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

# FINAL ENVIRONMENTAL ASSESSMENT and FINDING OF NO SIGNIFICANT IMPACT

#### **Special Permit Information:**

Docket Number:	PHMSA-2019-0207
Requested By:	Gulf South Pipeline Company, LP
<b>Operator ID#:</b>	31728
Original Date Requested:	October 4, 2019
Original Issuance Date:	July 20, 2020
Effective Dates:	July 20, 2020 to July 20, 2030
Code Section(s):	49 CFR 192.611(a)

#### I. Background

The National Environmental Policy Act (NEPA), 42 U.S.C. 4321 – 4375 et seq., Council on Environmental Quality Regulations, 40 CFR 1500-1508, and U.S. Department of Transportation (DOT) Order No. 5610.1C, requires the Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety (OPS)<sup>1</sup> to analyze a proposed action to determine whether the action will have a significant impact on the human environment. PHMSA analyzes special permit requests for potential risks to public safety and the environment that could result from our decision to grant, grant with additional conditions, or deny the request. As part of this analysis, PHMSA evaluates whether a special permit would impact the likelihood or consequence of a pipeline failure as compared to the operation of the pipeline in full compliance with the Pipeline Safety Regulations. PHMSA's environmental review associated with the special permit application is limited to impacts that would result from granting or denying the special permit.

<sup>&</sup>lt;sup>1</sup> References to PHMSA in this document means PHMSA OPS.

PHMSA developed this assessment to determine what effects, if any, our decision would have on the environment.

Pursuant to 49 U.S.C. 60118(c) and 49 Code of Federal Regulations (CFR) 190.341, PHMSA may only grant special permit requests that are not inconsistent with pipeline safety. PHMSA will impose conditions in the special permit if we conclude they are necessary for safety, environmental protection, or are otherwise in the public interest. If PHMSA determines that a special permit would be inconsistent with pipeline safety or is not justified, the application will be denied.

The purpose of this final environmental assessment (FEA) is to comply with NEPA for the Gulf South Pipeline Co, LP (GSPC)<sup>2,3</sup> application for a special permit request to waive compliance from 49 CFR 192.611(a) for 214 feet (.04 miles) of a 42-inch diameter gas transmission pipeline segment located in Madison Parish, Louisiana. This FEA and finding of no significant impact (FONSI) is prepared by PHMSA to assess the pipeline special permit request, in accordance with 49 CFR 190.341, and is intended to specifically analyze any environmental impact associated with the waiver of 49 CFR 192.611(a). This permit waives 49 CFR 192.611(a) and require GSPC to implement additional requirements for the operations, maintenance, and integrity management of the .04 miles of 42-inch diameter Index 817 Pipeline located in Madison Parish, Louisiana (*special permit segment*) and 35.1 miles of 42-inch-diameter Index 817 Pipeline located in Madison Parish, Louisiana and Warren and Hinds Counties, Mississippi (*special permit inspection area*).

#### **II.** Introduction

Pursuant to 49 United States Code 60118(b) and 49 CFR 190.341, GSPC submitted an application for a special permit to PHMSA on October 4, 2019, requesting that PHMSA waive the requirements of 49 CFR 192.611(a) to permit GSPC to maintain the maximum allowable operating pressure (MAOP) of a pipe segment located in Madison, Louisiana, for which the class location has changed from Class 1 to Class 3 location. Without the special permit, 49 CFR 192.611(a) would require GSPC to replace the pipe segment or the reduce pipeline MAOP.

<sup>&</sup>lt;sup>2</sup> GSPC is a wholly-owned, subsidiary of Boardwalk Pipelines.

<sup>&</sup>lt;sup>3</sup> The PHMSA operator identification number (OPID) for GSPC is: OPID 31728.

However, pressure reduction was not a viable option for GSPC because reducing MAOP would prevent GSPC from meeting its contractual gas delivery obligations to customers. Under the special permit, GSPC would implement alternative risk control measures and integrity management procedures in the *special permit inspection area* and the *special permit segment*.

PHMSA will grant a special permit to waive certain regulatory requirements where it is consistent with pipeline safety. A special permit is typically conditioned on the performance of additional measures beyond minimum PHMSA pipeline safety regulations, in accordance with 49 CFR 190.341.

## **III. Regulatory Background**

PHMSA regulations at 49 CFR 192.611(a) require that an operator confirm or revise the MAOP of a pipe segment that is in satisfactory condition when the hoop stress of the segment is no longer commensurate with class location. Under section 192.611(a), an operator may be required to reduce the operating pressure of a pipe segment, or alternatively, may have to replace the pipe in order to maintain the MAOP. Below is the relevant text of 49 CFR 192.611(a):

# 49 CFR 192.611 Change in class location: Confirmation or revision of maximum allowable operating pressure.

(a) If the hoop stress corresponding to the established maximum allowable operating pressure of a segment of pipeline is not commensurate with the present class location, and the segment is in satisfactory physical condition, the maximum allowable operating pressure of that segment of pipeline must be confirmed or revised according to one of the following requirements:

(1) If the segment involved has been previously tested in place for a period of not less than 8 hours:

(i) The maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations, 0.667 times the test pressure in Class 3 locations, or 0.555 times the test pressure in Class 4 locations. The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(ii) The alternative maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations and 0.667 times the test pressure in Class 3 locations. For pipelines operating at alternative maximum allowable pressure per §192.620, the corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations. (2) The maximum allowable operating pressure of the segment involved must be reduced so that the corresponding hoop stress is not more than that allowed by this part for new segments of pipelines in the existing class location.

3) The segment involved must be tested in accordance with the applicable requirements of subpart J of this part, and its maximum allowable operating pressure must then be established according to the following criteria:

(i) The maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations, 0.667 times the test pressure for Class 3 locations, and 0.555 times the test pressure for Class 4 locations.

(ii) The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(iii) For pipeline operating at an alternative maximum allowable operating pressure per §192.620, the alternative maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations and 0.667 times the test pressure for Class 3 locations. The corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.

#### **IV. Purpose and Need**

GSPC requests a special permit to avoid having to replace a 214-foot *special permit segment* located on the Index 817 Pipeline in Madison, Louisiana, where the class location has changed from a Class 1 to Class 3 location. This special permit consists of one (1) *special permit segment* and would waive the requirements of 49 CFR 192.611(a) with implementation of the special permit conditions. The class location change was identified by GSPC in May 2019 as a result of regular patrolling and the gathering of information regarding activities on and near the pipeline right-of-way. The pipeline *special permit segment* and *special permit inspection area* have a maximum allowable operating pressure (MAOP) of 1,456 pounds per square inch gauge (psig). The 42-inch diameter Index 817 Pipeline was installed in 2007 and 2008. Attachments A and B on pages 32 and 33 of 33 are Index 817 Pipeline route maps showing the *special permit inspection area*.

