U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
SPECIAL PERMIT – Conversion to Gas Service

Special Permit Information:

Docket Number:	PHMSA-2020-0040
Requested By:	Gulf South Pipeline Company, LP
Operator ID#:	31728
Date Requested:	March 17, 2020
Original Issuance Date:	July 24, 2020
Effective Date:	July 24, 2020
Code Section(s):	49 CFR 192.14(a)

Grant of Special Permit:

By this order, subject to the terms and conditions set forth below, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS),[1] grants this special permit to Gulf South Pipeline Company, LP (GSPC)[2]. This special permit waives compliance with the 49 Code of Federal Regulations (CFR) 192.14(a) for the conversion to natural gas transmission service and grants that GSPC conduct alternative safety measures in-lieu of hydrostatically pressure testing the Index 818-9 Pipeline. This special permit requires GSPC to implement additional conditions for the operations, maintenance, and integrity management (IM) of the Index 818-9 Pipeline.

I. Purpose and Need:

The Index 818-9 Pipeline is an existing 61.1-mile, 16-inch diameter pipeline that GSPC will convert from carbon dioxide service (49 CFR Part 195) to natural gas service (49 CFR Part 192)

[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] GSPC is a wholly-owned, subsidiary of Boardwalk Pipeline Partners, LP.

for approximately 57.7 miles, with a 3.4-mile portion of the pipeline to be idled and physically separated from the ***special permit segment*** as defined below. The Index 818-9 Pipeline will transport natural gas from a point near Heidelberg, Mississippi to the Kemper County power plant, northwest of Daleville, Mississippi. The Index 818-9 Pipeline was installed in 2013.

The Index 818-9 Pipeline was hydrostatically tested to a minimum pressure of 3,726 pounds per square inch gauge (psig) for eight (8) hours in 2013. The test pressure was performed at a minimum of 90 percent (%) of the pipeline specified minimum yield strength (SMYS). There were no hydrostatic test failures.

The Federal pipeline safety regulations in 49 CFR 192.14(a) require a pipeline to be pressure tested when converting to natural gas service. This special permit waives the hydrostatic pressure test requirement for the ***special permit segment*** being converted from carbon dioxide service to natural gas transmission service and requires GSPC to implement the conditions in this special permit.

II. Special Permit Segments:

Jasper, Clarke, Lauderdale, and Kemper Counties, Mississippi

This special permit applies to the ***special permit segment*** defined using the GSPC survey station (SS) references as follows:

- ***Special permit segment*** – Index 818-9 Pipeline - approximately 57.7 miles, SS 0+00 to SS 3044+12.

  The ***special permit segment*** is in Jasper, Clarke, Lauderdale, and Kemper Counties, Mississippi and will operate at a maximum allowable operating pressure (MAOP) of 1,480 psig, which is a maximum stress of 37% of the SMYS.
- The entire ***special permit segment*** must be treated as a high consequence area (HCA).

PHMSA grants this special permit for the ***special permit segment*** based on the findings set forth in the "*Final Environmental Assessment and Finding of No Significant Impact*" and the "*Special Permit Analysis and Findings*" documents, which can be read in their entirety in Docket No. PHMSA-2020-0040 in the Federal Docket Management System located on the internet at www.regulations.gov.

III. Conditions:

PHMSA grants this special permit subject to GSPC implementing the following conditions on the ***special permit segment*** as detailed below:

1. **General Conditions and Maximum Allowable Operating Pressure**:
    a) The special permit conditions must be included into GSPC Operations and Maintenance (O&M) Procedures in accordance with 49 CFR 192.603 and 192.605.
    b) GSPC must operate the ***special permit segment*** at or below an MAOP of 1,480 psig.
    c) The ***special permit segment*** must be capable of inline inspection (ILI) in accordance with 49 CFR 192.150.

