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-2020-0007
Requested By:	Southern Natural Gas Company, LLC
Operator ID#:	18516
Original Date Requested:	December 23, 2019
Issuance Date:	July 27, 2022
Code Section(s):	49 CFR 192.611(a) and (d) and 192.619(a)

I. Background

The National Environmental Policy Act (NEPA), 42 United States Code (U.S.C.) 4321 – 4375 et seq., Council on Environmental Quality Regulations, 40 Code of Federal Regulation (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) [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 Federal pipeline safety regulations. PHMSA's environmental review associated with the special permit application is limited to

[1] Throughout this special permit the usage of "PHMSA" or "PHMSA OPS" means the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety.

impacts that would result from granting or denying the special permit. PHMSA developed this assessment to determine what effects, if any, our decision will 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 will 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 Southern Natural Gas Company, LLC (SNG)[2] application for a special permit to waive compliance from 49 CFR 192.611 and 192.619 for four (4) ***special permit segments*** and four (4) ***special permit inspection areas*** along 3,278.06 feet (approximately 0.621 miles) of the natural gas transmission pipeline system in Georgia and Mississippi. 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) and (d) and 192.619(a). This FEA assesses 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 192.611(a) and (d) and 192.619(a).

II. Introduction

Pursuant to 49 U.S.C. 60118(b) and 49 CFR 190.341, SNG submitted a special permit application to PHMSA on December 23, 2019, requesting that PHMSA waive the requirements of 49 CFR 192.611(a) and (d) and 192.619(a) to permit SNG to maintain the maximum allowable operating pressure (MAOP) to the Pipeline segments where the class location has changed from Class 1 to Class 3 located in Harris and Effingham Counties, Georgia, and Clarke County, Mississippi.

PHMSA is granting a special permit to waive certain regulatory requirements where it is not

[2] Southern Natural Gas Company, LLC is owned by Kinder Morgan, Inc.

inconsistent with pipeline safety. A special permit is typically conditioned on the performance of additional measures beyond minimum Federal 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. Under 49 CFR 192.619(a)(2) the ***special permit segment*** would be required to be pressure tested to 1.5 times MAOP for eight (8) hours. 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.

(d) Confirmation or revision of the maximum allowable operating pressure that is required as a result of a study under §192.609 must be completed within 24 months of the change in class location. Pressure reduction under paragraph (a) (1) or (2) of this section within the 24-month period does not preclude establishing a maximum allowable operating pressure under paragraph (a)(3) of this section at a later date.

49 CFR 192.619 What is the maximum allowable operating pressure for steel or plastic pipelines?

(a)(2)(ii) For steel pipe operated at 100 p.s.i. (689 kPa) gage or more, the test pressure is divided by a factor determined in accordance with **Table 1 – Maximum Allowable Operating Pressure for Steel or Plastic Pipelines**. Which requires Class 3 location pipe to be pressure tested to 1.5 times MAOP.

Table 1 - Maximum Allowable Operating Pressure for Steel or Plastic Pipelines

Table 1 to Paragraph (a)(2)(ii)

Class location	Factors, [1] segment - Installed before (Nov. 12, 1970)	Installed after (Nov. 11, 1970) and before July 1, 2020	Installed on or after July 1, 2020	Converted under § 192.14
1	1.1	1.1	1.25	1.25
2	1.25	1.25	1.25	1.25
3	1.4	1.5	1.5	1.5
4	1.4	1.5	1.5	1.5

[1] For offshore pipeline segments installed, uprated or converted after July 31, 1977, that are not located on an offshore platform, the factor is 1.25. For pipeline segments installed, uprated or converted after July 31, 1977, that are located on an offshore platform or on a platform in inland navigable waters, including a pipe riser, the factor is 1.5.

(3) The highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column. This pressure restriction applies unless the segment was tested according to the requirements in paragraph (a)(2) of this section after the applicable date in the third column or the segment was uprated according to the requirements in subpart K of this part:

Section 192.619(a) requires Class 3 location pipe to be pressure tested to 1.5 times MAOP.

IV. Purpose and Need

SNG requested a waiver from the requirements of 49 CFR 192.611(a) and (d) and 192.619(a) for four (4) ***special permit segments*** consisting of approximately 0.621 miles (3,278.06 feet) of natural gas transmission pipeline listed below in **Table 2 – Special Permit Segment**s. Without a special permit, the cited regulations require that SNG to complete pipe replacement, hydrotest, and pressure reduction, based on population changes in the vicinity of the special permit segment. SNG must apply the special permit conditions to four (4) ***special permit segments*** to provide an equivalent margin of safety and environmental protection to meet the requirements of 49 CFR 192.611, as outlined in the special permit conditions.

The special permit establishes enhanced integrity management (IM) procedures to maintain pipe integrity and protect both the public and the environment for the class location units in which the ***special permit segment*** is located for the length of pipeline covered by the special permit. In addition, SNG must comply with conditions as provided in the terms of the special permit for all the impacted ***special permit segments*** and the ***special permit inspection area*** in the special permit.

The special permit authorizes future class changes within the ***special permit inspection areas*** (***special permit segment extensions***) under the special permit, providing the ***special permit segment extensions*** meet the special permit conditions applicable to the ***special permit segment***. In that case, SNG must also notify PHMSA and update this FEA/FONSI.

V. Site Description

The ***special permit segments*** consist of approximately 0.621 miles (3,278.06 feet) of natural gas transmission pipelines. The ***special permit inspection areas*** extend across approximately 169.72 miles of the pipeline. In each location, the class location has changed from Class 1 to Class 3 location in Effingham and Harris Counties, Georgia, and Clarke County, Mississippi. The four (4) ***special permit segments*** are described in **Table 2 - Special Permit Segments**.

VI. Special Permit Segments and Special Permit Inspection Areas

1) **Special Permit Segments:**

This special permit applies to the ***special permit segments*** located in Effingham and Harris Counties, Georgia; and Clarke County, Mississippi, that is identified using the SNG mile post (MP) and survey station (SS) references. Each ***special permit segment*** is defined in **Table 2 – Special Permit Segments**.

Table 2 – Special Permit Segments

Special Permit Segment Number[3]	Outside Diameter (inches)	Line Name	Length (feet)	Start Survey Station (MP - SS)	End Survey Station (MP - SS)	County, State	No. Dwellings	Year Installed	Seam Type	MAOP (psig)
1 (KM 555)	24	Cypress Line	1,503.00	2 – 3968	3 – 191	Effingham, GA	1	2007	ERW-HF	1,250
2 (KM 556)	26	South Main 2nd Loop Line	224.78	77 – 1899	77 – 2124	Clarke, MS	3	1967	DSAW	1,200
4 (KM 558)	36	South Main 3rd Loop Line	329.96	77 – 1728	77 – 2058	Clarke, MS	4	2003	DSAW	1,200
5 (KM 559)	36	South Main 3rd Loop Line	1,220.32	315 – 1862	315 – 3083	Harris, GA	7	2004	DSAW	1,200

Note: **EFW-HF** is a high frequency electric flash welded pipe longitudinal seam.
DSAW is double submerged arc welded pipe longitudinal seam.

2) **Special Permit Inspection Areas:**

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

[3] On February 3, 2022, SNG rescinded requested ***special permit segments number 3 (KM 557) and 6 (KM 560)***. These segments were withdrawn at the request of PHMSA

Table 3 – Special Permit Inspection Areas							
Special Permit Inspection Area Number	Special Permit Segment(s) Included	Outside Diameter (inches)	Line Name	Master Segment	Start Survey Station (MP - SS)	End Survey Station (MP - SS)	Length[4] (miles)
1	1 (KM 555)	24	Cypress Line	Cypress Line 1	00 – 24.78	87 – 4810	87.63
2	2 (KM 556)	26	South Main 2nd Loop Line	Enterprise to York	67 – 1394	102 – 4372	35.57
3	4 (KM 558)	36	South Main 3rd Loop Line	Enterprise Station	67 – 1631	97 – 2268	30.06
4	5 (KM 559)	36	South Main 3rd Loop Line	D/S of Ellerslie	311 - 3355	328 - 1743	16.46

Attachments A1 through A4 consist of maps that includes the pipeline route map and more detailed maps showing the area near the ***special permit segments***.