#### V. Site Description

The 42-inch diameter Index 817 Pipeline is located in Madison Parish, Louisiana, and Warren and Hinds Counties, Mississippi. The Index 817 Pipeline extends for 240 miles beginning at a junction near Keatchie, Louisiana, where the line connects to the Index 816 Pipeline, and runs

east to Harrisville Compressor Station, where it connects to the Index 818 Pipeline. The Index 817 Pipeline was installed primarily in 2008.

The Index 817 Pipeline is located in areas consisting primarily of farmland and woodlands, with a total of 51 residences, 11 businesses and 2 outside areas in the 35.1-mile long *special permit inspection area*.

The *special permit inspection area* contains four (4) high consequence areas (HCAs). The HCAs are calculated by Method 2 (49 CFR 192.903) and are caused by 20 or more dwellings adjacent to the pipeline and within the potential impact circle, and by identified sites, as defined by 49 CFR 192.903.

# VI. Special Permit Segment and Special Permit Inspection Area

#### Madison Parish, Louisiana, and Warren and Hinds Counties, Mississippi

On the condition that GSPC complies with the terms and conditions set forth below, the special permit will waive compliance from 49 CFR 192.611(a) for 0.04 miles (214 feet) of natural gas transmission pipeline on the 42-inch diameter Index 817 Pipeline, where the class location of the line changed from a Class 1 to Class 3 location in Madison Parish, Louisiana.

This special permit will allow GSPC to maintain the current 1,456 psig MAOP in the *special permit segment*.

#### Special permit segment: Madison Parish, Louisiana.

This special permit applies to the *special permit segment* and is defined as follows using the GSPC Index 817 Pipeline survey station references:

• *Special permit segment* – Index 817 Pipeline — 214 feet (0.04 miles), from Station 9431+56 to Station 9433+70 located in Madison Parish, Louisiana.

*Special permit inspection area* is defined as the area that extends 220 yards on each side of the centerline along the entire 35.1 miles of the Index 817 Pipeline from:

Station 8898+40 at Tallulah Compressor Station in Madison Parish, Louisiana to Station 10752+83 at a point located in Hinds County, Mississippi. The Index 817 Pipeline *special permit inspection area* extends approximately 35.1 miles (185,530 feet) including

field survey equations. The *special permit inspection area* is located in Madison Parish, Louisiana, and Warren and Hinds Counties, Mississippi.

- HCAs located in the *special permit inspection area* are at the following survey stations:
  - o 2008 Index 817 003, Station 9918+57 to Station 9960+28
  - $\circ\quad 2008-Index\ 817-004,\ Station\ 10015+26\ to\ Station\ 10043+50$
  - $\circ\quad 2008-$  Index 817 006, Station 9850+98 to Station 9893+42
  - 2018 Index 817 010, Station 9615+27 to Station 9652+61

The purpose of the special permit is to waive the requirements of 49 CFR 192.611(a), allowing GSPC to maintain the existing MAOP and implement alternative risk control measures for a 35.1-mile segment of Index 817 Pipeline without having to replace existing pipe.

PHMSA grants this special permit based on the findings set forth in the "Special Permit Analysis and Findings" document, which can be read in its entirety in Docket No. PHMSA-2019-0207 in the Federal Docket Management System (FDMS) located on the internet at www.regulations.gov.

# VII. ADDITIONAL DESIGN, CONSTRUCTION, OPERATIONS & MAINTENANCE REQUIREMENTS

To provide an equivalent level of safety in the absence of either lowering the pipeline operating pressure or upgrading the pipe, this special permit has additional operations and maintenance requirements (conditions) which are intended to decrease the likelihood of a release of gas. PHMSA believes that these additional measures designed to prevent leaks and ruptures will ensure that the Special Permit is not inconsistent with pipeline safety. An overview of the special permit conditions is below:

# **Overview of the Special Permit Conditions:**

PHMSA grants this special permit subject to the following conditions:

- 1) Maximum Allowable Operating Pressure for the Special Permit:
  - a) <u>MAOP</u>: GSPC must continue to operate the *special permit segment* and *special permit inspection area* at or below the Index 817 Pipeline MAOP of 1,456 psig.

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- b) <u>Alternative MAOP</u>: GSPC must continue to implement the Alternative MAOP *special permit* conditions (PHMSA-2006-26533) for the *special permit segment* and *special permit inspection area* defined in special permit PHMSA-2019-0207.
- Integrity Management Program: GSPC must incorporate the requirements of this special permit into its written integrity management program and standard operating procedures (SOPs).
  - a) 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* and *special permit inspection area* using high resolution magnetic flux leakage (HR-MFL) and high resolution (HR) Deformation inline inspection (ILI) must be conducted at the frequency specified for HCAs in 49 CFR 192, Subpart O.
  - b) If GSPC identifies threats within the *special permit segment* and *special permit inspection area* that require running additional ILI tools, pursuant to 49 CFR Part 192, Subpart O, such as for crack detection or pipe movement from soil or geologic stresses, GSPC must use the appropriate ILI tools or other evaluation methods for pipeline assessments.
- 3) Operations and Maintenance Manual: GSPC must amend applicable sections of its operations and maintenance (O&M) Manual(s) and Procedures to incorporate the procedures, inspections, assessments, reassessments, remediation, reporting, documentation, permitting, and timing or time intervals required by the special permit conditions. The O&M Manual and Procedures must require for each condition in this special permit that requires GSPC to perform an action with respect to the *special permit inspection area* to also require that action on the *special permit segment* within such *special permit inspection area*.

#### 4) <u>Close Interval Surveys</u>:

- a) <u>CIS</u>: The *special permit segment* and *special permit inspection area* must have close interval surveys (CIS) conducted at a maximum 5-foot spacing and with interrupted on/off current to meet 49 CFR 192.463 and 192.465.
- b) <u>CIS Timing</u>: GSPC must perform periodic CIS of the *special permit segment* and *special permit inspection area* at the applicable reassessment interval(s) for a "covered segment" determined in concert and integrated with ILI in accordance with 49 CFR 192,

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Subpart O, reassessment intervals as contained in 49 CFR 192.937 (a) and (b) and 192.939. If a CIS was not conducted with the last ILI survey, it must be conducted within one (1) year of issuance of this special permit.