2. **Integrity Management Program**: GSPC must incorporate the requirements of this special permit into its written IM program and standard operating procedures (SOPs).[3]
    a) GSPC must conduct a baseline assessment of the ***special permit segment*** using high resolution magnetic flux leakage (HR-MFL) and high resolution (HR) Deformation ILI tools within twelve (12) months after the grant of this special permit.
    b) GSPC must conduct integrity re-assessments in accordance with the 49 CFR 192.939(a) assessment intervals using in-line inspection tools along the ***special permit segment*** and in compliance with 49 CFR Part 192, Subpart O – IM regulations.
    c) GSPC must treat the ***special permit segment*** as a "covered segment" in a "HCA" in accordance with 49 CFR Part 192, Subpart O. Reassessments of the ***special permit segment*** using HR-MFL and HR Deformation ILI must be conducted at the frequency specified for HCAs in 49 CFR 192, Subpart O.
    d) If GSPC identifies threats within the ***special permit segment*** that require running additional ILI tools, pursuant to 49 CFR Part 192, Subpart O, such as for crack

[3] Pipeline operating procedures such as GSPC SOPs are required by 49 CFR 192.603(b) and 192.605.

detection[4] or pipe movement from soil or geologic stresses, GSPC must use the appropriate ILI tools or other evaluation methods for pipeline assessments.

3. **Anomaly Response and Repair**:

   a) **General**: GSPC must account for ILI tool tolerance and corrosion growth rates within the scheduled response times and repairs, and must document and justify the values used.

      i) GSPC must demonstrate ILI tool tolerance accuracy for each ILI tool run by usage of calibration excavations[5, 6] and unity plots that demonstrate ILI tool accuracy to meet the tool accuracy specification provided by the vendor (typical for depth within +/- 10% accuracy for 80% of the time). GSPC must incorporate ILI tool accuracy by ensuring that each ILI tool service provider determines the tolerance of each tool and includes that tolerance in determining the size of each anomaly feature reported to GSPC. GSPC must compare previous indications to current indications that are significantly different. If a trend is identified where the tool has

[4] "Pipe Crack" activity shall be defined as over both 20% wall thickness depth.

[5] ILI tool calibration excavations may include previously excavated anomalies or recent anomaly excavations with known dimensions that were field measured for length, depth, and width, externally re-coated, CP maintained, and documented for ILI calibrations prior to the ILI tool run. ILI tool calibrations must use ILI tool run results and anomaly calibrations from either the ***special permit segment*** or from the complete ILI tool run segment, if the continuous ILI segment is longer than the ***special permit segment.*** A minimum of four (4) calibration excavations must be used for unity plots or as an alternative a minimum of one (1) calibration excavation and compliance with API 1163-2013, In-Line Inspection Systems Qualification Standard (API 1163), Level 1 criteria must be used. For API 1163, Level 1 criteria to be used, all anomalies greater than 20-percent wall loss must be excavated and remediated unless Director, PHMSA Central Region gives GSPC a "No Objection" to an alternative ILI tool calibration procedure (*see* Footnote 6).

[6] Other known and documented pipeline features that are appropriate for the type ILI tool used may be used as calibration excavations for ILI tool calibration with technical documentation of their validity. To use other known and documented pipeline features as calibration excavations for ILI tool calibration GSPC must submit a plan for using known and documented pipeline features as calibration excavations to, and receive a "No Objection" from the Director, PHMSA Central Region, prior to performing the ILI tool calibration using pipeline features. PHMSA must reply to GSPC within 90-days of GSPC's request. The plan must include at least the following information: **(1)** reason that known and documented pipeline features must be used in place of anomalies on the pipelines; the pipeline features that will be used for the ILI tool calibration, and the technical justification for using the pipeline features for ILI tool calibration; and **(2)** submit a report to the Director, PHMSA Central Region and to the Director, PHMSA Engineering and Research with the results of the use of pipeline features for the ILI tool calibration that includes technical documentation establishing the validity of using the pipeline features for the ILI tool calibration. GSPC must submit the report to PHMSA within 90-days after completion of the ILI tool calibration.

been consistently over-calling or under-calling, the remaining ILI features must be re-graded accordingly.

ii) The unity plots must show actual anomaly depth versus predicted depth.

iii) ILI tool evaluations for metal loss must use "6t x 6t"[7] interaction criteria for determining anomaly failure pressures and response timing.

iv) Discovery date[8] must be within 150 days of any ILI tool run for each type of ILI tool (e.g. HR-geometry, HR-deformation or HR-MFL tools).

b) **Dents**: GSPC must repair dents in the ***special permit segment*** in accordance with the 49 CFR 192.933 repair criteria. The ***special permit segment*** must have a HR deformation ILI as part of the initial ILI. The timing for these dent repairs should follow the GSPC O&M Manual but must be no longer than one (1) year after discovery or the timing intervals in 49 CFR 192.933(d), whichever is shorter.

c) **Repair Criteria and Response Time for ILI Results**: The following provisions provide the required timing for excavation and investigation of anomalies based on ILI results. GSPC must evaluate ILI data by using either the ASME Standard B31G, "*Manual for Determining the Remaining Strength of Corroded Pipelines*",[9] the modified B31G (0.85dL) or R-STRENG[10] for calculating the predicted failure pressure ratio (FPR) to determine corrosion anomaly responses.

