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-2019-0015
Requested By:	Gulf South Pipeline Company, LP
Operator ID#:	31728
Original Date Requested:	November 30, 2018
Original Issuance Date:	June 19, 2019
Effective Dates:	June 19, 2019 to June 18, 2029
Code Section(s):	49 CFR 192.611

I. Background

The National Environmental Policy Act (NEPA), 42 United States Code (USC) 321 – 4375, Council on Environmental Quality regulations, 40 Code of Federal Regulations (C.F.R. or CFR) 1500-1508, and U.S. Department of Transportation (DOT) Order 5610.1C, requires the Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety (OPS)[1] 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

[1] References to PHMSA in this document means PHMSA OPS.

would result from granting or denying the special permit. 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 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 National Environmental Policy Act (NEPA) for the Gulf South Pipeline Company, LP (GSPC)[2,3] application for a special permit request to waive compliance from 49 CFR 192.611 for 3,964 feet (0.75 miles) of a 30-inch diameter gas transmission pipeline segment located in St. Mary 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 certain Federal Pipeline Safety Regulations found in 49 CFR Part 192. This permit will require GSPC to implement additional conditions on the operations, maintenance, and integrity management of the 0.75-miles (***special permit segment***) and 22.96 miles (***special permit inspection area***) of the 30-inch-diameter natural gas transmission pipeline (Index 330 Pipeline) located in St. Mary and Iberia Parishes, Louisiana.

II. Introduction

Pursuant to 49 U.S.C. 60118(b) and 49 CFR 190.341, GSPC submitted a special permit petition to PHMSA on November 30, 2018, requesting that it waive the requirements of 49 CFR 192.611 for a class 1 location to class 3 location change by implementing alternative risk and integrity management procedures for the ***special permit segment*** located on the GSPC Index 330 Pipeline located in St. Mary Parish, Louisiana.

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

[3] The PHMSA operator identification number (OPID) for GSPC is: OPID 31728.

PHMSA may issue a special permit to waive certain regulatory requirements where it is not inconsistent with pipeline safety. A special permit is typically contingent 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 a segment upgrade or pressure reduction when the pipeline class location changes from a Class 1 location to a Class 3 location, due to population density increase near the pipeline. 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 in order to avoid replacement of a ***special permit segment*** located on the Index 330 Pipeline, a gas transmission pipeline, located in St. Mary Parish, Louisiana. The class location has changed from Class 1 to a Class 3 location and to include additional areas that may experience further development and class change in the near future. This special permit request will consist of one (1) ***special permit segment*** and would waive the requirements of 49 CFR 192.611 with implementation of the special permit conditions. The ***special permit segment*** is a Class 1 to 3 location change identified by GSPC in June 2018 on the Index 330 Pipeline. The pipeline ***special permit segment*** and ***special permit inspection area*** have a maximum allowable operating pressure (MAOP) of 974 pounds per square inch gauge (psig). The 30-inch diameter Index 330 Pipeline was installed in 1961 and early 1962. Attachments A and B on pages 25 and 26 are Index 330 Pipeline route maps showing the ***special permit segments***, ***special permit inspection area,*** high consequence areas (HCAs), and class locations.

GSPC, a subsidiary of Boardwalk Pipeline Partners, LP, must apply special permit conditions to the 0.75 miles of the ***special permit segment*** and to the 22.96 miles of ***special permit inspection area*** of Index 330 Pipeline in order to allow blanket approval for future class changes in the ***special permit segment***.

V. Site Description

The 30-inch diameter Index 330 Pipeline is located in St. Mary and Iberia Parishes, Louisiana. The area consists primarily of single dwelling rural homes, with a total of 126 residences, 13 businesses and 2 outside areas in the 22.96-mile ***special permit inspection area***.

The ***special permit inspection area*** contains four (4) HCAs. The HCAs are calculated by Method 2 (49 CFR 192.903) and are caused by ≥ 20 dwellings adjacent to the pipeline and within the potential impact circle.

Index 330 Pipeline is a 30-inch diameter, 216-mile steel pipeline that transports natural gas from a point near GSPC Bayou Sale Compressor Station to a junction in West Monroe, Louisiana. The Index 330 Pipeline was installed primarily in 1961 and early 1962.