- c) <u>CIS Timing Delay</u>: If environmental permitting or right-of-way factors beyond GSPC's control should prevent the completion of the CIS and remediation<sup>4</sup> within six (6) months from the issuance of this special permit, the CIS and subsequent remediation including coating repair must be completed as soon as practicable. GSPC must submit a letter justifying the CIS and remediation delays, no later than one (1) month prior to the end of six (6) month interval, and must provide the anticipated date of completion to the Director, PHMSA Central Region<sup>5</sup>.
- d) <u>CIS Reassessments</u>: GSPC must perform periodic CIS of the *special permit segment* and *special permit inspection area* at the applicable reassessment interval(s) for a "covered segment" determined in concert and integrated with ILI in accordance with 49 CFR 192, Subpart O, reassessment intervals as contained in 49 CFR 192.937 (a) and (b) and 192.939. CIS assessments within the reassessment interval are not required to be performed in the same year as ILI reassessments.

#### 5) Cathodic Protection Test Stations:

- a) <u>Test Station Locations</u>: At least one (1) cathodic protection (CP) pipe-to-soil test station must be located within the *special permit segment* with a maximum spacing of ½ mile between test stations. In cases where obstructions or restricted areas prevent test station placement, the test station must be placed in the closest practical location.
- b) <u>Monitoring</u>: Annual monitoring of cathodic protection pipe-to-soil test stations must be performed to meet 49 CFR 192.463 and 192.465.

#### 6) Annual Cathodic Protection Test Station Readings:

<sup>&</sup>lt;sup>4</sup> The terms "remediate" or "remediation" of pipe coating shall include repair of damaged external pipe coating, where required to maintain cathodic protection of the pipeline in accordance with 49 CFR 192.463.

<sup>&</sup>lt;sup>5</sup> Upon notice to GSPC by the Director, PHMSA Central Region, PHMSA may change the reporting responsibilities for this special permit to another PHMSA Region Director.

- a) <u>CP Findings</u>: If any annual CP test station readings on the *special permit inspection area* fall below 49 CFR Part 192, Subpart I requirements, remediation must occur within six (6) months of the survey and must include a CIS on each side of the affected test station to the next test station. GSPC must implement corrosion system modifications that are identified through the CP test station readings and remediation findings to ensure corrosion control.
- b) <u>Remediation Timing</u>: If factors beyond GSPC's control prevent the completion of remediation within six (6) months, remediation must be completed as soon as practicable and a letter justifying the delay and providing the anticipated date of completion must be submitted to the Director, PHMSA Central Region no later than one (1) month prior to the end of the six (6) month remediation period. GSPC must receive a letter of "No Objection" letter from the Director, PHMSA Central Region prior to implementing an extended remediation interval.
- 7) **Interference Currents Control**: Control of induced alternating current (AC) from parallel electric transmission lines and other interference issues in the *special permit inspection area*, that may affect the pipeline, must be incorporated into the operations of the pipeline and addressed. An induced AC program to protect the pipeline from corrosion caused by stray currents must be in place within one (1) year of the date of this special permit.

#### 8) Anomaly Assessment and Remediation:

a) <u>General</u>: GSPC must conduct anomaly assessments using ILI that meets the assessment intervals of special permit PHMSA-2006-26533 and 49 CFR Part 192, subpart O. GSPC

must account for ILI tool tolerance<sup>6,7</sup> and corrosion growth rates in scheduled response times and repairs, and document and justify the values used.

- b) <u>Dents</u>: GSPC must repair dents to the Index 817 Pipeline in the *special permit inspection area* in accordance with 49 CFR 192.933 repair criteria. *Special permit inspection area* must have a high resolution (HR) deformation tool inspection as part of the ILI. The HR deformation ILI can be from past inspections. The timing for these dent repairs should follow GSPC's O&M Procedures but must not be longer than one (1) year after discovery.
- c) <u>Anomaly Evaluation Repair Criteria and Timing</u>: 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*" (ASME B31G)<sup>8</sup>, the modified B31G (0.85dL) or R-STRENG for calculating the predicted FPR to determine anomaly responses.
  - i) Special permit segment:
    - <u>Immediate response time repair immediately</u>:

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<sup>&</sup>lt;sup>6</sup> 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 inspection area* or from the complete ILI tool run segment, if the continuous ILI segment is longer than the *special permit inspection area*. 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 7).

<sup>&</sup>lt;sup>7</sup> Note: 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 will be used in place of anomalies on the pipeline features for ILI tool calibration. (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. GSPC must submit the report to PHMSA within 90-days after completion of the ILI tool calibration. ILI tool calibration. GSPC must submit the report to PHMSA within 90-days after completion of the ILI tool calibration.

<sup>&</sup>lt;sup>8</sup> Standards used in this special permit must be the edition incorporated by reference in 49 CFR 192.7.

• Any anomaly within a *special permit segment* that meets either: (1) a failure pressure ration (FPR) equal to or less than 1.25; (2) an anomaly depth equal to or greater than 60% wall thickness loss.

#### - One-year response:

- Any anomaly within a *special permit segment* with 'pipe operating over 56% SMYS and up through 67% SMYS' that meets either: (1) an FPR equal to or less than 1.50; or (2) an anomaly depth equal to or greater than 40% wall thickness loss.
- Any anomaly within a *special permit segment* with 'pipe operating over 67% SMYS and up through 72% SMYS' that meets either: (1) an FPR equal to or less than 1.39; or (2) an anomaly depth equal to or greater than 40% wall thickness loss.
- Any anomaly within a *special permit segment* with 'pipe operating over 72% SMYS and up through 80% SMYS' that meets either: (1) an FPR equal to or less than 1.25; or (2) an anomaly depth equal to or greater than 40% wall thickness loss.
- Any anomaly within a *special permit segment* with 'pipe operating up through 56% SMYS' that meets either: (1) an FPR equal to or less than 1.80; or (2) an anomaly depth equal to or greater than 40% wall thickness loss.

#### - Monitored response:

- Any anomaly within a *special permit segment* with 'pipe operating over 56% SMYS and up through 67% SMYS' that meets either: (1) an FPR over 1.50; or (2) an anomaly depth less than 40% wall thickness loss.
- Any anomaly within a *special permit segment* with 'pipe operating over 67% SMYS and up through 72% SMYS' that meets either: (1) an FPR over 1.39; or (2) an anomaly depth less than 40% wall thickness loss.
- Any anomaly within a *special permit segment* with 'pipe operating over 72% SMYS and up through 80% SMYS' that meets either: (1) an FPR over 1.25; or (2) an anomaly depth less than 40% wall thickness loss.

