

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION**

Special Permit Analysis and Findings

Class 1 to Class 3 Locations

Special Permit Information:

Docket Number: PHMSA-2020-0005
Requested By: Colorado Interstate Gas Company, LLC
Operator ID#: 2564
Original Date Requested: December 23, 2019
Original Issuance Date: August 4, 2022
Effective Dates: August 4, 2022 to August 4, 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 Colorado Interstate Gas Company, LLC (CIG),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. CIG 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 Class 3 locations.

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 Colorado Interstate Gas Company, LLC is owned by Kinder Morgan, Inc.

Pipeline System Affected:

This special permit application applies to the CIG request for a waiver of the class location change requirements in 49 CFR 192.611(a) and (d) and 192.619(a) for approximately 0.049 miles of gas transmission pipelines located in Sweetwater County, Wyoming.

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)	Minimum Test Pressure (psig)	Pressure Test Factor
0155-A	20	1992	HF-ERW	Tape	X70	0.219	1,100	1,287	1.28
0233-A	24	2006	HF-ERW	Fusion Bonded Epoxy	X70	0.353	1,480	2,066	1.44

Note: HF-ERW is high frequency-electric resistance welding pipe seam type.

Without this special permit, 49 CFR 192.611(a) would require CIG 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 23, 2019, CIG 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 segments*, where class location changes have occurred from the original Class 1 to Class 3 on the 20-inch diameter 0155-A Uinta Basin Lateral (Line 0155-A) and the 24-inch diameter Line 0233-A Wic-Piceance Basin Lateral (Line 0233-A) Pipelines located in Sweetwater County, Wyoming.

Special Permit Segments:

This special permit applies to the *special permit segments* described and defined as follows, using the CIG survey station (SS) references as detailed in **Table 2 – Special Permit Segments**.

Table 2 – Special Permit Segments

Special Permit Segment Number (KM #)	Outside Diameter (inches)	Line Name	Length (feet)	Start Survey Station (MP - SS)	End Survey Station (MP - SS)	County or Parish, State	No. Dwellings	Year Installed	Seam Type	MAOP (psig)
1 (KM 551)	20	0155-A	112.81	00 – 443	00 – 556	Sweetwater, WY	2	1992	HF-ERW	1,100
2 (KM 552)	24	0233-A	147.24	00 – 195	00 – 343	Sweetwater, WY	2	2006	HF-ERW	1,480

Special Permit Inspection Areas:

The *special permit inspection areas* are defined as the areas that extends 220 yards on each side of the centerline as defined and listed in **Table 3 – Special Permit Inspection Areas**.

Table 3 – Special Permit Inspection Areas

Special Permit Inspection Area Number	Special Permit Segment(s) Included	Outside Diameter (inches)	Line Name	Master Segment Name	Start Survey Station (MP - SS)	End Survey Station (MP - SS)	Length ³ (miles)
1	1 (KM 551)	20	0155-A	Wamsutter to Greasewood	00 – 222	138 – 2131	138.40
2	2 (KM 552)	24	0233-A	Wamsutter to Snake River C/S	00 - 0	54 – 1432	54.13

Public Notice:

On December 8, 2020, PHMSA posted a notice of this special permit request in the Federal Register (85 FR 79074) with a closing date of January 7, 2021. PHMSA received no comments on this special permit application during the comment period.

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 segments* and *special permit inspection areas*. The special permit will require CIG’s Operations and Maintenance (O&M) Manual and Procedures to provide a systematic program to review and remediate the pipeline for safety concerns. Additional operational integrity reviews and remediation requirements will be required by this special permit for these *special permit segments* for Class 1 to 3 location changes.

³ If the *special permit inspection area* footage does not extend from launcher to receiver then the *special permit inspection area* would need to be extended.

The CIG special permit application letter, Federal Register notice, Final Environmental Assessment and Finding of No Significant, special permit with conditions, special permit analysis and findings document, and all other pertinent documents are available for review in Docket No. PHMSA-2020-0005 in the Federal Docket Management System (FDMS) located on the internet 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 (IM) 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 IM provides 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 for the CIG 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 the *special permit segments* on the Line 0155-A and Line 0233-A Pipelines, where a change has occurred from a Class 1 location to a Class 3 location.
 - CIG has met this requirement.
- 2) No bare pipe will be considered.
 - The *special permit segments* are externally coated with tape or fusion bonded epoxy.
 - CIG has met this requirement.
- 3) No pipe containing wrinkle bends will be considered.