VI. Special Permit Segment and Special Permit Inspection Area

St. Mary and Iberia Parishes, Louisiana

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 for 0.75 miles (3,964 feet) of natural gas transmission pipeline on the 30-inch diameter Index 330 Pipeline, where changes have occurred from Class l locations to Class 3 locations in St. Mary Parish, Louisiana.

This special permit will allow GSPC to maintain the current 974 psig MAOP in the ***special permit segment*** and ***special permit inspection area*** for the Index 330 Pipeline.

***Special permit segment and special permit inspection area*: St. Mary Parish, Louisiana**.

This special permit applies to the ***special permit segment*** defined as follows using the GSPC Index 330 Pipeline survey station references:

- ***Special permit segment*** – Index 330 — 3,964 feet, Survey Station 527+87 to Survey Station 567+51.
- ***The special permit segment*** totals 0.75 miles and is located in St. Mary Parish, Louisiana.

Special permit inspection area[4] is defined to mean - the area that extends 220 yards on each side of the centerline along the entire 22.96 miles of the Index 330 Pipeline from:

[4] There are two (2) survey station equations in the ***special permit inspection area***, which explain the discrepancy between the reported length and the difference between the beginning and ending stations of the Inspection Area: BK=0+00 AH=0+00, BK=1007+97 AH=1004+74. The equation 0=0 is where the first three (3) feet of stationing reverses direction.

- Survey station 0+03 at Bayou Sale Junction in St. Mary Parish, Louisiana to survey station 1212+28 at Weeks Island Junction located in Iberia Parish, Louisiana. The Index 330 Pipeline ***special permit inspection area*** extends approximately 22.96 miles (121,558 feet) including field survey equations. The ***special permit inspection area*** is located in St. Mary and Iberia Parishes, Louisiana.
- HCAs located in the ***special permit inspection area*** are at the following survey stations:
    - Survey Station 52+39 to 69+56 – 1,717 feet
    - Survey Station 525+00 to 553+27 – 2,827 feet
    - Survey Station 844+20 to 864+30 – 2,010 feet
    - Survey Station 915+11 to 931+10 – 1,599 feet

The ***special permit inspection area,*** which includes the ***special permit segment*** and HCAs, is located in St. Mary and Iberia Parishes, Louisiana.

The purpose of the special permit is to waive the requirements of 49 CFR 192.611, allowing GSPC to avoid replacing existing pipe by applying alternative risk control measures to a 22.96-mile segment of the Index 330 Pipeline. This permit will also allow GSPC blanket approval for future class location changes in the ***special permit inspection area,*** that meet the special permit conditions, eliminating duplicate work for future permit extensions for both GSPC and PHMSA.

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-2019-0015 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 an equivalent level of safety. An overview of the special permit conditions is below:

Overview of the Special Permit Conditions:

1) **Maximum Allowable Operating Pressure**: GSPC can maintain the 974 psig MAOP in the 30-inch diameter Index 330 Pipeline ***special permit segment*** and ***special permit inspection area*** through implementation of the special permit conditions. The ***special permit segment*** must be hydrostatically tested to 1218 psig (which is a minimum of 1.25 times the MAOP of 974 psig) for 8 continuous hours in accordance with 49 CFR Part 192, subpart J, within the later of twelve (12) months of the granting of this special permit or June 30, 2020.[5]

2) **Integrity Management Program**: GSPC must incorporate the ***special permit segment*** and ***special permit inspection area*** into its written integrity management program (IMP) as a "covered segment" in a "HCA" in accordance with 49 CFR 192.903,[6] except for the reporting requirements contained in 49 CFR 192.945.

3) **Close Interval Surveys**: GSPC must perform a close interval survey (CIS) along the entire length of the ***special permit inspection area***[7] no later than one (1) year after the grant of this special permit. GSPC must remediate any areas of inadequate cathodic protection. A CIS and remediation need not be performed if GSPC has performed a CIS and remediation[8] on the Index 330 Pipeline along the entire length of the ***special permit inspection area*** less than one (1) year prior to the issuance of this special permit.