PHMSA is granting this special permit request based on this document and the "Special Permit Analysis and Findings" document, which is incorporated by reference into this document and can be read in its entirety in Docket No. PHMSA-2020-0007 in the Federal Docket Management System (FDMS) located on the internet at www.regulations.gov.

VII. Alternatives

Alternative 1: "No Action" Alternative

If PHMSA were to select the "no action" alternative, PHMSA would deny SNG's special permit request, SNG would be required to fully comply with 49 CFR 192.611(a) and (d) and 192.619(a). In order to maintain the existing MAOP, SNG would be required to replace the approximately 0.621 miles of pipe with a higher-grade pipe in the ***special permit segment***, or alternatively, SNG would be required to reduce pressure on the segment. SNG states that it would choose to replace the segments to maintain MAOP. [5]

Alternative 2: "Selected" Alternative – Issuance of the special permit

PHMSA is granting the special permit with the below conditions, and SNG is allowed to continue to operate at the current maximum allowable operating pressure (MAOP) of 1,250 pounds per square inch gauge (psig) on the Cypress Line and 1,200 psig on the South Main 2nd

[4] If the ***special permit inspection area*** footage does not extend from launcher to receiver, the ***special permit inspection area*** would need to be extended.

[5] These regulatory options are specified in 49 CFR 192.611 Change in class location: Confirmation or revision of maximum allowable operating pressure.

Loop Line and South Main 3rd Loop Line in the Class 3 locations without replacing pipe while complying with the special permit conditions, as described below.

VIII. Overview of Special Permit Conditions

The special permit conditions are designed to prevent leaks and ruptures such that the Special Permit is not inconsistent with pipeline safety. This section provides an overview of the special permit conditions. This section provides an overview of the special permit conditions. For SNG specific technical requirements, the special permit conditions can be read in its entirety in Docket No. PHMSA-2020-0007 in the Federal Docket Management System located on the internet at www.regulations.gov or on the PHMSA website for special permits issued at https://www.phmsa.dot.gov/pipeline/special-permits-state-waivers/special-permits-issued.

1) **Current Status of Pipe in the Ground**

   To ensure that key characteristics of the pipe currently installed in each ***special permit segment*** are known, records that confirm pipe specifications, successful pressure tests, and girth weld non-destructive tests are required. Should records be unavailable or unacceptable, additional activities as detailed in the special permit must be completed. If these additional activities are not completed or should pipe be discovered that does not meet specific requirements of eligibility, the ***special permit segment*** must be replaced.

2) **Operating Conditions**

   The ***special permit inspection areas*** must continue to be operated at or below the existing MAOP until a restoration or uprating plan has been approved, if allowed by the special permit. To ensure compliance with special permit conditions, the operator's Operations and Maintenance Manual (O&M), IM procedures, and Damage Prevention (DP) program must be modified to implement the special permit conditions. In addition, PHMSA must approve any long-term flow reversals that will impact the ***special permit segments***.

3) **Threat Management**

   Threats are factors that can lead to the failure of a pipeline. Activities are required to identify, assess, remediate, and monitor threats to the pipeline.

   a) **General activities.** SNG must perform annual data integration and identification of threats to which the ***special permit inspection area*** is susceptible. These activities must include integrity assessments with specific inline inspection (ILI) tools, strict anomaly

repair criteria, and appropriate environmental assessment and permitting. Additional integrity assessment methodologies may be used if allowed by the special permit. Integrity assessments must then be conducted periodically at an interval determined in the special permit for each threat identified.

b) **External corrosion control requirements**. The special permit requires additional activities to monitor and mitigate external corrosion. These activities include installation and annual monitoring of cathodic protection (CP) test stations, periodic close interval surveys (CIS), and clearing or remediating shorted casings that may impede CP effectiveness. These activities ensure the appropriate level of CP is reaching the pipeline in areas where coating loss or damage has occurred in order to prevent or mitigate external corrosion. In addition, SNG will be required to develop and implement a plan that identifies and remediates interference from alternating or direct current (AC/DC) sources (such as high-voltage powerlines) that could adversely impact the effectiveness of CP.

c) **Internal corrosion control requirements.** The special permit includes gas quality specifications to mitigate internal corrosion because internal corrosion is highly dependent on the quality of the gas transported within the pipeline.

d) **Stress corrosion cracking requirements.** To ensure that stress corrosion cracking **(**SCC) is discovered and remediated, any time a pipe segment is exposed during an excavation the SNG must examine coating to determine type and condition. If the coating is in poor condition, SNG must conduct additional SCC analysis. If SCC is confirmed, SNG must implement additional special permit defined remediation and mitigation.

e) **Pipe seam requirements.** SNG must perform an engineering integrity analysis to determine susceptibility to seam threats. SNG must re-pressure test any ***special permit segments*** with an identified seam to ensure the issue is not systemic in nature.

f) **External pipe stress requirements.** Upon identification of any source of external stress on the pipeline (such as soil movement), SNG must develop procedures to evaluate and periodically monitor these stresses.

g) **Third-party specific requirements.** To assist in identifying the pipeline location and minimizing the chance of accidental pipeline strikes, SNG must install and maintain line-of-site markers for the pipeline. SNG must perform mitigation activities for any location where a depth-of-cover survey shows insufficient soil cover.

4) **Consequence Mitigation**

To ensure quick response and decreased adverse outcome in the event of a failure, each side (upstream and downstream) of the ***special permit segment*** must have and maintain operable automatic shutdown valves (ASV) or remote-controlled valves (RCV). SNG must monitor valves through a control room with a supervisory control and data acquisition (SCADA) system. In addition to the mainline valves, should a crossover or lateral connect between the valve locations, additional isolation valves may be required.

5) **Post Leak or Failure**

If a ***special permit inspection area*** experiences an in-service or pressure test leak/failure, SNG must conduct a root cause analysis to determine the cause. If the cause is determined to be systemic in nature, SNG must implement a remediation plan or the ***special permit segment*** must be replaced, as determined by the special permit specific conditions.

6) **Class Location Study and Potential Extension of Special Permit Segment**

SNG must conduct a class location study at an interval specified in the special permit. This allows SNG to quickly identify extended locations that must comply with the ***special permit segment*** requirements. SNG may extend the ***special permit segments*** with proper notification, update of the Final Environmental Assessment, and implementation of all requirements in the special permit.

7) **PHMSA Oversite and Management**

PHMSA maintains oversight and management of each special permit. This includes annual meetings with executive level officers on special permit implementation status, written certification of the special permit, special permit required notification of planned activities, notification of root cause analysis results, and notification prior to certain excavation activities so that PHMSA may observe.

8) **Gas Leakage Surveys and Remediation**

Each ***special permit segment*** and ***special permit inspection area*** have requirements in the special permit to conduct leakage surveys more frequently than is presently required in 49 CFR 192.706. Gas leakage surveys using instrumented gas leakage detection equipment must be conducted along each ***special permit segment*** and at all valves, flanges, pipeline tie-ins with valves and flanges, ILI launcher, and ILI receiver facilities in each ***special permit inspection area*** at least twice each calendar year, not to exceed 7½ months. The type of leak detection equipment used, survey findings, and remediation of all instrumented gas leakage surveys must be documented by operator. The special permit will require a three-step grading process with a time interval for remediation based upon the type of leak.

9) **Documentation**

SNG must maintain documentation that supports compliance with special permit conditions for the life of the pipeline.

IX. Affected Resources and Environmental Consequences

A) Affected Resources and Environmental Consequences of the Granted Action and the "No Action" Alternative

SNG is granted a special permit that waives compliance with 49 CFR 192.611(a) and (d) and 192.619(a) for four (4) ***special permit segments*** totaling approximately 0.621 miles located within four (4) ***special permit inspection areas*** totaling approximately 169.72 miles. SNG must comply with the special permit conditions within the ***special permit segments***.

Implementation of the special permit conditions, including enhanced IM procedures, provides an additional level of safety without the impacts of excavation to remove existing pipe, install the replacement pipe, and conduct pressure testing of the existing pipe. Thus, SNG will avoid disturbing approximately 0.621 miles of the pipeline right of way (ROW), with the exception of additional inspections that may be required to satisfy the conditions of the special permit such as those related to the IM protocols that may require verification digs and potential anomaly evaluations/repairs.

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.

Therefore, implementing enhanced inspection and assessment practices within the ***special permit inspection areas***, in lieu of replacing and pressure testing the small sections of pipe experiencing the class location changes, extends pipeline safety benefits to a much greater area, and avoids environmental disturbances.

An analysis of environmental resources and potential environmental consequences in the vicinity of the ***special permit segments*** are provided in the following sections. This FEA incorporates the special permit analysis and findings (SPAF), which is available under this docket on www.regulations.gov. The SPAF does not describe any integrity issue that would affect the approval of the special permit or the development of the special permit conditions.

Aesthetics*:** The visual character of the ***special permit segments and the ***special permit inspection areas*** will not be changed by the approval of this special permit request. The objective of the special permit is to avoid construction or ground disturbances in the pipeline ROW that would be necessitated if the special permit was not granted. Therefore, the issuance of the requested special permit will result sporadic and temporary aesthetic impacts due to increased monitoring, maintenance, and repair activities along the affected ***special permit segments*** or ***special permit inspection areas***.

Denial of the special permit request would require the replacement or pressure testing of all the pipeline segments associated with this special permit request. 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. Furthermore, pressure testing would also require disturbances along the pipeline ROW.

Agricultural Resources*:** The area surrounding the ***special permit segments contain cultivated crops. The issuance of the special permit will reduce impact to agricultural resources in the ***special permit segments***. Increased monitoring and maintenance requirements imposed by the special permit conditions could increase these activities causing temporary and isolated impacts to the ***special permit inspection areas***. The aim of the special permit is to avoid the higher impact construction activities associated with pipeline replacement in the right-of-way along the ***special permit segments***.

Air Quality*:** If the permit is not granted, pipe replacement of the ***special permit segments would be required, which would necessitate blowing down the pipeline to release unburned natural gas,

which is a powerful greenhouse gas. If the special permit is granted, it could have minimal impacts on air quality in the ***special permit inspection segments*** due to combustion emissions resulting from surveillance, assessment, and maintenance activities required by the permit. The no action alternative would have a more substantial, though still minimal effects onair quality, with additional emissions that are temporary caused by equipment use during excavation, pipe removal, pipe replacement, and pipe installation.

Biological Resources*:** The project area (special permit segment 1***) is dominated by mixed forest and evergreen broadleaf forest land cover. Federally listed species that may occur within the project vicinity include red-cockaded woodpecker, eastern indigo snake, gopher tortoise, frosted Flatwoods salamander, and pond berry. No critical habitat occurs within the project area.

The project area (***special permit segments 2 and 4***) is dominated by open shrub lands land cover. Federally listed species that may occur within the project vicinity include the wood stork. No critical habitat occurs within the project area.

The project area (***special permit segment 5***) is dominated by open shrub lands land cover. Federally listed species that may occur within the project vicinity include red-cockaded woodpecker, gulf moccasin shell, purple bank climber, fringed Campion, Georgia rockcress, little amphianthus, and relict trillium. No critical habitat occurs within the project area.

Any potential impacts to wildlife will be temporary in nature and may include disturbancefrom increased human presence, vehicle access, vegetation clearing, and use of mechanized equipment within the project area. Some avian species may occasionally fly over or forage within the project location or stop over during migration.

Table 4.
Federally and State Listed Threatened and Endangered Species with the Potential to Occur along the Special Permit Segments and Preliminary Effect Determination for the "Granted" Alternative, Clarke County, Mississippi, and Effingham and Harris County Georgia

CommonName	Scientific Name	Federal	State	Habitat Description	Occurrence	Effect
Amphibians						
Frosted Flatwoods Salamander	*Ambystoma cingulatum*	T	--	This species occurs in longleaf pine-wiregrass flatwoods and savannas. (USFWS 2018).	Not likely to occur.	No effect
Mammals						

Table 4. Federally and State Listed Threatened and Endangered Species with the Potential to Occur along the Special Permit Segments and Preliminary Effect Determination for the "Granted" Alternative, Clarke County, Mississippi, and Effingham and Harris County Georgia						
CommonName	**Scientific Name**	**Federal**	**State**	**Habitat Description**	**Occurrence**	**Effect**
West IndianManatee	*Trichechus manatus*	T	E	Manatees live in marine, brackish, and freshwater systems in coastal and riverine areas throughout their range. Preferred habitats include areas near the shore featuring underwater vegetation like seagrass and eelgrass. (USFWS 2019a).	Not likely to occur.	No effect
Birds						
Red-cockaded Woodpecker	*Picoidesborealis*	E	E	This species of bird roost and nest exclusively in live pine trees. They require pines at least 60 years old but prefer 80 to 100-yearold pines infected with red heart fungus. (USFWS 2020b).	Potential to occur along forest edges.	No effect
Wood stork	*Mycteria Americana*	T	--	This species prefers to nest in large tracts of bald cypress (Taxodium distichum) or red mangrove (Rhizophora mangle);forages in prairie ponds, floodedpastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries; formerly nested in Texas, but no breeding records since 1960. (USFWS 2005).	Not likely to occur.	No effect
Reptiles						
Eastern IndigoSnake	*Drymarchon corais couperi*	T	--	The indigo snake occupies sandhills during the winter, using gopher tortoise burrows as a retreat from cold temperatures. During the warmer months snakes move to nearby wetlands.(USFWS 2019b).	Not likely to occur.	No effect
GopherTortoise	Gopherus polyphemus	T	T	This species lives in scrub, dry hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, mixed hardwood-pine communities, and a variety of habitats that have been disturbedor altered by man, such as powerline rights-of-way, and along roadsides. (USFWS 2019c).	Potential to occur within the ROW.	No effect

Table 4. Federally and State Listed Threatened and Endangered Species with the Potential to Occur along the Special Permit Segments and Preliminary Effect Determination for the "Granted" Alternative, Clarke County, Mississippi, and Effingham and Harris County Georgia						
CommonName	**Scientific Name**	**Federal**	**State**	**Habitat Description**	**Occurrence**	**Effect**
Yellow- blotched Map Turtle	*Graptemys flavimaculata*	T	--	River sections with moderate current, sand and clay bottom with many sand bars, or rocky bottom with limestone ledges along banks (less abundant in rocky areas). Most abundant in areas with tangled tree roots and logs in water (basking sites). Needs river wide enough to allow several hours of sunshine daily. Also usesoxbow lakes, semi-permanent ponds, and occasionally temporary flood pools (USFWS 2019d).	Not likely to occur.	No effect
Mollusks						
Pink Mucket	*Lampsilisabrupta*	E	--	This mussel is found in mud and sand and in shallow riffles and shoals swept free of silt in major rivers and tributaries. This mussel buries itself in sand or gravel, with only the edge of its shell and its feeding siphons exposed. (USFWS 2019e)	Not likely to occur.	No effect
Ring Pink	Obovaria retusa	E	--	This species is endemic to the Ohio River basin and is found ingravel and sandy substrates in large rivers. (USFWS 2020c).	Not likely to occur.	No effect
Slabside Pearlymussel	*Pleuronaia dolabelloides*	E	E	The slabside pearlymussel is primarily a large creek to moderately-sized river species. It generally is found in gravel substrates with interstitial sand, with moderate current, at depths less than 1 meter deep in moderate to swift current velocities. This species requires flowing, well oxygenated waters to thrive. (USFWS 2014).	Not likely to occur.	No effect
Tan Riffleshell	*Epioblasma forentina walker*	E	E	This species occurs in sedentary within the substrate (relatively silt-free substrates of sand, gravel,and cobble in good flows of smaller streams) of river systems. (USFWS 2019f).	Not likely to occur.	No effect
Fishes						

Table 4. Federally and State Listed Threatened and Endangered Species with the Potential to Occur along the Special Permit Segments and Preliminary Effect Determination for the "Granted" Alternative, Clarke County, Mississippi, and Effingham and Harris County Georgia						
CommonName	**Scientific Name**	**Federal**	**State**	**Habitat Description**	**Occurrence**	**Effect**
AtlanticSturgeon	*Acipenser oxyrinchus*	T	T	These fish will then begin to ascend the lower reaches of large rivers in the spring to begin their spawning runs. Spawning normally occurs over bedrock, boulders and gravel bottoms. Adult Atlantic sturgeon will then return to the sea after spawning. (USFWS 2020d)	Not likely to occur.	No effect
Pearl Darter	*Percina aurora*	T	--	The Pearl Darter is known only from the Pearl and Pascagoula River systems in Mississippi and Louisiana. (USFWS 2020e).	Not likely to occur.	No effect
Flowering Plants						
Fringed Campion	*Silene polypetala*	E	--	This species occurs in mature hardwood forests with low-acid soils on moist, mid- to lower slopes and small stream terraces. (USFWS 2020f)	Potential to occur along forest edges.	No effect
Georgia Rockcress	*Arabis georgiana*	T	--	Georgia Rockcress occurs in thin woods and on steep rocky slopes above rivers and streams on basicor neutral soils. It may be persist in shady locations, but usually only flowers when growing in open areas. (USFWS 2019g)	Not likely to occur.	No effect
Little Amphianthus	*Amphianthus pusillus*	T	--	This species inhabits rock- rimmed temporary pools on weathered granite or gneissic outcrops. The outcrops can be large, isolated domes or gently rolling flatrocks. The pools are often referred to as vernal poolsand are typically shallow, flat- bottomed, and have intact rims. (USWFS 2003).	Not likely to occur.	No effect
Pondberry	*Lindera melissifolia*	E	--	Pondberry, for the most part, is associated with wetland habitats such as bottomland and hardwoods in the interior areas, and the margins of sinks, ponds and other depressions in the more coastal sites. The plants generally grow in shaded areas but may alsobe found in full sun. (USFWS 2014).	Not likely to occur.	No effect
Relict Trillium	*Trilliumreliquum*	E	--	This species occurs in rich, mixed-deciduous forests on slopes, bluffs, stream-flats, andfloodplains. (USFWS 2020g).	Not likely to occur.	No effect
T: Threatened (State and Federal) E: Endangered (State and Federal)						

Increased maintenance, monitoring, and repair activities in order to achieve compliance with this special permit in the ***special permit segments*** and ***special permit inspection areas*** will be

conducted within the boundaries of the previously disturbed pipeline right-of-way. SNG will request no effect concurrence from the United States Fish and Wildlife Service Twin Cities Ecological Services Field Office for any proposed future work by SNG to be undertaken within its existing, previously disturbed right-of-way to ensure compliance with Section 9 of the Endangered Species Act (ESA). Replacement of line pipe in the would result in increased disturbance to wildlife habitat, though that disturbance would also be temporary and limited in nature.

Climate Change*:** The scope and duration of any activities associated with the ***special permit segments, including maintenance and repair activities will have minimal impact on climate change. A benefit of the "Selected" Alternative is that it will avoid methane venting, construction, or ground disturbances in the pipeline ROW. The "No Action" Alternative would not grant a special permit, requiring the pipe replacement and/or hydrotesting would be required, which would necessitate the use of heavy equipment during construction and blowing down the pipeline releasing natural gas, a known greenhouse gas. Pipeline operators can and should mitigate blowdowns through pressure reductions and capture and storage of natural gas during pipeline work. However, PHMSA does not currently have authority to mandate these mitigation measures.

The "Selected" alternative will result in emissions that result from increased maintenance, monitoring, and repair requirements for the duration of the special permit. These emissions would be expected to be significantly less than the replacement associated with the "No Action" alternative.

The scope and duration of any activities associated with the special permit will have an insignificant impact on climate change.

Cultural Resources*:** There are no cultural, archaeological, or paleontological resources that will be impacted by this special permit request because the right of way was disturbed during initial construction of the pipeline. A cultural resource survey completed in 2019 determined no National Register of Historical Places (NRHP) listed building is located within one (1) mile of the ***special permit segments.

Environmental Justice: The special permit alternative associated with this special permit will not have an adverse impact on the local population. The ***special permit segments*** are not situated in or disproportionately impacts any predominantly minority, low income, or non-English

language populations as demonstrated in **Table 5 – Demographic Information for Special Permit Segments – Using EPA EJScreen**. In any event, the activities of the special permit are intended to maintain safety along the ***special permit segments*** and increase the level of the safety along the 169.72-mile ***special permit inspection areas***.

The special permit is intended to maintain or increase safety with the implementation of safety conditions in the ***special permit segments***. Many special permit conditions also apply to the ***special permit inspection areas*** and will not have a disparate impact on any minority, low income, or limited English proficiency populations. This special permit will also reduce climate change impacts, which are understood to disproportionately affect low-income and minority communities. Therefore, consistent with DOT Order 5610.2C ("Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations") and Executive Orders 12898 ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"), 13985 ("Advancing Racial Equity and Support for Underserved Communities Through the Federal Government"), 13990 ("Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis"), 14008 ("Tackling the Climate Crisis at Home and Abroad"), 12898 and DOT Order 5610.2(a), and Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, PHMSA does not anticipate that the special permit will result in disproportionately high and adverse effects on minority or low-income populations.

Table 5 - Demographic Information for Special Permit Segments – Using EPA EJScreen						
Special Permit Segment No.	State	County	Total Population (Along Special Permit Segment)	Minority*/ People of Color** Population	Low Income Population	Linguistically Isolated
1	GA	Effingham	509	19%	5%	1%
2	MS	Clarke	109	11%	30%	0%
4	MS	Clarke	109	11%	30%	0%
5	GA	Harris	479	24%	10%	0%

Minority*: The term minority is used in the currently active DOT Environmental Justice Order 5610.2(a), available at: https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102a/index.fm

People of Color**: The term people of color is used in the EPA's Environmental Justice Screening and mapping tool (EJSCREEN). An overview of demographic indicators through EJSCREEN is available at: https://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen

Geology and Soils*:** The ***special permit segment 1 is located within the Penholoway Shoreline Complex Geological Formation which is characterized by coastal plain sedimentary rocks. The dominant soils are the Leon sand soils. Soils in this group are poorly drained and are not classified as prime farmland.

Earthquake activity impact analysis for SNG's pipelines is based upon magnitude, location, intensity extents, and analytical information provided by the USGS quantifying ground shaking and strength at our pipelines. The Modified Mercalli Intensity (MMI scale) provides an understanding of the intensity decrease with distance. For SNG, conditions of initial interest will not be expected until an earthquake magnitude reaches M4.5 (referenced and explained inchart below) and greater with the epicenter directly at the pipeline or when the local ground shaking at the pipeline resulting from a remotely located event reaches an assigned MMI value of at least VI.[6]

There have been four (4) historical earthquakes in a 62-mile radius from the ***special permit***

[6] The Modified Mercalli Intensity (MMI) value assigned to a specific site after an earthquake has a more meaningful measure of severity to nonscientist than the magnitude because intensity refers to the effects actually experienced at that place. The MMI is provided by the USGS (United Stated Geological Service) after earthquake. See chart below for more information.

segments. The epicenter of the closest historic earthquake is located ~16.38 miles from the ***special permit segments*** and with a magnitude of 4.1, was classified as a Light Earthquake.

The project area (***special permit segments 2 and 4***) is located within the Kosciusko Geological Formation which is characterized by irregularly bedded sand, clay, and some quartzite. The dominate soils are the Smithdale fine sandy loam soils. Soils in this group are well drained and are classified as prime farmland.

There have been twenty (20) historical earthquakes in a 62-mile radius from the ***special permit segments***. The epicenter of the closest historic earthquake is located ~ 2.37 miles from the ***special permit segments*** and with a magnitude of 3.0, was classified as a minor Earthquake.

The project area (***special permit segment 5***) is located within the Biotite Gneiss Geological Formation. The dominate soils are the Pacolet sandy loam soils. Soils in this groupare well drained and are classified as farmland of statewide importance.

There have been five (5) historical earthquakes in a 62-mile radius from the ***special permit segments***. The epicenter of the closest historic earthquake is located ~ 6.45 miles from the ***special permit segments*** and with a magnitude of 3.1, was classified as a minor Earthquake.

Granting the special permit will minimize the ground disturbance and existing conditions will remain undisturbed. As such, geologic, soil and mineral resources will not be impacted.

Indian Trust Assets: Any work associated with these ***special permit segments*** 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: Minimal ground disturbance or modifications could occur along the ***special permit segments*** and ***special permit inspection areas*** will occur as part of the special permit from increased maintenance activities. The special permit will not impact land use or planning and does not require permits from local governments.

Noise: The scope and duration of any maintenance or repair activities required for compliance with the special permit along the ***special permit segments*** and ***special permit inspection areas*** would cause minimal localized and temporary increases in noise levels in the vicinity of the pipeline. These noise impacts could occur throughout the duration of the special permit, which

could be many years. A denial of the special permit or the "no action" alternative would likely result in more significant and concentrated, though temporary increases in noise during the replacement of the existing pipe.

Recreation: The request could have minimal impacts on recreational resources in the special permit segments and ***special permit inspection areas*** due to compliance with increased maintenance, monitoring, and repair activities required for compliance with the special permit. The impacts will be temporary and sporadic throughout the applicability of the proposed special permit.

A denial of the special permit or the "no action" alternative would result in temporary increasesin disturbances to recreational activities during the replacement of the existing pipe.

Safety: Class locations are based upon the population (dwellings for human occupancy) within a "class location unit" which is defined as an onshore area that extends 220 yards on either side of the centerline of any continuous one-mile of pipeline. These locations are determined by surveying the pipeline for population growth. The more conservative safety factors are required as the number of dwellings for human occupancy (population growth) increase near the pipeline. Pipeline operators must conduct surveys and document population growth within 220 yards on either side of the pipeline. A higher population along the pipeline may trigger any of the following for the pipeline segment with the higher population: a reduced MAOP, a new pressure test at a higher pressure, or new pipe with either or both heavier walled or higher-grade pipe.

The special permit enhanced IM conditions are designed to identify and mitigate integrity threats that could threaten the ***special permit segments*** and cause failure. The effect of the monitoring and maintenance requirements in the special permit conditions will ensure the integrity of the pipe and protection of the population living near the pipeline segment to a similar degree of a lower MAOP, new pressure test, or a thicker walled or higher-grade pipe that would not have the enhanced IM protections.

Under the "Selected" Alternative of granting a special permit, PHMSA will require increase IM inspections for each ***special permit inspection area*** adjacent to the ***special permit segment***, which will lower the risk in areas beyond each ***special permit segment***. SNG must implement the conditions in ***special permit inspection area*** for the duration of the special permit.

PHMSA analyzed the integrity conditions and history of the SNG natural gas transmission pipeline system, and PHMSA determined that the pipeline is in satisfactory condition for the issuance of the special permit. Details about the pipeline's integrity and compliance history are provided in the SPAF s document, which is available in the docket.

Performance of the conditions in the special permit provides an equivalent level of safety for the public and environment; and imposes no additional safety risks as a result of the waived regulation. As already noted, the ***special permit segments*** included under the special permit will be treated as HCAs with the additional risk analysis and remedial activities associated with this designation. The special permit also includes a number of conditions that address potential safety risks. Among these are incorporation of these segments into the SNG IM Program, close interval corrosion surveys, implementation of a cathodic protection reliability improvement plan, an in-line inspection program with intervals not to exceed seven years, anomaly evaluation and repair meeting more stringent criteria, additional testing and remediation of interference currents caused by induced alternating current sources, pipe seam evaluations, criteria for the identification of pipe properties, installation of line-of-sight markers, and the integration of all inspection and remediation data.

(a) Will operation under a special permit change the risk of rupture or failure?

Operation under the special permit will not be expected to have an impact on the risk of failure or rupture as the operating conditions of the ***special permit segments*** have not changed. The special permit will require inspections at intervals similar to IM program intervals, which will maintain the integrity of the ***special permit segment*** over the life of the special permit.

(b) If a failure occurred, will consequences and spill or release volumes be different if PHMSA granted the permit? Will granting this permit increase, decrease, or have no change on the risk of failure?

The consequences of any spill or release will not be impacted as a result of the special permit and the potential for such an event is expected to be less likely with the added safety programs noted above.

If PHMSA denied the special permit request and SNG opted to lower the pressure, the potential impact radius (PIR) would be smaller in the event of a pipeline failure.

However, SNG's contractual obligations would not allow for a lowering of pressure and therefore, SNG would need to replace the existing pipeline.

(c) Will the Potential Impact Radius of a rupture change under the Special Permit? Please calculate and provide the PIR data, if applicable. Will more people be affected by a failure if PHMSA granted the permit?

As compared to current operation, the PIR as calculated in accordance with 49 CFR § 192.903 will not change under the special permit since maximum operating pressure and pipe diameter will not change, thus there will be no additional impact on the public.

The PIR for each ***special permit segment*** is calculated below.

PIR = 0.69 * (MAOP * NOMINAL DIAMETER^2)$^{0.5}$

For ***special permit segment 1***, calculated PIR = 0.69 * (1250 * 24^2)$^{0.5}$ = 585 feet

For ***special permit segment 2***, calculated PIR = 0.69 * (1200 * 26^2)$^{0.5}$ = 621 feet

For ***special permit segment 4***, calculated PIR = 0.69 * (1200 * 36^2)$^{0.5}$ = 860 feet

For ***special permit segment 5***, calculated PIR = 0.69 * (1200 * 36^2)$^{0.5}$ = 860 feet

(d) Will operation under the Special Permit have any effect on pipeline longevity or reliability? Will there be any life cycle or maintenance issues?

Operation under the special permit conditions will provide a positive impact on pipeline longevity and reliability. PHMSA does not anticipate any deleterious life cycle or maintenance issues related to operation of the pipeline special permit segment by implementation the special permit by SNG.

Socioeconomics: This special permit will not be situated in, or disproportionately impact, any predominantly low-income populations. The scope and duration of any activities associated with the ***special permit segments*** will have no impact on the socioeconomics in the vicinity of the Harris County, Georgia and Clarke County, Mississippi. Approximately 18.5% of families in Clarke County, Mississippi, are living below the poverty level. The project is not situated in, or disproportionately impacts, any predominantly low-income populations.

Approximately 7.3% of families in Harris County, Georgia are living below the poverty level. The project is not situated in, or disproportionately impacts, any predominantly low-income populations.

In any event, the special permit will be designed to maintain pipeline safety for the ***special permit segments*** and increase pipeline safety for the ***special permit inspection areas***.

Topography: The topography of the area surrounding the requested ***special permit segments*** are flat open and forested land. The aim of the special permit is to avoid construction and other ground disturbing activities in the right-of-way.

No construction-related activities will occur if the special permit is granted; therefore, the topography in the area will not be affected.

Transportation: The ***special permit segments*** will be accessed by existing roads and right-of-way crossings. No construction-related activities will occur as part of the special permit request; therefore, traffic will not increase, and construction of additional roads will not be required.

Water Resources: ***Special Permit Segment 1*** – The ***special permit inspection area*** traverses Dasher Creek-Savannah River, Little Ogeechee River, Lower Ogeechee River, Ossabaw Sound-Atlantic Ocean, Medway River-Atlantic Ocean, North Newport River, South Newport River, Altamaha River-Atlantic Ocean, and Turtle River watersheds. The ***special permit inspection area*** crosses through the mapped Federal Emergency Management Agency (FEMA) 100-year floodplain at more than 75 locations. The ***special permit inspection area*** crosses more than 75 wetland areas consisting of palustrine forested and palustrine emergent wetland types.

Special Permit Segment 2 – The ***special permit inspection area*** traverses Archusa Creek-Chickasawhay River, Long Creek-Buckatunna Creek, Tuckaburn Creek, and Kinterbish Creek watersheds. The ***special permit inspection area*** crosses through the mapped FEMA 100-year. Floodplain at 12 locations and through the floodway at one (1) location. The ***special permit inspection area*** crosses ten major palustrine forested wetland areas.

Special Permit Segment 4 – The ***special permit inspection area*** traverses Archusa Creek-Chickasawhay River, Long Creek-Buckatunna Creek, Tuckaburn Creek watersheds. ***The special permit inspection area*** crosses through the mapped FEMA 100-year floodplain at nine (9) locationsand through the floodway at one (1) location. The ***special permit inspection area*** crosses six (6) major palustrine forested wetland areas.

Special Permit Segment 5 – The ***special permit inspection area*** traverses Lower Upatoi Creek, Mulberry Creek, and Lazer Creek watersheds. The ***special permit inspection area*** crosses through the mapped FEMA 100-year floodplain at 13 locations. The ***special permit inspection***

area crosses six (6) major palustrine forested wetland areas.

Minor additional yet temporary waterbody impacts could result from runoff or siltation from additional maintenance and repair activities that occur along the ***special permit inspection areas***. These minor impacts could occur for as long as the special permit remains in effect. If the special permit is denied, more significant, yet temporary runoff or siltation impacts could affect water bodies in the vicinity of the ***special permit segments***. Siltation can decrease oxygen levels and visibility, affecting the feeding and reproduction of benthic macroinvertebrates, fish, reptiles, amphibians, and water fowl. In each case, SNG is required to follow Federal, state, andlocal law to minimize impacts to these resources.

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 operator 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 segments*** and ***special permit inspection areas***, 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 SNG, will avoid delivery interruptions and supply shortages, and avert environmental disturbance.

While the granting of the special permit avoids the full replacement of affected pipe, the special permit conditions require monitoring and maintenance that could lead to minor excavations and repair or replacement of some pipe. The effect of the monitoring and maintenance requirements in the special permit conditions will ensure the integrity of the pipe and protection of the population living near the ***special permit segments*** to a similar degree of a lower MAOP, new pressure test, or a thicker walled or higher-grade pipe without the enhanced IM protections.

Performance of the special permit conditions provides an equivalent level of safety for the public and environment; and imposes no additional safety risks as a result of the waived regulation. As already noted, all the ***special permit segments*** included in the special permit will be treated as HCAs with the additional risk analysis and remedial activities associated with this designation.

The special permit also includes a number of conditions that address potential safety risks.

In the event that PHMSA denied the special permit, it would have no authority to decide whether SNG achieved full compliance with 49 CFR Part 192 through pressure reduction or pipeline segment replacement. Nonetheless, SNG reports that its contractual obligations would not allow the operating pressure of the pipe to be lowered. Thus, the PIR of a pipeline failure will be the same whether the pipe operates under a special permit, is replaced, or pressure tested. Likewise, human safety as a result of pipeline failure would not be affected differently under either the action or no-action alternatives. Furthermore, the special permit enhanced IM conditions are designed to identify and mitigate integrity issues that could threaten the ***special permit segments*** and cause failure.

SNG will evaluate the potential environmental consequences and affected resources of land disturbances and adjacent waterbody impacts caused by construction activities (including adding, modifying, replacing, or removing any facility) associated with any SNG activity. These activities are regulated by the Federal Energy Regulatory Commission (FERC) under Section 7 of the Natural Gas Act (NGA) and are subject to federal, state, and local environmental authorizations and require a review by SNG Environmental Services staff prior to the start of work, incorporation of environmental requirements into the project implementation, and ensuring outstanding (environmental) requirements are incorporated into facility operation.

The ”Selected” Alternative approval of the special permit will have a positive impact to landowners and negligible, if any, environmental impact for the ***special pipeline segments*** that does not require pressure testing or replacement. SNG will avoid disturbing the ROW of property owners except for the additional inspections that may be required to satisfy the conditions of the special permit such as those related to the IMP for HCAs, and potential anomaly evaluations/repairs. If the special permit was not granted, 49 CFR 192.611(a) and (d) and 192.619(a) would require pipe replacement and pressure testing. This would result in temporary disturbances to the natural environment in the ***special permit segments***. The consequences of any spill or release will not be changed as a result of the special permit and the potential for such an event is expected to be less likely

X. Consultation and Coordination

The following Kinder Morgan employees were consulted in the preparation of this document:

- Jaime Hernandez - Director of Codes and Standards
- Charlie Childs - Manager, IC Pipeline Integrity
- Justin Durham - Manager, Engineering
- Gary Taylor- Manager, Pipeline Compliance Systems
- Johnson Samuel - Project Management Specialist Compliance systems
- Megan Mater - Specialist SR 1, Project Permitting – Minor Projects

The following PHMSA employees were involved in the preparation of this document:

- Amelia Samaras, Attorney
- Joshua Johnson, Engineer
- Steve Nanney, Engineer

XI. Response to Public Comments Placed on Docket PHMSA-2020-0007

PHMSA published the special permit request in the Federal Register (86 FR 6737) for a 30-day public comment period from January 22, 2021, through February 22, 2021. The special permit application from SNG, draft environmental assessment, and draft special permit conditions were available in Docket No. PHMSA-2020-0007 at: www.regulations.gov for public review. PHMSA received no public comments concerning this special permit renewal request through February 22, 2021.

XII. Finding of No Significant Impact

In consideration of the FEA and special permit conditions explained above, PHMSA finds that granting this special permit with conditions that require SNG to operate the four (4) ***special permit segments***, which consists of approximately 0.621 miles of 24-inch, 26-inch, and 36-inch diameter pipelines located in Effingham and Harris Counties, Georgia, and Clarke County, Mississippi, at either their current or at a reduced MAOP for a Class 1 to 3 location change segment will not be inconsistent with pipeline safety. The special permit waives the requirements of 49 CFR 192.611(a) and (d) and 192.619(a) for four (4) ***special permit segments***. This special permit grant is based upon SNG's implementation of the special permit conditions. In the four (4) ***special permit segments*** SNG must identify, assess, and remediate threats

including threats to the pipe body, weld seams and girth welds, and the cause of these integrity threats or replace the pipe, as required in the special permit conditions. This permit will require SNG to implement additional conditions on the operations, maintenance, and integrity management of the special permit segments and special permit inspection areas.

The special permit conditions can be read in its entirety in Docket No. PHMSA-2020-0007 in the Federal Docket Management System located on the internet at www.regulations.gov or on the PHMSA website for special permits issued at https://www.phmsa.dot.gov/pipeline/special-permits-state-waivers/special-permits-issued.

XIII. Bibliography

Florida Department of Environmental Protection (FDEP). 2019. Florida Map Direct. Available online at: https://ca.dep.state.fl.us/mapdirect/#Division%20of%20Water%20Restoration%20Assistance%20(DWRA). Accessed October 2019.

Florida Natural Areas Inventory (FNAI). 2019. Florida Conservation Lands data. Available online at: https://www.fnai.org/gisdata.cfm. Accessed October 2019.

U.S. Census Bureau. 2013-2017. American Fact Finder. American Community Survey 5-Year Estimates (2013-2017). Available online at: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk. Accessed October 2019.

U.S. Fish and Wildlife Service (USFWS). 2019a. Information, Planning, and Conservation System (IPaC) Trust Resource Report. Available online at: http://ecos.fws.gov/ipac/. Accessed October 2019.

USFWS. 2019b. National Wetlands Inventory Data. Available at: https://www.fws.gov/wetlands/Data/Data-Download.html. Accessed October 2019.

U.S. Geologic Survey (USGS). 2014. 2014 Long-term Model. Available online at: https://earthquake.usgs.gov/hazards/hazmaps/conterminous/2014/images/HazardMap2014_lg.jpg. Accessed October 2019.

USGS. 2018. Short-term Induced Seismicity Models, 2018 One-Year Model. Available online at: https://earthquake.usgs.gov/hazards/induced/index.php#2018. Accessed October 2019.

Completed by PHMSA in Washington, DC on: July 27, 2022

Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest,especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

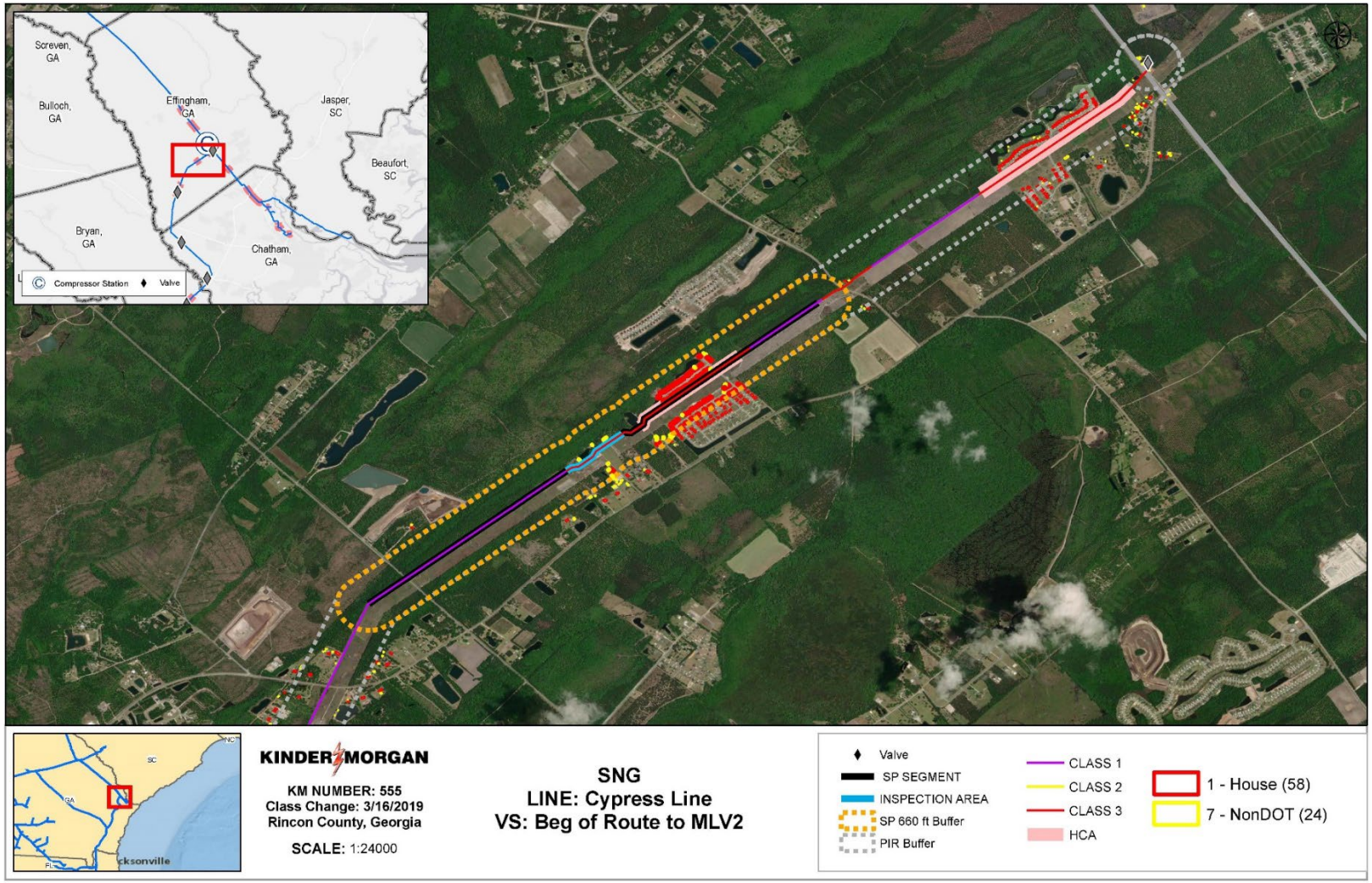
(Public domain.)

Earthquake Magnitude Scale

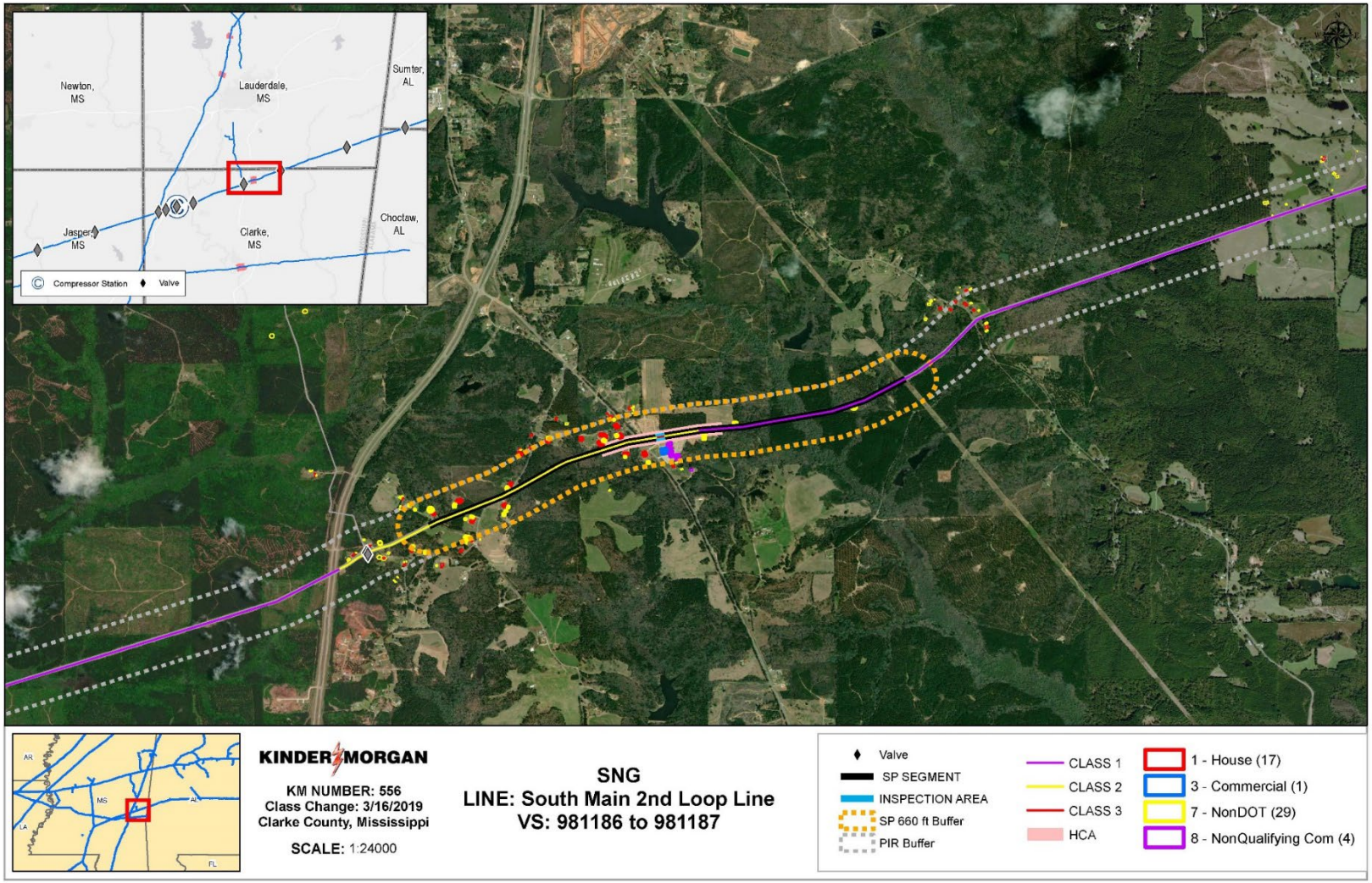
Richter Magnitudes	Description	Earthquake Effects	Frequency of Occurrence
Less than 2.0	Micro	Micro-earthquakes, not felt.	About 8,000 per day
2.0 - 2.9	Minor	Generally not felt, but recorded.	About 1,000 per day
3.0 - 3.9	Minor	Often felt, but rarely causes damage.	49,000 per year (est.)
4.0 - 4.9	Light	Noticeable shaking of indoor items, rattling noises. Significant damage unlikely.	6,200 per year (est.)
5.0 - 5.9	Moderate	Can cause major damage to poorly constructed buildings over small regions. At most slight damage to well-designed buildings.	800 per year
6.0 - 6.9	Strong	Can be destructive in areas up to about 160 kilometers (100 mi) across in populated areas.	120 per year
7.0 - 7.9	Major	Can cause serious damage over larger areas.	18 per year
8.0 - 8.9	Great	Can cause serious damage in areas several hundred miles across.	1 per year
9.0 - 9.9	Great	Devastating in areas several thousand miles across.	1 per 20 years
10.0+	Epic	Never recorded	Extremely rare (Unknown)

(Based on U.S. Geological Survey documents.)[2]

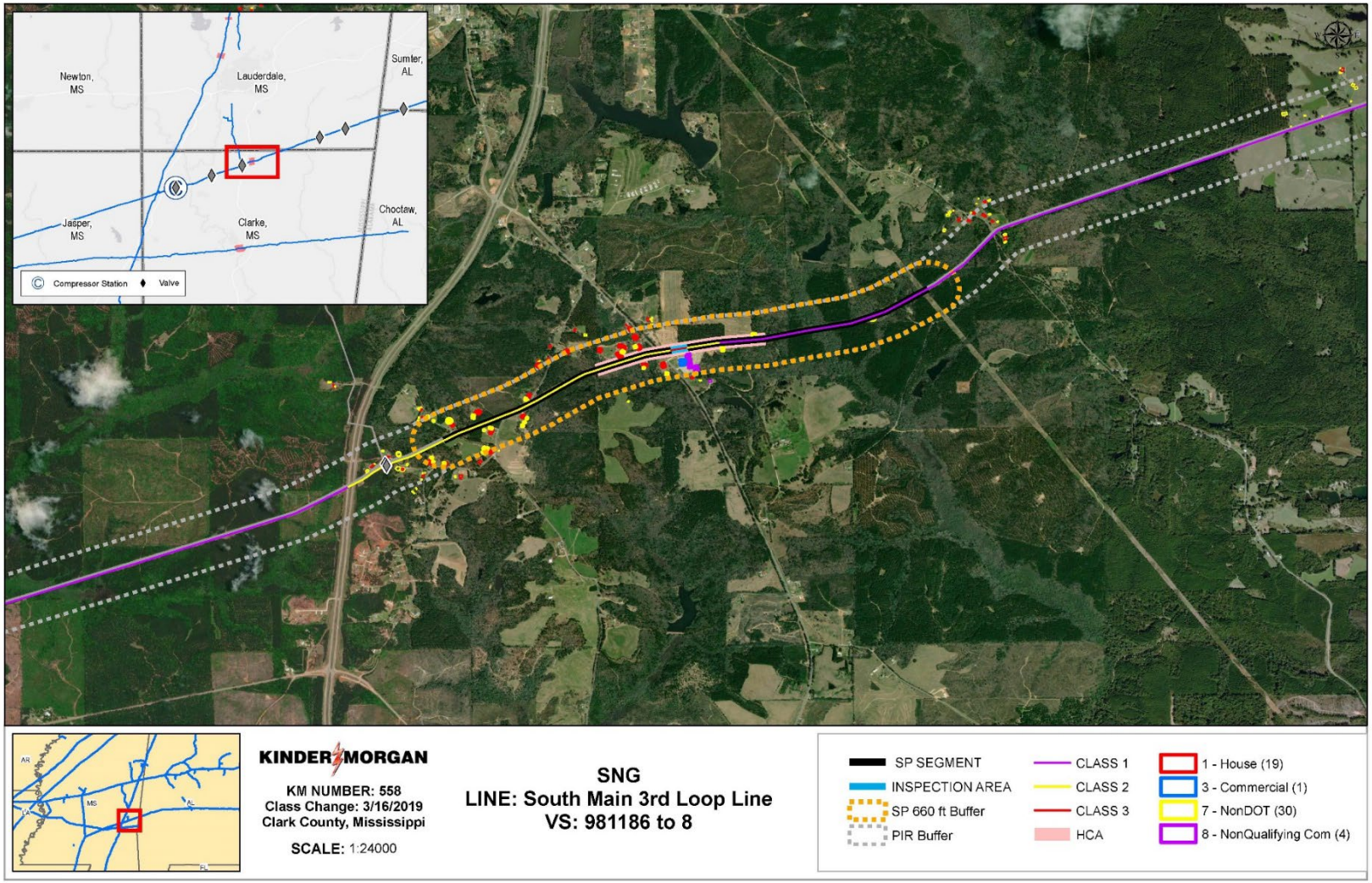
Attachment A-1 - Special Permit Segment 1



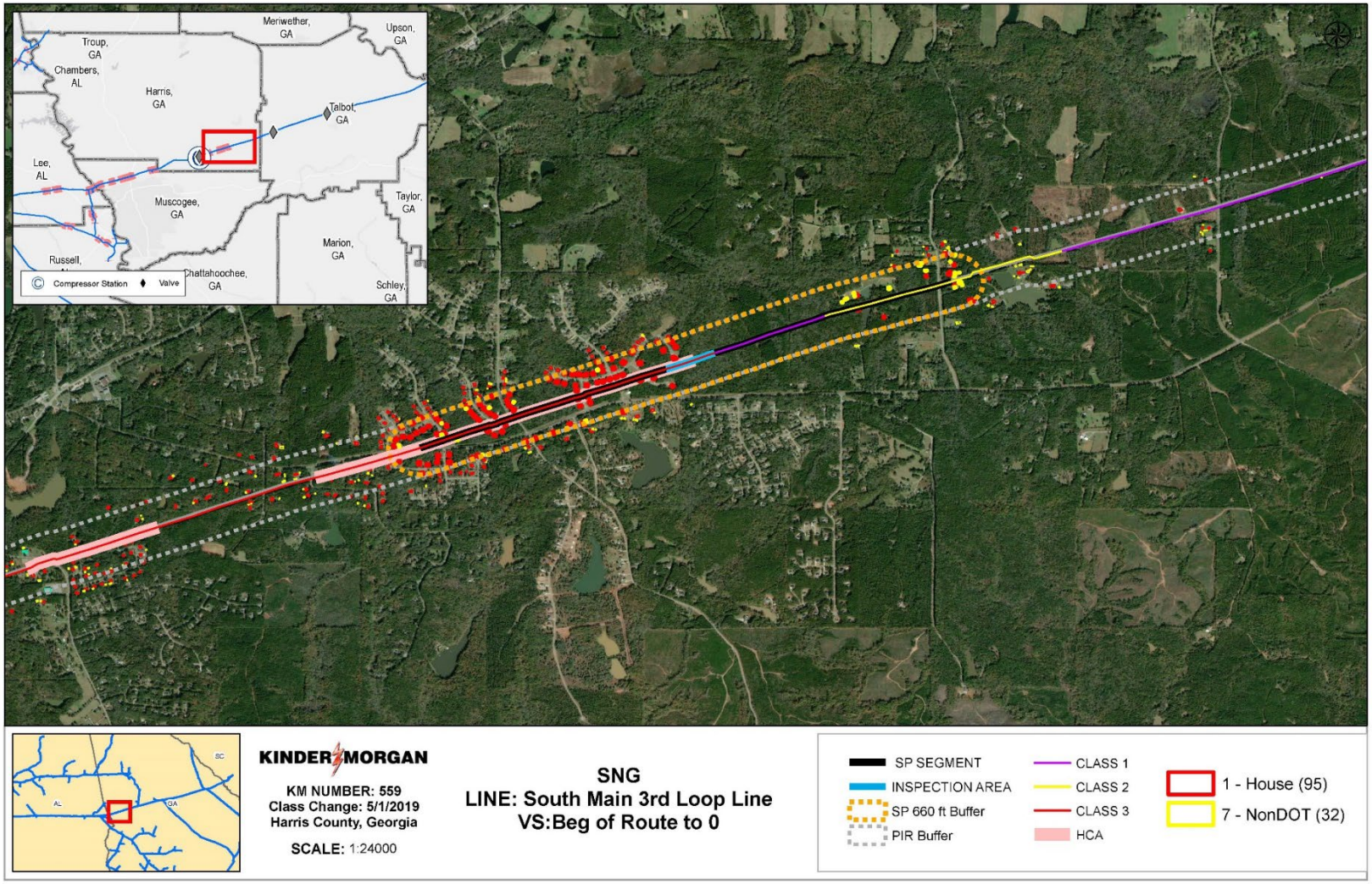
Attachment A-2 - Special Permit Segment 2



Attachment A-3 - