TGP January 1, 2011 through January 31, 2022					
Notice of Amendment					
OME Procedural Manual	11	Operation and/or Maintenance	2	Operator Qualification	3
Public Awareness	8	Reporting	3	Transportation of Gas	5
Integrity Management	10	Control Room Management	4	Construction	1
Welding of Steel in Pipelines	3				
Notice of Amendment Total:					50
Notice of Probable Violation					
Corrosion Control	13	OME Procedural Manual	14	Operation and/or Maintenance	26
Operator Qualification	7	Public Awareness	2	Reporting	5
Integrity Management	10	Control Room Management	1	Welding of Steel in Pipelines	1
Design	2				
Notice of Probable Violation Total:					81
Warning Letter					
Corrosion Control	10	OME Procedural Manual	9	Operation and/or Maintenance	31
Operator Qualification	2	Public Awareness	4	Reporting	1
Transportation of Gas	1	Integrity Management	1	Design	1
Notice of Amendment Total:					60
Grand Total:					191

Findings:

Based on the information submitted by SNG and PHMSA’s analysis of the technical, operational, and safety issues, PHMSA finds that granting this special permit to SNG to operate the *special permit segment* on the 26-inch diameter Main Pass Franklinton 2nd Loop Line Pipeline located in Saint Tammany Parish, Louisiana, at an MAOP of 1,200 psig in a Class 1 to 3 location change segment would not be inconsistent with pipeline safety. This special permit

grant is based upon SNG's implementation of the special permit conditions for identifying, assessing, and remediating threats to the pipeline which include threats to the pipe body, weld seams and girth welds, and the cause of these integrity threats. This permit will require SNG to implement additional conditions on the operations, maintenance, and integrity management of the *special permit segment* and *special permit inspection area*.

Completed in Washington DC on: April 11, 2022

Prepared by: PHMSA - Engineering and Research Division

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