4) **Close Interval Surveys – Reassessment Interval**: GSPC must perform periodic CIS of the ***special permit inspection area*** at the applicable reassessment interval(s) for a

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[5] Index 330 Pipeline was installed in late 1961 and early 1962 and operated at an MAOPs of 1000 psig and 974 psig. The ***special permit inspection area*** was pressure tested in late December 1962 at 1260 psig. The pressure test records were not complete to meet 49 CFR 192.517 for a Class 1 to 3 ***special permit segment***.

[6] GSPC is not required to report the mileage included as part of this special permit in its annual report in accordance with the requirements of 49 CFR 191.17, unless it is in a high consequence area.

[7] Each condition in this special permit that requires GSPC to perform an action with respect to the ***special permit inspection area*** shall also require GSPC to perform that action on any ***special permit segment*** within such areas, unless there is a condition that is more stringent.

[8] 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.

"covered segments" determined in concert and integrated with in-line inspection (ILI) in accordance with 49 CFR Part 192, subpart O reassessment intervals as contained in 49 CFR 192.937 (a) and (b) and 192.939, not to exceed a 7-calendar year reassessment interval in 49 CFR 192.939(a). CIS data must be integrated with ILI data.

5) **Coating Surveys and Remediation:** GSPC must perform a Direct Current Voltage Gradient (DCVG) survey or an Alternating Current Voltage Gradient (ACVG) survey of the ***special permit inspection area*** no later than one (1) year after the grant of this special permit and remediate any integrity issues in the ***special permit inspection area***.

6) **Stress Corrosion Cracking Direct Assessment**: Should GSPC find stress corrosion cracking (SCC) on the Index 330 Pipeline at any time, GSPC must evaluate the Index 330 Pipeline along the entire length of the ***special permit segment*** for stress corrosion cracking (SCC).

7) **O&M Manual – In-line Inspections and Reassessment Intervals**: GSPC must amend applicable sections of its operations and maintenance (O&M) manual(s) to incorporate the inspection and reassessment intervals by ILI including both high resolution metal loss and deformation/geometry tools of the Index 330 Pipeline along the entire length of the ***special permit inspection area*** at a frequency consistent with 49 CFR Part 192, Subpart O, but not to exceed a seven (7) calendar year reassessment interval as defined in 49 CFR 192.939(a).

8) **O&M Manual - Close Interval Surveys and Reassessment Intervals**: GSPC must amend applicable sections of its O&M manual(s) to incorporate the inspection and reassessment intervals by CIS of the Index 330 Pipeline ***special permit inspection area*** at a frequency consistent with 49 CFR Part 192, subpart O reassessments.

9) **Inline Inspection**: The assessments of the Index 330 Pipeline along the entire length of the ***special permit inspection area*** using inline inspection (ILI) must conform to the required maximum reassessment intervals specified in 49 CFR 192.939. GSPC must conduct instrumented ILI, to meet 49 CFR 192.917 for threats and 49 CFR 192.939 for

reassessment intervals, in 2024 for the ***special permit inspection area***.[9] ILI tools must include high resolution magnetic flux leakage (HR-MFL) tool and high resolution (HR) deformation tool with deformation extended sensor arms not limited by pig cups.

10) **Integrity Reassessment Intervals**: GSPC must schedule ILI reassessment dates for the Index 330 Pipeline ***special permit inspection area*** according to 49 CFR 192.939 intervals by adding the required time interval to the previous assessment date.

11) **Damage Prevention Program**: GSPC's damage prevention program must incorporate the applicable best practices of the Common Ground Alliance (CGA) within the ***special permit inspection area***.

12) **Field Activity Notices to PHMSA**: GSPC must give a minimum of 14-day notice to the PHMSA OPS Southwest Region Director to enable PHMSA to observe the excavations relating to conditions related to field activities in the ***special permit inspection area***.

13) **HCA Assessments**: GSPC must not let this special permit impact or defer any of the operator's assessments for HCAs under 49 CFR Part 192, subpart O.