The ***special permit segment*** baseline assessment and first reassessment anomaly findings must be remediated in accordance with the below criteria, or the timing intervals in 49 CFR 192.933(d) for other threats, whichever timing interval is shorter or more stringent. Thereafter, subsequent reassessments after the first reassessment must be remediated in accordance with 49 CFR Part 192 criteria for either HCAs or moderate consequence areas, as applicable.

i) **Immediate response**: Any anomaly within the ***special permit segment*** that meets either: (l) a failure pressure ratio (FPR) equal to or less than 1.25; or

[7] "6t" means pipe wall thickness times six.

[8] Discovery date is the day, month and year that an Operator receives the ILI tool run results from the ILI tool service provider.

[9] The applicable edition incorporated by reference is listed in 49 CFR 192.7.

[10] The applicable edition incorporated by reference is listed in 49 CFR 192.7.

(2) an anomaly depth equal to or greater than 70% wall thickness loss.

ii) **<u>One-year response</u>**: Repair any anomaly in the ***special permit segment*** that meets either: (l) a FPR less than or equal to 1.39 in a Class 1 location; (2) FPR less than or equal to 1.67 in a Class 2 location; (3) a FPR less than or equal to 2.00 in a Class 3 or 4 location; or (4) an anomaly depth greater than 40% of pipe wall thickness.

iii) **<u>Monitored response</u>:** Any anomaly within the ***special permit segment*** that meets both: (1) a FPR greater than 1.39 in a Class 1 location; a FPR greater than 1.67 in a Class 2 location; a FPR greater than 2.00 in a Class 3 or 4 location; and (2) an anomaly depth less than or equal to 40% wall thickness loss. The schedule for the response must take tool tolerance[11] and corrosion growth rates into account.

iv) **<u>Special permit segment – *Crack Type Anomalies*</u>** - All cracking exceeding 30% of the pipe wall thickness, having a FPR below 1.39, or having defects that meet the 49 CFR Part 192 requirements must be remediated within 180 days of discovery.[12, 13]

4. **<u>Close Interval Surveys</u>**: GSPC must perform a close-interval survey (CIS)[14] and remediate[15] any areas of inadequate cathodic protection in the ***special permit segment*** within one (1) year after the grant of this special permit. If environmental permitting or right-of-way factors beyond GSPC's control should prevent the completion of the CIS

[11] Tool tolerance shall be applied only to FPR calculations, and not to the anomaly depth criteria.

[12] Should any cracking anomalies above 30% of the pipe wall thickness be found in the ***special permit segment***, GSPC must remediate the cracks or have a crack anomaly evaluation procedure submitted to the Director, PHMSA Central Region with a "No Objection" reply prior to using the crack evaluation procedure for cracking anomalies left in the pipeline above 30% of the pipe wall thickness without remediation. If GSPC does not receive a "No Objection" letter or a request for additional review time from PHMSA within 90 days of the notification, GSPC may proceed.

[13] A fracture mechanics and pressure cycling evaluation is required where an un-remediated crack of 20% or more (of wall thickness) is detected by ILI or direct inspection tools. The pipe must have toughness tests (Charpy V-notch impact values) of the pipe body, seam, or girth weld so that fracture mechanics modeling can be used, if needed.

[14] CIS must be conducted at a maximum 5-foot spacing and with interrupted on/off current.

[15] The terms "remediate" or "remediation" of pipe coating must include repair of damaged external pipe coating, where required to maintain cathodic protection of the pipeline in accordance with 49 CFR 192.463.

within one (1) year from the grant of this special permit, **(1)** GSPC must complete a CIS and perform subsequent remediation including coating repair as soon as practicable, **(2)** GSPC must submit a letter justifying the delay and provide the anticipated date of completion to the Director, PHMSA Central Region, no later than one (1) month prior to the end of one (1) year after the grant of this special permit, and **(3)** must receive a letter of "No Objection" from the Director, PHMSA Central Region, for a delay.[16] CIS remediation activities must be completed within one (1) year of the finding. GSPC must submit a written request to the Director, PHMSA Central Region, for any extended evaluation and remediation schedules. GSPC must receive a letter of "No Objection" from PHMSA prior to implementing an extended CIS and remediation interval.