- Any anomaly within a *special permit segment* with 'pipe operating up through 56% SMYS' that meets either: (1) an FPR over 1.80; or (2) an anomaly depth less than 40% wall thickness loss.
- ii) Special permit inspection area:
  - <u>Immediate response time repair immediately</u>:
    - Any anomaly within a *special permit inspection area* that meets either: (1) an FPR equal to or less than 1.10; (2) an anomaly depth equal to or greater than 80% wall thickness loss.
  - <u>One-year and monitored response</u>:
    - The anomaly assessment remediation requirements and response time for a *special permit inspection area* must be in accordance with: (1) 49 CFR Part 192, Subpart O; (2) Special Permit PHMSA-2006-26533, Condition 43, for the Index 817 Pipeline; and (3) 49 CFR 192.620(d)(11). Whichever assessment response that has a shorter repair timing or more conservative anomaly remediation requirements must be implemented by GSPC.
    - Any within the *special permit inspection area* with a depth equal to or greater than 40% wall thickness loss must be remediated within one-year of finding the anomaly.
- Damage Prevention Program: GSPC must ensure its damage prevention program incorporates the applicable best practices of the Common Ground Alliance within the *special permit inspection area*.
- 10) <u>Annual Report to PHMSA</u>: Annually,<sup>9</sup> after the grant of this special permit, GSPC must submit an annual pipeline integrity report to the Director, PHMSA Central Region summarizing any significant integrity threats and the following items:<sup>10</sup>
  - a) In the first annual report, GSPC must describe the economic benefits of the special permit including both the costs avoided from not replacing the pipe and the added costs of the

<sup>&</sup>lt;sup>9</sup> Annual reports must be received by PHMSA by the last day of the month in which the special permit is granted. For example, the annual report for a special permit granted on July 15, 2020, must be received by PHMSA no later than July 31 each year beginning in 2021.

<sup>&</sup>lt;sup>10</sup> Annual reports must be placed by GSPC on the special permit docket - PHMSA-2019-0207 – in <u>www.regulations.gov</u>.

inspection program. Subsequent annual reports must address any changes to these economic benefits.

- b) In the first annual report, fully describe how the public benefits from energy availability. This must address the benefits of avoided disruptions as a consequence of pipe replacement and the benefits of maintaining system capacity. Subsequent reports must indicate any changes to this initial assessment.
- c) Any new integrity threats identified during the previous year in the *special permit segment*, and the results of any ILI or direct assessments performed (including any remediated anomalies with the associated wall loss, length, and unrepaired failure pressure; any un-remediated anomalies over 30% pipe wall loss and the associated wall loss, length and failure pressure; cracking found in the pipe body; weld seam or girth welds; and dents with metal loss, cracking or stress riser) during the previous year in the *special permit segment*;
- d) Summaries of any close interval surveys that resulted in low cathodic protection levels in the *special permit segment* and a remediation schedule;
- e) Any reportable incident or any leak normally indicated on the DOT Annual Report, and all repairs on the pipeline that occurred during the previous year in the *special permit segment*;
- f) Any pressure test leaks or failures with a description of the cause in the *special permit segment*;
- g) Any mergers, acquisitions, transfer of assets, or other events affecting the regulatory responsibility of the company operating the pipeline;
- h) Any emergency events that cause closure of mainline valves as described in Condition
  12, including the location (Mile Post) of valves and closure times.
- 11) *Special Permit Segment Specific Conditions*: GSPC must comply with the following requirements:
  - a) <u>Line-of-Sight Markers</u>: GSPC must install and maintain line-of-sight markers within the *special permit inspection area* in accordance with 49 CFR 192.620(d)(4)(iv) to the extent practicable. Line-of-sight markers must be installed within three (3) months of issuance of this special permit and replaced as necessary by GSPC within 30 days of discovering the marker is removed or missing.

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- b) Data Integration: GSPC must maintain data integration of all special permit condition findings and remediations in the *special permit inspection area*. 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-geometry/caliper or deformation tools; (10) CISs most recent; (11) depth of cover surveys; rectifier readings-past five years; (12) cathodic protection test point survey readings-past five years; (13) AC/DC interference surveys; (14) pipe coating surveys; (15) pipe coating and anomaly evaluations from pipe excavations; (16) stress corrosion cracking excavations and findings; and (17) pipe exposures from encroachments.<sup>11</sup> Structures must be validated every three (3) years by obtaining new aerial imagery or by ground patrol.
  - i) Data integration must be performed in accordance with 49 CFR 192.917 for threat identification, evaluation, remediation, and mitigation.
  - ii) Data integration documentation and drawings, with four (4) years of prior data, to meet Condition 11(b) must be completed and must be submitted, if requested by PHMSA, beginning with the 2<sup>nd</sup> annual report of this modified special permit.
  - iii) Data integration must be updated on an annual basis. GSPC must conduct, at least, an annual review of integrity issues to be remediated.
  - iv) GSPC must maintain data integration as a composite of all applicable data elements in a data viewer.
- c) <u>Pipeline Patrolling</u>: Pipeline patrolling must be conducted at least monthly (12 times per calendar year), not to exceed 45 days, to inspect the *special permit inspection area* for excavation activities, ground movement, wash-outs, leakage or other activities and conditions affecting the safe operation of the pipeline.
- d) <u>Environmental Assessments and Permits</u>: GSPC must evaluate the potential environmental consequences and affected resources of any land disturbances and water

<sup>&</sup>lt;sup>11</sup> 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 a comparable data viewer. These data elements may not be on a drawing.

body crossings needed to implement the special permit conditions for *special permit segment* or *special permit inspection area* prior to the disturbance. If a land disturbance or water body crossings is required, GSPC must obtain and adhere to all applicable (Federal, state, and local) environmental permit requirements when conducting the special permit conditions activity.

- e) <u>Root Cause Analysis for Failure or Leak</u>: If a leak or rupture (incident as defined by 49 CFR 191.3) occurs in any of the *special permit inspection area*, GSPC must notify the Director, PHMSA Central Region, within five (5) days of the leak or rupture. A root cause analysis must be performed to determine the cause of the failure and must be sent to the Director, PHMSA Central Region and the Director, PHMSA Engineering and Research, within 90 days of the incident. If a root cause analysis cannot be performed within 90 days of the incident, GSPC must submit to the Director, PHMSA Central Region, a request for an extension of time. GSPC must receive a letter of "no objection" from the Director, PHMSA Central Region, prior to implementing an extended timeframe to perform the root cause analysis. PHMSA will review the root cause analysis report to determine if revocation, suspension, or modification of the special permit is warranted based upon incident findings.
- 12) Mainline Valve Monitoring and Remote Control for Leaks or Ruptures: GSPC must automate the nearest existing mainline valves on both sides of the *special permit segment* for closure, or demonstrate capability to manually close the mainline valves in accordance with the requirements of this Condition 12. The mainline valves must be within a maximum 20-mile total spacing, upstream and downstream, of the *special permit segment*. GSPC mainline valves are located at Index 817 Pipeline Mile Posts 168.5 (SS 8897+01) and 183.06 (SS 9665+82). GSPC must develop and implement procedures for the isolation of each mainline valve as follows:
  - a) <u>Supervisory Control and Data Acquisition System and Remote Monitoring</u>: 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 in accordance with 49 CFR 192.620(d)(3)(iii) and the below requirements in this Condition 12;

- b) <u>Crossovers or Lateral Pipe Isolation</u>: 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). If the nearest valve for a gas receipt or delivery line to the *special permit segment* is not isolated, isolation valves must be used;<sup>12</sup>
- c) <u>Remote Control Valve Monitoring for Valve Status and Operating Pressure</u>: Mainline valves must be constantly monitored for valve status (open, closed, or partial closed/open), upstream pressure, and downstream pressure;
- d) Valve Closure for a Leak or Rupture: Closure of the appropriate valves following a pipeline leak or rupture meeting the criteria specified in this Condition 12(d)(i) must occur as soon as practicable from the time the pipeline leak or rupture location is confirmed, not to exceed 30 minutes from such confirmation;<sup>13</sup>
  - i) "Rupture" means a significant breach of a pipeline that results in a large-volume, uncontrolled release of gas. For purposes of this special permit, GSPC must treat any of the following as ruptures unless and until determined otherwise:
    - 1. A release of gas observed or reported to the operator by its field personnel, nearby pipeline or utility personnel, the public, local responders, or public authorities, and that may be representative of an unintentional and uncontrolled release event defined in paragraphs (2) or (3) of this definition;
    - 2. An unanticipated or unplanned pressure loss of 10 percent or greater, occurring within a time interval of 15 minutes or less, unless the operator has documented in advance of the pressure loss the need for a higher pressure-change threshold due to pipeline flow dynamics that cause fluctuations in gas demand that are typically

<sup>&</sup>lt;sup>12</sup> Gas delivery pipelines must have a remote-controlled shutoff valve (gate or ball valve) either at the connection to the Index 817 Pipeline or at the delivery meter station. Any gas delivery or receipt station over 5-miles in length that is connected to the Index 817 Pipeline must have a remote-controlled shutoff valve within 5-miles of the Index 817 Pipeline. For gas delivery or receipt pipelines manual shutoff valves can be used for isolation but must be closed within 30-minutes from pipeline leak or rupture confirmation.

<sup>&</sup>lt;sup>13</sup> The pipeline valve section location to be closed and isolated (if there should be a rupture) must be confirmed by GSPC through Gas Control or other field operations personnel monitoring of the appropriate pipeline pressures, pressure changes, or flow rate changes through a compressor discharge section or by location confirmation from responsible persons.

higher than a pressure loss of 10 percent in a time interval of 15 minutes or less; or

An unexplained flow rate change, pressure change, instrumentation indication, or equipment function that may be representative of an event defined in paragraph (2) of this definition.

Note: Rupture identification occurs when a rupture, as defined in this section, is first observed by or reported to pipeline operating personnel or a controller.

- ii) Within five (5) minutes of the initial notification to GSPC, GSPC must evaluate and identify a rupture, as defined above, as being either an actual leak event, rupture event or non-rupture event in accordance with operating procedures and 49 CFR 192.615.
- e) **<u>24-Hour Monitoring by Gas Control Center</u>**: The GSPC Gas Control Center must monitor the *special permit segment* 24 hours a day, 7 days a week and must confirm the existence of a leak or rupture as soon as practicable, in accordance with GSPC pipeline operating procedures;
- f) <u>Remote Monitoring of Valves</u>: GSPC must maintain remote monitoring and automatic control equipment, mainline valves, mainline valve operators, and pressure sensors in accordance with 49 CFR 192.631 and 192.745. All remote monitoring and automatic control equipment including pressure sensors must have backup power to maintain communications and control to the GSPC Gas Control Center during power outages;
- g) <u>Point-to-Point Verification</u>: 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;
- h) <u>Maintenance of Valves</u>: All valves used to isolate a leak or rupture must be maintained in accordance with this special permit and 49 CFR 192.745;
- i) <u>Inoperable Valves</u>: GSPC must take remedial measures to correct any valve used to isolate a leak or rupture that is found to be inoperable or unable to maintain shut-off, as follows:
  - i) Repair or replace the valve as soon as practicable but no later than six (6) months after the finding;

- ii) Designate an alternative valve within seven (7) calendar days of the finding while repairs are being made. Repairs must be completed within six (6) months; and
- iii) If valve repair or replacement 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"<sup>14</sup> from PHMSA prior to implementing the schedule change.
- j) <u>Communications</u>: GSPC must establish and maintain adequate means of communication with the appropriate public safety access point (9-1-1 emergency call center) and must notify them if there is a leak or rupture, as well other emergency responders as required in 49 CFR 192.615;
- k) <u>Notifications</u>: GSPC must immediately and directly notify the appropriate public safety access point (9-1-1 emergency call center) or other coordinating agency for the communities and jurisdictions in which the pipeline is located when a release is indicated;<sup>15</sup> and
- Operator Actions During an Emergency: GSPC must establish actions required to be taken by a pipeline controller, or the appropriate emergency response coordinator, during an emergency in accordance with these special permit conditions and as required in 49 CFR 192.615 and 192.631.
- 13) **Documentation**: GSPC must maintain the following records for each *special permit segment*:
  - a) Documentation showing that each *special permit segment* has received a 49 CFR 192.505, Subpart J, hydrostatic test for eight (8) continuous hours and at a minimum pressure of 1.25 times MAOP. If GSPC does not have hydrostatic test documentation, then the *special permit segment* must be hydrostatically tested to meet this requirement within one (1) year of receipt of this special permit.

<sup>&</sup>lt;sup>14</sup> For any special permit condition that requires GSPC to provide a notice for a "No Objection" response from PHMSA, other notice, annual report, or documentation to the Director, PHMSA Central Region.

<sup>&</sup>lt;sup>15</sup> GSPC must designate the pipeline controller or the appropriate operator emergency response coordinator in its operating procedures and train the pipeline controller or the appropriate operator emergency response coordinator for coordinating with emergency responders.

- b) Documentation (mill test reports) showing that the pipe in the *special permit segment* meets the wall thickness, yield strength, tensile strength and chemical composition of either the American Petroleum Institute Standard 5L, 5LX or 5LS, "Specification for Line Pipe" (API 5L)<sup>16</sup> approved by the 49 CFR Part 192 code at the time of manufacturing or if pipe was manufactured and placed in-service prior to the inception of 49 CFR Part 192 then the pipe meets the API 5L standard in usage at that time. Any *special permit segment* that does not have mill test reports for the pipe cannot be authorized per this special permit.
- c) Documentation of compliance with all conditions of this special permit must be kept for the applicable life of this special permit for the referenced *special permit segment* and *special permit inspection area*.
- 14) Extension of the Special Permit Segment: PHMSA may extend the original special permit segment to include <u>contiguous segments</u> of the Index 817 Pipeline up to the limits of the special permit inspection area pursuant to the following conditions. The special permit segment cannot be extended into pipe operating at over a 72% of specified minimum yield strength. GSPC must:
  - a) Provide at least 90 days advanced notice to the Director, PHMSA Central Region, and the Director, PHMSA Engineering and Research Division, of a requested extension of any Index 817 Pipeline *special permit segment* based on actual class location change and include a schedule of inspections and of any anticipated remedial actions. If PHMSA makes a written objection before the effective date of the requested *special permit segment* extension (90 days from receipt of the above notice), the requested special permit extension does not become effective.
  - b) Complete all inspections and remediation of the proposed special permit segment extension to the extent required of the original Index 817 Pipeline *special permit segment*.
  - c) Apply all the special permit conditions and limitations included herein to all future extensions.
- 15) <u>Certification</u>: A GSPC senior executive officer, vice president or higher, must certify in

<sup>&</sup>lt;sup>16</sup> Standards used for this special permit must be the edition incorporated by reference in 49 CFR 192.7.

writing the following:

- a) The *special permit segment* and *special permit inspection area* meet the conditions described in this special permit;
- b) The written manual of O&M procedures required by 49 CFR 192.605 for the GSPC Index 817 Pipeline 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 15(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-2019-0207) at <u>www.regulations.gov.</u>

## VIII. ALTERNATIVES

#### Alternative 1: "No Action" Alternative

The "no action" alternative would entail full compliance with 49 CFR 192.611(a). If the special permit application is denied, then GSPC would be required to replace the 214-foot pipe in the *special permit segment* to maintain the existing MAOP or GSPC would be required to reduce pressure on the segment. GSPC states that a pressure reduction would prevent it from meeting its contractual obligations to provide reliable transportation services to customers. GSPC also maintains that replacing the pipe would cause interruptions in customers' services and cause construction-related environmental disruption, including the release of methane, a known and potent greenhouse gas.

#### **Alternative 2: Proposed Alternative**

PHMSA will issue a special permit, allowing the pipe to continue to operate at the current 1,456 psig MAOP in the Class 3 location without replacing pipe.

The special permit will avoid adverse environmental impacts, possible construction-related inconveniences for business located near the affected area and service disruptions that would result from taking the line out of service during replacement activities.

GSPC will comply with the Federal Energy Regulatory Commission (FERC) Environmental Guidelines and all Federal, state and county permitting requirements in performing the alternative risk control activities.

#### IX. AFFECTED RESOURCES AND ENVIRONMENTAL CONSEQUENCES

# A. Affected Resources and Environmental Consequences of the Proposed Action and the No Action Alternatives

*Aesthetics:* The Proposed Action would have no impact on the visual character of the *special permit segment* right-of-way. Pipe replacement under the No Action Alternative would require removal of the existing pipe and installation of a new pipe. This would result in the use of heavy equipment and ground disturbance. Therefore, the issuance of the special permit would result in less aesthetic impacts to the affected *special permit segment*.

*Agricultural Resources:* The right-of-way of the *special permit segment* is in a rural area, specifically the adjacent field is used to grow crops. A new special permit segment would not impact any agricultural resources. If the permit is not granted and pipe replacement is required, it would cause disturbance to farm operations adjacent to the segment.

*Air Quality:* The special permit would not affect the air quality of the *special permit inspection area*. If the permit is not granted, pipe replacement would be required, which would necessitate blowing down the pipeline releasing natural gas, a potent greenhouse gas. The no action alternative would have a minimal effect on air quality, with additional emissions that are temporary caused by equipment use during excavation, pipe removal, pipe replacement, and pipe installation. Issuance of the special permit under the proposed action could cause minor increases in emissions through increased surveillance and assessment activities.

*Biological Resources:* The primary wildlife habitat occurring within, and in the vicinity of the *special permit segment* and *special permit inspection area* includes woodlands, pasture, and

farmland. Granting the special permit would not result in modifications to any habitat, or impact wetlands or waterbodies, and would have no effect on fishery resources or essential fish habitats (EFH). The special permit would not trigger any notification or permitting requirements from Coastal Zone Management.

No area within the *special permit segment* is designated as sensitive wildlife habitat. The area does not cross any land administered by federal, state, or local agencies, or non-governmental organizations that could provide sensitive wildlife habitat. No lands enrolled in the Conservation Reserve Program (CRP) or the Wetland Reserve Program (WRP), both administered by the Natural Resource Conservation Service (NRCS), would be affected by granting this special permit.

Any activities related to the new *special permit segment* would be conducted within the boundaries of the previously disturbed pipeline right-of-way. GSPC will request no effect concurrence from the United States Fish and Wildlife Service Lafayette Field Office (Service) for any proposed future work to be undertaken within its existing, previously disturbed right-of-way to ensure compliance with Section 7 of the Endangered Species Act (ESA). The ESA requires federal agencies or their applicants to consider the effects of their undertakings on federally listed species. Denial of the special permit, which would mean GSPC would be required to replace the segment of pipeline in question, and this would cause temporary excavation activities that could have temporary impacts to biological resources, including some addition of silt or excavation runoff to the nearby Mississippi River.

*Climate Change:* The scope and duration of any activities associated with the *special permit segment* would have no impact on climate change. If the permit is not granted, however, pipe replacement would be required, which would necessitate blowing down the pipeline releasing natural gas, a known greenhouse gas. Pipeline replacement would also result in increased emissions from manufacture of new pipe, transportation of materials, and construction activities related to pipeline replacement.

*Cultural Resources:* Any activities associated with the new *special permit segment* would be conducted within the boundaries of the previously disturbed pipeline right-of-way. According to the Louisiana National Register there are no known historic properties near the special permit

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area. Further, GSPC has Annual Categorical Exemptions with the Louisiana State Historic Preservation Officer (La SHPO) that covers work on its existing facilities and rights-of-way.

*Environmental Justice:* The special permit alternative associated with this special permit will not have an adverse impact on the local population. Based on US Census data from 2018 for Madison Parish, Louisiana and Warren and Hinds Counties, Mississippi, the average residence has 2.53 people per house. With 51 residences, 13 businesses and other outside areas located along the pipeline in the 35.1-mile *special permit inspection area*, the increased safety measures associated with the Special Permit would benefit an estimated 489 people. With one (1) building in the current Class 3 location area, there are an estimated 55 people who would benefit from increased safety associated with pipe replacement.

According to US Census data, Madison Parish has 66.2% minority population, Warren County, Mississippi has 53.2% minority population, and Hinds County, Mississippi has 75.8% minority population. The special permit will not disproportionately impact any minority, low income, or non-English language populations.

*Geology, Soils, and Mineral Resources:* The *special permit inspection area* is comprised primarily of natural deposits from the Mississippi River, consisting of soil, gravel, and clay, with recent deposits of fertile material, especially silt. The lithology is generally unconsolidated and undifferentiated. (USGS 2007)

The topography across the *special permit inspection area* is generally flat to gently sloping, with the exception of a hilly area just east of the Mississippi River. The elevation in the *special permit segment* is flat, with less than 10 feet of elevation change.

According to the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Information System, there are no oil or gas wells located within 0.25-mile of the *special permit segment*.

The *special permit segment* is in an area of carbonate karst terrain. It is not anticipated that karst terrain will adversely impact the special permit.

Seismic hazards include earthquakes, surface faulting, and soil liquefaction. According to the USGS Seismic Hazards maps, the Project is situated in areas of very low seismic probability. Therefore, it is not anticipated that earthquakes will impact the *special permit segment*.

*Indian Trust Assets:* Any work associated with this *special permit segment* would have no impact on Native Americans or any land owned or otherwise administered by Native American tribes. The scope and duration of any compliance work resulting from the special permit would have little to no effect or impact on the socioeconomics in the surrounding area.

*Land Use:* All areas within the vicinity of the *special permit segment* are privately owned tracts of land. There are no other planned land developments known to GSPC at this time.

*Noise:* The scope and duration of any activities associated with the *special permit segment* would have little to no impact on noise levels in the vicinity of the pipeline. A denial of the special permit or the "no action" alternative would result in temporary increases in noise during the replacement of the existing pipe.

*Recreation:* The scope and duration of any activities associated with the *special permit segment* would have little to no impact on recreation in the vicinity of the pipeline.

*Safety:* The Pipeline Safety Regulations require pressure reduction or replacement of Class 1 location pipe in the event of certain population growth in order to better protect higher populations located along the pipeline. With one (1) building in the current Class 3 location area, there are an estimated 55 people who would benefit from increased safety associated with pipe replacement.

The special permit would waive the requirement to reduce pressure or replace the existing pipe with a stronger pipe. However, the special permit would include conditions intended to improve safety and environmental protection to equal or exceed that provided by the measures required under 49 CFR 192.611(a). The special permit conditions include: coating surveys and remediation, corrosion surveys and remediation, damage prevention activities, line of sight markers, inline-tool inspections for threats (corrosion, third party damage, and cracking – pipe body, seam and girth welds), remediation of pipe threats based upon design factor for class

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location, reassessments based upon integrity management program, procedures, and documentation.

Monthly patrols, weather permitting, are used to observe surface conditions on and adjacent to the pipeline right-of-way for indications of leaks, third party construction activity, exposed pipe, erosion or other factors that affect the safety and operation of the pipeline.

CIS and direct current voltage gradient (DCVG) have been or will be performed on the pipe within the *special permit segment* to ensure cathodic protection (CP) is acceptable. Areas of low CP potentials have been or will be remediated according to the special permit conditions, if the special permit is granted.

GSPC will continue to perform Damage Prevention measures as described in the best practices of the Common Ground Alliance (CGA) within the *special permit inspection area*.

ILI tool inspections will be performed using high-resolution inspection at intervals as specified by 49 CFR Part 192, Subpart O reassessment intervals.

Any anomalies detected during in-line inspections will be remediated in accordance with 49 CFR Part 192, Subpart O and the conditions of the special permit. These activities provide safety and environmental protection in the area of the new *special permit segment*.

The above-described monitoring conditions associated with the special permit would not be applicable if PHMSA denied the special permit request, because the safety requirements in 49 CFR Part 192, Subpart O only applies to 2.8 miles of the 35.1 miles of the *special permit inspection area*.

These monitoring conditions are intended to provide more information about the condition of the pipe so that any integrity issues can be remediated to avoid risk.

On the other hand, the "no action" alternative would require full compliance with 49 CFR 192.611(a). This provision would require the replacement of the existing pipeline with a thicker/stronger pipeline that meets the requirements of 49 CFR 192.611(a). However, the monitoring conditions associated with the special permit would not be applicable if the special

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permit were denied because those conditions are not mandated by the current 49 CFR Part 192. Accordingly, both alternatives are expected to lead to a similar safety result.

- (a) Would operation under the special permit change the risk of rupture or failure? Because much of this pipeline is already operating under an Alternative MAOP Special Permit, a number of pipeline safety measures that exceed the requirements of 49 CFR Part 192 have already been implemented in the *special permit inspection area*. These measures include conducting inline inspections not required under existing regulations and conservatively repairing conditions that do not present a near-term risk to pipeline integrity in order to help ensure the integrity and safety of the pipeline. In addition, patrolling frequencies that exceed the requirements of 49 CFR 192.705, line-of-sight signage where practical, and on-site monitoring of excavations following CGA best practices, enable GSPC to manage the risk of third party damage to the pipeline. As a result of these measures, the pipeline is in good condition, and GSPC's safety record is good. The permit would allow operation at the current pressure (MAOP), creating no additional risk. Additional inspections would lower the risk of rupture or failure.
- (b) If a failure occurred, would consequences and spill or release volumes be different if PHMSA granted the permit? Would granting this permit increase, decrease, or have no change on the risk of failure? GSPC believes that granting the special permit would not increase the risk of failure with implementation of the special permit conditions. The implementation of these practices, in conjunction with inspecting all pipe located in the Inspection Area with high resolution ILIs on a frequency consistent with PHMSA's Subpart O integrity management regulations helps ensure an enhanced knowledge and awareness of the integrity of the Index 817 and constitute unique circumstances that demonstrate that applying 49 CFR 192.611(a) to the requested *special permit segment* is not necessary.

However, if PHMSA denies the special permit and GSPC opted to reduce pressure instead of replace the pipe, a failure on a reduced-pressure pipeline could result in a smaller volume of natural gas released. GSPC contends that it would not opt to reduce pressure due to ongoing contractual obligations.

- (c) Would the Potential Impact Radius (PIR) of a rupture change under the Special Permit? Please calculate and provide the PIR data, if applicable. Would more people be affected by a failure if PHMSA granted the permit? The current MAOP would not change whether the special permit is granted or not. Because of current contractual commitments, GSPC would replace 0.04 miles (214 feet) of 42-inch diameter pipe if the special permit request is denied. Because the MAOP of the *special permit segment* would not change, the PIR calculation would not change. The number of people affected by a failure would not change if the special permit request is denied.
- (d) Would operation under the Special Permit have any effect on pipeline longevity or reliability? Would there be any life cycle or maintenance issues? Increased pipeline assessments required by the special permit including defined reassessment intervals ensures anomalies would be identified and remediated per the conditions of the special permit. Appling the special permit conditions over the special permit inspection area will improve reliability and safety. Pipe replacement or uprating under the "no action" alternative would also increase the longevity of the pipeline.

*Socioeconomics:* The scope and duration of any activities associated with the *special permit segment* will have no impact on the socioeconomics in the vicinity of the Index 817 Pipeline. According to US Census data, Madison Parish, Louisiana has 38.9% of persons in poverty, Warren County, Mississippi has 21.4% of persons in poverty, and Hinds County, Mississippi has 20.2% of persons in poverty. The special permit will not disproportionately impact any predominantly low income populations.

*Topography:* The *special permit segment* right-of-way is in a rural area and used to grow crops. Any required excavations would result in no long-term impact to ground topography in the *special permit segment*.

*Transportation:* The scope and duration of any activities associated with the *special permit segment* or the "no action" alternative would have little to no impact on the local infrastructure or roads. If the special permit is not granted, work to replace pipe could temporarily block Highway 602.

*Water Resources:* The Index 817 Pipeline *special permit segment* is in very close proximity to the Mississippi River, which is a critical water resource that provides valuable habitat and drinking water. However, the Index 817 Pipeline does not cross a waterbody or wetland in Madison Parish, Louisiana. The scope and duration of any activities associated with the *special permit segment* would have little to no impact on the surface waters in the vicinity of the Index 817 Pipeline.

The *special permit inspection area* is underlain by two (2) principal aquifers, the Coastal Lowlands aquifer system and the Mississippi River Valley alluvial aquifer (USGS, 2003). The Coastal Lowlands aquifer system extends from Texas across Louisiana, Mississippi, and Alabama and into western Florida (USGS, 2003) and the Mississippi River Valley alluvial aquifer extends from southern Illinois to northern Louisiana. Although several regional aquifers underlie the *special permit inspection area*, the aquifer system is characterized by an Oligocene to Holocene age heterogeneous, gulf-ward thickening, unconsolidated to poorly consolidated, discontinuous wedge of clay, sand, and silt (USGS, 2003).

GSPC does not anticipate any impact to domestic water wells because no wells are believed to exist on or close to the project area. The potential for groundwater impact resulting from the *special permit inspection area* is very low because existing groundwater flow paths are not expected to change. The special permit would not cause changes in overall groundwater quantity, which is determined by the quantity of recharge to the aquifer. Additionally, due to the depth of groundwater, GSPC does not anticipate encountering groundwater during pipeline excavation activities in the *special permit segment* or *special permit inspection area*. There is one Sole Source Aquifer (SSA) in the *special permit inspection area*, in Warren County, Mississippi.

#### **B.** Comparative Environmental Impacts of Alternatives

As PHMSA recognized in its June 29, 2004, Criteria for Class Location Change Waivers,<sup>17</sup> implementing additional preventative and mitigative measures enables a pipeline to improve its knowledge and understanding of the pipeline's integrity, accelerate the identification and repair of actionable anomalies, and better manage and mitigate threats to the public and environment. Implementing enhanced inspection and assessment practices throughout the *special permit* 

<sup>&</sup>lt;sup>17</sup> Development of Class Location Change Waiver Criteria, 69 Federal Register 38,948 (June 29, 2004).

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*segment* and *special permit inspection area*, in lieu of replacing small segments of pipe experiencing the class location change, extends pipeline safety benefits to a much greater area along the pipeline. In addition, avoiding pipe excavation and replacement will minimize costs to the operator, will avoid delivery interruptions and supply shortages, and avert environmental disturbance. All of these benefits will be realized under GSPC's requested *special permit segment*.

If the special permit is not granted, 49 CFR 192.611(a) would require a reduced MAOP and GSPC would have to replace the pipe in order to maintain reliable transportation service. However, the monitoring conditions associated with the special permit would not be applicable if the special permit were denied because those conditions are not mandated. Accordingly, both alternatives are expected to lead to a similar safety result.

Because GSPC contractual obligations would not allow the operating pressure of the pipe to be lowered, the mode of pipeline failure would be the same whether the pipe operates under a special permit or is replaced. Likewise, human safety would not be affected.

The natural environment would be temporarily disturbed if the pipe is replaced; a special permit would have little to no impact on the environment in the *special permit segment*.

#### X. Consultation and Coordination

GSPC and PHMSA personnel involved in preparation of this document include:

#### Personnel from parent owner and operator of GSPC

Darral Ward, Manager Pipeline Safety, Boardwalk Pipelines Tina Baker, Manager Compliance Services, Boardwalk Pipelines Sam Swift, Pipeline Safety Engineer, Boardwalk Pipelines

#### PHMSA

Amelia Samaras, PHMSA, US DOT Steve Nanney, PHMSA, US DOT Joshua Johnson, PHMSA, US DOT

#### XI. Response to Public Comments Placed on Docket PHMSA-2019-0207

PHMSA published the special permit request in the Federal Register (85 FR 7388) for a 30-day public comment period from February 7, 2020 through March 9, 2020. The special permit application from GSPC, DEA, and draft special permit conditions were available in Docket No. PHMSA-2019-0207 at: <u>www.regulations.gov</u> for public review. PHMSA received one (1) public comment (anonymous), which is summarized below:

• The commenter recommended "no permit be issued and no more pipelines be built to better protect the environment, public, and work toward a greener future. Otherwise, with continued use of fossil fuels our future is bleak."

The comment did not have anything to do with the environmental assessment and special permit conditions for the *special permit segment* or the *special permit inspection area*. The special permit with conditions will help to protect the public and the environment in the *special permit segment* or the *special permit inspection area*.

#### XII. Finding of No Significant Impact

In consideration of the safety conditions explained above, PHMSA finds that no significant negative impact will result from the issuance and full implementation of the above-described special permit to waive the requirements of 49 CFR 192.611(a) for *special permit segment*, which consists of 214 feet of 42-inch diameter along Index 817 Pipeline located in Madison Parish, Louisiana. This permit will require GSPC to implement additional conditions on the operations, maintenance, and integrity management of the *special permit segment* and *special permit inspection area*.

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Attachment A – 42-inch Index 817 Route Map Special Permit Segment and Inspection Area

#### Attachment B – 42-inch Index 817 Route Map Special Permit Segment