14) **Annual Report to PHMSA**: GSPC must provide an annual report of identified activities and integrity findings to PHMSA and post the report on the docket for public review.

15) **Cathodic Protection Test Stations**: At least one (1) cathodic protection (CP) pipe-to-soil test station must be located within each HCA with a maximum spacing between test stations of one-half mile within an HCA in the ***special permit inspection area***.

16) **Annual CP Test Station Readings**: If any annual CP test station readings on the Index 330 Pipeline within the ***special permit inspection area*** fall below 49 CFR Part 192, subpart I requirements, remediation must occur within six (6) months and include a CIS on each side of the affected test station to the next test station and any identified corrosion system modifications to ensure corrosion control.

[9] GSPC ran HR-MFL and HR-Deformation ILI Tools in the Index 330 Pipeline ***special permit inspection area*** during June 2017.

17) **Interference Currents Control**: GSPC must address induced alternating current (AC) from parallel electric transmission lines and other interference issues such as direct current (DC) in the ***special permit inspection area*** that may affect the pipeline. An induced AC or DC program and remediation plan 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.

18) **Anomaly Evaluation and Repair**: GSPC must account for ILI tool tolerance and corrosion growth rates in scheduled response times and repairs and document and justify the values used. Repair criteria will apply to all anomalies located on the Index 330 Pipeline within the ***special permit segment*** and ***special permit inspection area*** when they have been evaluated, excavated, or investigated in accordance with 49 CFR 192.485 and 192.933, and in the ***special permit segment*** using a failure pressure ratio based upon pipeline Class location and anomaly depth greater than 40% of pipe wall thickness.

19) **Girth Welds**: GSPC must provide records to PHMSA demonstrating girth welds on the Index 330 Pipeline were nondestructively tested at the time of construction.

20) **Pipe Casings**: GSPC must identify all shorted casings within a ***special permit segment*** no later than six (6) months after the grant of this special permit and classify any shorted casings as either having a "metallic short" (the carrier pipe and the casing are in metallic contact) or an "electrolytic short" (the casing is filled with an electrolyte) using a commonly accepted method such as the Panhandle Eastern, Pearson, DCVG, ACVG or AC Attenuation.

21) **Pipe - Seam Evaluations**: GSPC must identify any pipeline in a ***special permit inspection area*** that may be susceptible to pipe seam issues because of the vintage of the pipe, the manufacturer of the pipe, or other issues.

22) ***Special Permit Segment* Specific Conditions**: GSPC must comply with the following requirements.

    a. **Line-of-Sight Markers:** GSPC must install and maintain line-of-sight markings on the pipeline in the ***special permit inspection area*** except in agricultural areas or large water crossings such as lakes where line-of-sight signage is not practical.

b. **Data Integration**: GSPC must maintain data integration of special permit condition findings and remediation in the ***special permit inspection area***.

c. **Pipe Properties Testing**: GSPC must test the pipe in the ***special permit segment or special permit inspection area*** that does not have pipe properties documented by conducting non-destructive or destructive tests, examinations, and assessments.

d. **Pipeline System Flow Reversals**: For pipeline system flow reversals lasting longer than 90 days and where the MAOP for class location changes are exceeded under either 49 CFR 192.619(a)(1) or 192.611[10] in a ***special permit segment***, GSPC must prepare a written plan that corresponds to those applicable criteria identified in PHMSA Advisory Bulletin (ADB-2014-04), "Guidance for Pipeline Flow Reversals, Product Changes and Conversion of Service" issued on September 18, 2014 (79 FR 56121, Docket PHMSA-2014-0400).

e. **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*** or a ***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.

f. **Depth of Cover:** Depth of cover in the ***special permit segment*** must be in accordance with 49 CFR 192.327 for a Class 1 location or be remediated through additional markers, lowering the pipe, adding cover, or installing safety barriers for a Class 1 to 3 location segment. Where the depth of cover is less than 24-inches in areas of non-consolidated rock, GSPC must either lower or add cover over the ***special permit segment***. GSPC is unaware of any shallow pipe.