5. **Close Interval Surveys – Reassessment Interval**:
    a) GSPC must perform periodic CIS of the ***special permit segment*** at the applicable reassessment interval(s) for a "covered segment" determined in concert and integrated with ILI in accordance with 49 CFR 192.937 (a) and (b) and 192.939. GSPC must not exceed the 7-calendar year reassessment interval in 49 CFR 192.939(a). CIS assessments within the reassessment interval are not required to be performed in the same year as ILI reassessments.
    b) CIS data must be integrated with ILI data. **Condition 10 (Data Integration)** – gives a complete description of data integration information that GSPC must maintain for the ***special permit segment***, including CIS and ILI data.

6. **Right-of-Way Patrols and Leakage Surveys**: In addition to the requirements of 49 CFR 192.705, GSPC must perform right-of-way patrols as follows:
    a) Aerial flyover patrols or ground patrols by walking or driving of the ***special permit segment*** right-of-way once each month, not to exceed 45 days, contingent on weather conditions. Should mechanical availability of the patrol aircraft or weather conditions become an extended issue, the ***special permit segment*** pipeline aerial flyover patrol must be completed within 60 days of the last patrol by other methods such as walking or driving the pipeline route, as feasible.

[16] PHMSA has assigned this special permit to the Director, PHMSA Central Region, but upon notice to GSPC could assign this special permit to a different PHMSA Region.

b) If the schedule for either ground patrols or aerial flyover patrols cannot be met due to circumstances beyond GSPC's control, GSPC must notify the Director, PHMSA Central Region, in writing of the reasons the schedule cannot be met and obtain a letter of "No Objection" within three (3) business days of the exceedance.

c) GSPC must conduct a leakage survey, referenced in 49 CFR 192.706, within 45 days of placing the ***special permit segment*** into gas service and thereafter in accordance with 49 CFR 192.706 leakage survey intervals.

7. **Line-of-Sight Markers**: GSPC must install and maintain line-of-sight markers within the ***special permit segment*** in accordance with 49 CFR 192.620(d)(4)(iv) to the extent practicable. Any removed or missing line-of-sight markers must be replaced within 60 days of discovering the marker has been removed or missing.

8. **Mainline Valve – Monitoring and Remote Control for Leaks or Ruptures**: Mainline valves at Mile Post 0, 17.7, 23.2, 44.9, and 56.7 in the ***special permit segment*** must be controlled by a supervisory control and data acquisition (SCADA) system and must be equipped for remote monitoring and control, or remote monitoring and automatic control. GSPC must also implement the following requirements:

   a) **Crossovers or Lateral Pipe Isolation**: If any crossover or lateral pipe for gas receipts or deliveries connects to the isolated segment between the upstream and downstream mainline valves, the nearest valve on the crossover connection(s) or lateral(s) must be isolated, such that, when all valves are closed, there is no flow path for gas to flow to the leak or rupture site (except for residual gas already in the shut-off segment);

   b) **Remote Control Valve Monitoring for Valve Status and Operating Pressure**: Mainline valves must be continuously monitored for valve status (open, closed, or partial closed/open), upstream pressure, and downstream pressure;

   c) **Point-to-Point Verification**: GSPC must conduct a point-to-point verification between SCADA displays and the mainline valve, sensors, and communications equipment in accordance with 49 CFR 192.631(c) and (e), or an equivalent verification; and

d) **Maintenance of Valves**: All valves used to isolate a leak or rupture must be maintained in accordance with this special permit and 49 CFR 192.745.

9. **Interference Currents Control**: Within one (1) year of the grant of this permit, GSPC must perform surveys and remediation, with corrosion control implemented, for induced currents from electric transmission lines and other known sources of potential interference that may affect the ***special permit segment***. An induced alternating current (AC) or direct current (DC) program and remediation plan to protect the pipeline from corrosion caused by stray currents must be written and implemented within one (1) year of the grant date of this special permit.

10. **Data Integration**: GSPC must maintain data integration of special permit condition findings and remediation in the ***special permit segment.*** Data integration must include the following information: **(1)** Pipe diameter, wall thickness, grade, and seam type; **(2)** pipe coating; **(3)** MAOP; **(4)** class location (including boundaries on aerial photography); **(5)** HCAs (including boundaries on aerial photography); **(6)** hydrostatic test pressure including any known test failures; **(7)** casings; **(8)** any in-service ruptures or leaks; **(9)** ILI survey results including HR-MFL, HR-Deformation tools; **(10)** CISs – most recent; **(11)** rectifier readings; **(12)** cathodic protection test point survey readings; **(12)** AC/DC interference surveys; **(14)** pipe coating surveys; **(15)** pipe coating and anomaly evaluations from pipe excavations; **(16)** stress corrosion cracking (SCC) excavations and findings; and **(17)** pipe exposures from encroachments.[17] Structures must be validated every three (3) years by obtaining new aerial imagery or by ground patrol.
    a) Data integration documentation and drawings, with four (4) years of prior data, must be maintained and must be submitted, if requested by PHMSA, beginning with the 2nd annual report of this special permit.
    b) Data integration must be updated on an annual basis. GSPC must conduct, at least, an annual review of integrity issues to be remediated.
    c) GSPC must maintain data integration as a composite of all applicable data elements

[17] Hydrostatic test failures, in-service ruptures, rectifier readings, cathodic protection test point survey readings, AC/DC interference surveys, pipe coating surveys, pipe coating and anomaly evaluations from pipe excavations, SCC excavations and findings, and pipe exposures from encroachments must be maintained for data integration into "IntegraLink" or a comparable data viewer. These data elements may not be on a drawing.

in a data viewer.

11. **Environmental Assessments and Permits**: GSPC must evaluate the potential environmental consequences and affected resources of any land disturbances and water body crossings needed to implement the special permit conditions for the ***special permit segment*** prior to the disturbance. GSPC must obtain all applicable (Federal, state, and local) environmental permits and adhere to all applicable (Federal, state, and local) environmental permit requirements when conducting the special permit conditions activity.

12. **Documentation**: GSPC must maintain documentation for **Conditions 1 through 11 and 13** for the ***special permit segment*** for the life of this special permit.

13. **Certification**: A GSPC senior executive officer, vice president or higher, must certify in writing the following:
    a) The ***special permit segment*** meets the conditions described in this special permit;
    b) The written manual of O&M procedures required by 49 CFR 192.603 and 192.605 for the ***special permit segment*** has been updated to include all additional operating and maintenance requirements of this special permit; and
    c) GSPC has implemented all conditions as required by this special permit.

    Within 12 months after the grant of this special permit, GSPC must send the certifications required in **Condition 13(a) through (c)** with special permit condition status and procedure completion date, compliance documentation summary, and the required senior executive signature and date of the signature to the PHMSA Associate Administrator for Pipeline Safety, with copies to Director, PHMSA Central Region; and to the Federal Register Docket (PHMSA-2020-0040) at www.regulations.gov.

IV. Limitations:

This special permit is subject to the limitations set forth in 49 CFR 190.341 as well as the following limitations:

1) PHMSA has the sole authority to make all determinations on whether GSPC has complied with the specified conditions of this special permit. Failure to comply with any condition of this special permit may result in revocation of the permit.

2) Any work plans and associated schedules for the ***special permit segment*** are automatically incorporated into this special permit and are enforceable in the same manner.

3) Failure by GSPC to submit the certifications required by **Condition 13 (Certification)** within the time frames specified may result in revocation of this special permit.

4) As provided in 49 CFR 190.341, PHMSA may issue an enforcement action for failure to comply with this special permit. The terms and conditions of any corrective action order, compliance order or other order applicable to a pipeline facility covered by this special permit will take precedence over the terms of this special permit.

5) If GSPC sells, merges, transfers, or otherwise disposes of all or part of the assets known as the GSPC ***special permit segment***, GSPC must provide PHMSA with written notice of the change within 30 days of the consummation date. In the event of such transfer, PHMSA reserves the right to revoke, suspend, or modify the special permit if the transfer constitutes a material change in conditions or circumstances underlying the permit.

AUTHORITY: 49 U.S.C. 60118(c)(1) and 49 CFR 1.97.

Issued in Washington, DC on July 24, 2020.

ALAN KRAMER MAYBERRY

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Alan K. Mayberry,

Associate Administrator for Pipeline Safety

Attachment A – 16-inch Index 818-9 Route Map with Class Locations