- There are no wrinkle bends in the *special permit segments*.
 - CIG 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.
 - CIG has met this requirement.
- 5) Records must be produced that show a hydrostatic test to at least 1.25 times MAOP and 90% of SMYS.
- *Special permit segment 1 (KM 551)* on the Line 0155-A Pipeline was pressure tested in 1992 at 1,407 psig for 8 hours.
 - *Special permit segment 2 (KM 552)* on the Line 0233-A Pipeline was pressure tested in 2006 at 2,066 psig for 8 hours.
 - CIG has met this requirement.
- 6) Inline inspection (ILI) must have been performed with no significant anomalies identified that indicate systemic problems such as stress corrosion cracking (SCC).
- CIG ran ILI tools on the Line 0155-A Pipeline in 2013.
 - CIG ran ILI tools on the Line 0233-A Pipeline in 2018.
 - CIG has had no SCC findings or failures.
 - CIG 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 CIG's incorporation of the *special permit segments* in its written IM program as covered segments in a high consequence area in accordance with 49 CFR 192.903 and to assess and remediate threats to the *special permit inspection areas*.

Criteria Matrix: The data submitted by CIG for the *special permit segments* have been compared to the class location change special permit criteria matrix and are as follows:

- The *special permit segments* fall in the *probable acceptance* column of the criteria matrix for:
 - Design stress, test failures, pressure fluctuations, safety related condition reports, program, ILI type, direct assessment, coating assessment, and damage prevention.
- The *special permit segments* fall in the *possible acceptance* column of the criteria matrix for:
 - Class 1 to 3 location, pipe manufacture, pipe girth welds, pipe coating, test pressure, depth of cover, local geology, leaks and failures, service, cathodic protection (CP), ILI timeframe, and inspection findings.
- The *special permit segments* fall in the *requires substantial justification* column of the criteria matrix for:
 - Kinder Morgan, Inc. overall enforcement findings fall in the *requires substantial justification category*. CIG's 11-year enforcement findings do not fall within this category.
 - This special permit requires CIG to implement the special permit conditions that include safety requirements on the operations, maintenance, and integrity management of the *special permit segments (0.049 miles)* and the *special permit inspection areas (192.53 miles)*. Therefore, the safety benefits are obtained beyond the portion of the pipeline that experienced a class location change.
 - CIG will be required to submit an annual report for this special permit on integrity threats to the pipeline in the *special permit segments* and the *special permit inspection 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 design 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 system to be ineffective. PHMSA has carefully designed a comprehensive set of conditions that CIG must implement to comply with this special permit.

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

During January 1, 2011 through January 31, 2022, CIG was cited in five (5) enforcement actions. PHMSA issued two (2) Notices of Amendment, two (2) Warning Letters, and one (1) Notice of Probable Violation to CIG. **Tables 4 and 5** below show PHMSA’s enforcement actions and civil penalties for CIG:

Table 4 – CIG 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	2	1	0	2	5
OPEN	0	0	0	0	0	0
Total	0	2	1	0	2	5

Table 5 – CIG Enforcement Civil Penalty Status January 1, 2011 through January 31, 2022				
Proposed	Awaiting Order	Assessed	Withdrawn/Reduced	Collected
\$198,000	\$0	\$154,800	\$43,200	\$154,800

Summary of Enforcement Findings for CIG includes: The type of 49 CFR Part 192 enforcement violations against CIG from January 1, 2011, through January 31, 2022, included reporting, welding, conversion of service, operations and maintenance procedures, records, and IM as listed below:

- 49 CFR 191.5, 192.14, 192.225, 192.227, 192.452, 192.603, 192.605, 192.933, and 192.935.

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

Table 6 – Summary of Enforcement Findings for CIG January 1, 2011 through January 31, 2022					
Notice of Amendment					
OME Procedural Manual	2	Reporting	1	Integrity Management	1
Welding of Steel in Pipelines	2	Transportation of Gas	1		
Notice of Amendment Total:					7
Notice of Probable Violation					
Integrity Management	3	Operation and/or Maintenance	2		
Notice of Probable Violation Total:					5
Warning Letter					
Integrity Management	1	Operation and/or Maintenance	1		
Warning Letter Total:					2
Grand Total:					14

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

From January 1, 2011, through January 31, 2022, Kinder Morgan, the operator of CIG, 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 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, NGPL, SNG, Tejas, and TGP with operator identification numbers (OPID#) 2564, 4280, 13120, 18516, 4900, and 19160.

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, NGPL, SNG, Tejas, 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 IM:

- 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 CIG and PHMSA’s analysis of the technical, operational, and safety issues, PHMSA finds that granting this special permit to CIG to operate the *special permit segments* on the 20-inch diameter Line 0155-A and 24-inch diameter Line 0233-A Pipelines in Sweetwater County, Wyoming, for approximately 0.049 miles of Class 1 location pipe in a Class 3 location is consistent 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 CIG properly implements the special permit conditions, CIG will be required to give PHMSA an annual review of their compliance with the special permit.

PHMSA finds that no significant negative impact to human safety and the environment will result from the issuance and full implementation of a special permit that waives the requirements of 49 CFR 192.611 for class location changes to a Class 3 location. This special permit requires CIG 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*. CIG will be required to implement the special permit conditions in the *special permit segments* and *special permit inspection areas*, which include areas along the pipeline where periodic assessment is not required by 49 CFR Part 192.

Completed in Washington DC on: August 4, 2022

Prepared by: PHMSA - Engineering and Research Division

Final Page of the Special Permit Analysis and Findings