[10] An example of exceedance of 49 CFR 192.619(a)(1) is a Grandfathered MAOP which has a design factor above 0.72. An example of exceedance of 49 CFR 192.611 is a Class 1 to 3 location change.

23) **Documentation**: GSPC must maintain the following records for each ***special permit segment*** and ***special permit inspection area:*** pressure test, pipe properties, and compliance with the special permit conditions.

24) **Extension of Special Permit Segment**: PHMSA may extend the original ***special permit segment*** to include contiguous segments of the Index 330 Pipeline up to the limits of the ***special permit inspection area***. Any extensions of the ***special permit segment*** must meet the following requirements prior to the Class location change or within one (1) year after the class location change:

    a. All anomalies must be remediated in accordance with Condition 18 and
    b. The ***special permit segment*** must have been hydrostatically tested to a minimum of 1,218 psig (which is a minimum of 1.25 times the MAOP of 974 psig) for eight (8) continuous hours in accordance with 49 CFR Part 192, subpart J.

25) **Certification**: A senior executive officer, vice president or higher, of GSPC must certify in writing the following:

    a. GSPC pipeline ***special permit inspection area***, ***special permit segment,*** and HCAs meet the conditions described in this special permit;

    b. The written manual of O&M procedures for the GSPC Index 330 Pipeline has been updated to include all additional operating and maintenance requirements of this special permit; and

    c. GSPC has implemented all original conditions and the conditions of this modification as required by this special permit.

    d. GSPC must send the certifications required in this Condition with completion date, compliance documentation summary, and the required senior executive signature and date of signature to PHMSA.

26) **Limitations**:

    a. 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.

b. Any work plans and associated schedules for the Index 330 Pipeline ***special permit segment*** and ***special permit inspection area*** are automatically incorporated into this special permit and are enforceable in the same manner.
c. Failure by GSPC to submit the certifications required by Condition 25 (Certification) within the time frames specified may result in revocation of this special permit.
d. 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.
e. If GSPC sells, merges, transfers, or otherwise disposes of all or part of the assets known as the Index 330 Pipeline 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.

VIII. Alternatives

PHMSA's review of the potential alternatives is limited to review of the special permit and possible alternatives, as well as associated impacts to the ***special permit segment.*** In terms of the potential alternatives for PHMSA action, the options include: **(1)** no action/PHMSA denies the requested special permit, in which case the GSPC Index 330 Pipeline and its operation would need to be fully compliant with 49 CFR 192.611(a) or **(2)** grant the requested special permit and impose additional operations and maintenance, including integrity management activities beyond those required under Part 192.

ALTERNATIVES

Alternative 1: "No Action" Alternative

The "no action" alternative would entail full compliance with existing regulations, specifically 49 CFR 192.611. This provision requires pressure reduction, pressure testing, or pipe

replacements to address the class location changes when the pipeline is not commensurate with the new class location. The use of stronger pipe is intended to decrease risks of failure posed to population in the vicinity of the pipeline. If the special permit application is denied, then GSPC would be required to replace pipe in the current and future class change areas in order to uprate to the desired MAOP. Impacts include construction and testing along the right of way, and possible service disruption as the line is taken out of service.

Alternative 2: Applicant's Preferred Alternative

GSPC's preferred alternative is to obtain a special permit, allowing the pipe to operate at its desired MAOP in the class 3 location without replacing pipe. The current 974 psig MAOP of the pipeline will be maintained in this alternative.

The special permit will avoid possible construction-related inconveniences for businesses located near the affected area and will avoid service disruptions that could result from taking the line out of service during replacement activities.

GSPC will comply with the Federal Energy Regulatory Commission's 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 alternative would have no impact on the visual character of the ***special permit segment*** right-of-way. Pipe replacement 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 an industrial area, land mowed, and maintained as an empty field. A new special permit segment will not impact

any agricultural resources. If the permit is not granted then pipe replacement would be required, which may disturb business operations.

Air Quality: The special permit will 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 known greenhouse gas. The no action alternative would also require the temporary use of heavy equipment, which results in emissions.

Biological Resources: The primary wildlife habitat occurring within, and in the vicinity of the ***special permit inspection area*** includes industrial and disturbed lands. Granting the special permit will not result in modifications to any habitat, or impact wetlands or waterbodies, and will have no effect on fishery resources or essential fish habitats (EFH). The work area is located within the Louisiana Coastal Zone; however, the special permit will 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), will be affected by granting this special permit.

Any activities related to the new ***special permit segment*** will 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 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).

Climate Change: The scope and duration of any activities associated with the ***special permit segment*** would have no significant impact on climate change. If the permit is not granted 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. The special permit will facilitate increased throughput of natural gas, which is a greenhouse gas, whether released as methane or as carbon dioxide after burning. Nonetheless, the applicant would replace the pipeline to achieve the desired throughput in the event that the special permit was denied, so this special permit is not the cause of greenhouse gas emissions.

Cultural Resources: Any activities associated with the new ***special permit segment*** will 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 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 2012-2016 for St. Mary Parish, the average residence has 2.6 people per house. With 126 residences, 13 businesses and other outside areas located along the pipeline in the 22.96-mile ***special permit inspection area***, the increased safety measures associated with the special permit will benefit an estimated 846 people. With five (5) buildings in the current class 3 location area, there are only an estimated 163 people who will benefit from increased safety associated with pipe replacement.

According to US Census data, St. Mary Parish has a 45.2% 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 segment*** crosses one (1) waterway, the Charenton Drainage Canal. The special permit will have no impact to this waterway.

The ***special permit segment*** pipeline right-of-way is within industrial area, land mowed and maintained as an empty field. The ***special permit segment*** is located in stable soil. The terrain throughout the entire ***special permit inspection area*** is gradually sloping land and the soils are stable. Other geological hazards include landslides, karst topography, subsidence and shallow

bedrock. GSPC is not aware of any shallow bedrock or karst topography in the vicinity of the new special permit segment, nor has it documented landslides or ground subsidence in the vicinity of the pipeline.

According to the Louisiana Geological Survey the soil in the ***special permit segment*** is a natural levee complex of Mississippi River meander belt 3, upper deposits, composed of low natural levees flanking the younger of two occupations of Mississippi River meander belt 3.[11]

The area is not prone to significant earthquakes, risk of flooding, subsidence or landslides. The attached maps show the proximity of dwellings and other populated areas to the pipeline right-of-way and the location of road crossings. Although earthquakes occur in Louisiana, many are too small to be felt by people and most are unlikely to do serious damage (Louisiana Geological Survey). The nearest known faults are those of the Baton Rouge fault system, which are growth faults, a gradual fault creep unlikely to cause earthquakes. The largest earthquake in historical records through 1994 had an intensity of VI on the Modified Mercalli Scale, reported in 1930. Based on the relatively low historic seismic activity and the low level of ground motion predicted for the new ***special permit inspection area***, it is unlikely that a damaging earthquake will occur in the new ***special permit segment***.

The area is in a 1-percent annual chance flood hazard area according to the National Flood Insurance Program's Flood Insurance Rate Map.

Indian Trust Assets: Any work associated with this ***special permit segment*** will 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 will 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. It is GSPC's understanding that a development will be constructed north of the class 3 area.

[11] "Meander belt" refers to ancient courses or locations of the River.

Noise: The scope and duration of any activities associated with the ***special permit segment*** will 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*** will 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 pipe in the event of certain population growth in order to better protect higher populations located along the pipeline. The special permit will waive the requirement to reduce pressure or replace the existing pipe with a stronger pipe. However, actions will include special permit 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 location, reassessments based upon integrity management program, procedures, and documentation.

Quarterly 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 DCVG have been or will be performed on the pipe within the ***special permit segment*** to ensure 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 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 will not be applicable if PHMSA denied the special permit request, because the safety requirements in 49 CFR Part 192, subpart O only applies to 2,540 feet of the 3,964 feet of the ***special permit segment***.

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. This provision would require the replacement of the existing pipeline with a thicker/stronger pipeline that meets the requirements of 49 CFR 192.611. 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 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?* GSPC has a practice of implementing a number of pipeline safety measures that exceed the requirements of 49 CFR Part 192. These measures include conducting in-line 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 will allow operation at the current pressure (MAOP), creating no additional risk. Additional inspections will 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? PHMSA believes that granting the special permit will not increase, and could arguably decrease the probability 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 330 pipeline and constitute unique circumstances that demonstrate that applying 49 CFR 192.611 to the requested ***special permit segment*** is not necessary.

However, in the event that PHMSA denied the special permit and GSPC opted to reduce pressure instead of replacing 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 will not change whether the special permit is granted or not. Because of current contractual commitments, GSPC would have to replace 0.75 miles of 30-inch diameter pipe if the special permit request is denied. Because the MAOP of the ***special permit segment*** will not change, the PIR calculation will not change. The PIR of the Index 330 pipeline is 646 feet at an MAOP of 974 psig. The number of people affected by a failure would not change if the special permit request is denied or granted.

(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 will be identified and remediated per the conditions of the special permit. Applying the ***special permit segment*** conditions over the 0.75-mile pipeline length 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 330 Pipeline. According to US Census data St. Mary Parish has 22.2% 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 within an industrial area and is mowed and maintained as an empty field. There will likely be pipeline excavation conducted as a calibration dig due to the special permit DCVG test requirement as well as anomaly investigation digs. These excavations, will be conducted within the boundaries of the previously disturbed pipeline right-of-way. There will be 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 would temporarily block Borough Lane. The "no action" alternative could result in increases in traffic due to construction activities in the ***special permit segment***.

Water Resources: The Index 330 ***special permit segment*** crosses one waterbody and no wetlands in St. Mary Parish, Louisiana. The scope and duration of any activities associated with the ***special permit segment*** will have little to no impact on the surface waters in the vicinity of the Index 330 Pipeline.

The ***special permit inspection area*** is underlain by one principal aquifer, the Coastal Lowlands aquifer system (USGS, 2003). The Coastal Lowlands aquifer system extends from Texas across Louisiana, Mississippi, and Alabama and into western Florida (USGS, 2003). 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).

The water quality of this system diminishes as it moves toward the coast where it mixes with salt water, causing a marked increase in salinity and concentration of dissolved solids. The ***special***

permit inspection area is located where the groundwater contains 500 to 1,000 milligrams per liter of dissolved solids (USGS, 2009).

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 will 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 are no Sole Source Aquifer (SSA) in the ***special permit segment*** or ***special permit inspection area.***

B. Comparative Environmental Impacts of Alternatives

As PHMSA recognized in its June 29, 2004, Federal Register Notice (69 FR 38948), 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 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 would require pipe replacement or pressure reduction. 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 potential impact radius of a 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 will 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 Pipeline Partners, MLP
Tina Baker, Manager Compliance Services, Boardwalk Pipeline Partners, MLP
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PHMSA

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

XI. Response to Public Comments Placed on Docket PHMSA-2019-0015

PHMSA published the special permit request in the Federal Register for a 45-day public comment period through May 17, 2019. The special permit application from GSPC, environmental assessment, and special permit conditions were available in Docket No. PHMSA-2019-0015 at: www.regulations.gov.

Through May 20, 2019, there were two comments posted on the docket. PHMSA has reviewed all comments. The comments were against pipelines and any possible impacts from their location. The Index 330 Pipeline is an existing pipeline. PHMSA does not authorize pipeline siting, construction, or operation. PHMSA believes the special permit conditions that must be implemented by GSPC will enhance the overall safety of the pipeline in the ***special permit segment***, where the Class location has changed from a Class 1 to 3 location, and in 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 safety or environmental 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 0.75 miles of 30-inch diameter Index 330 Pipeline located in St. Mary Parish, Louisiana. This permit will require GSPC to implement additional conditions on the operations, maintenance, and integrity management of the 0.75-mile (***special permit segment***) and 22.96 miles (***special permit inspection area***) of the 30-inch-diameter natural gas transmission pipeline (Index 330 Pipeline) located in St. Mary and Iberia Parishes, Louisiana.

XIII. Bibliography

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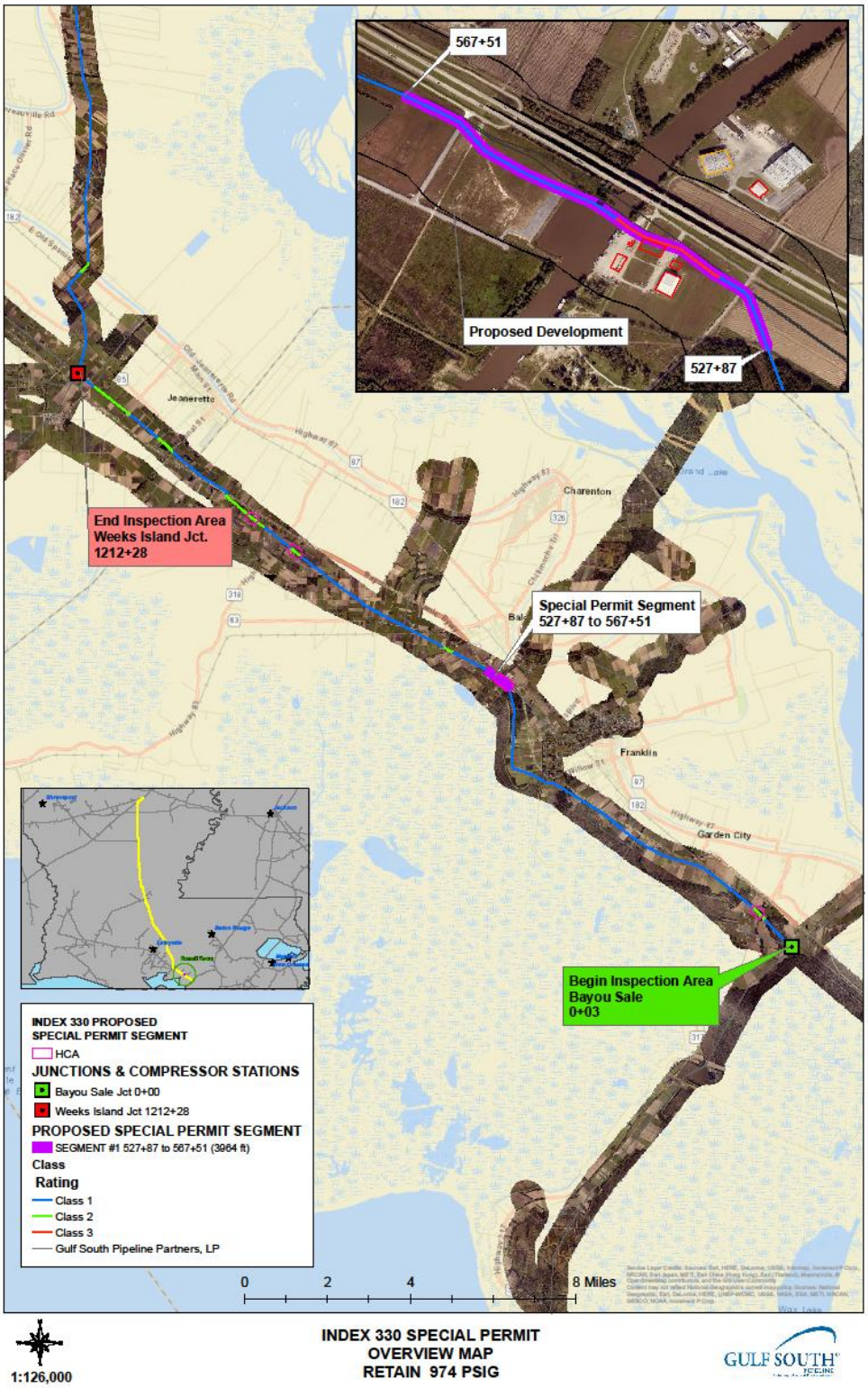
Completed by PHMSA in Washington, DC on: June 19, 2019

Attachment A – 30-inch Index 330 Route Map
Special Permit Segment and Inspection Area with Class Locations and HCAs



Attachment B – 30-inch Index 330 Route Map
Special Permit Segment and Inspection Area with Class Locations and HCAs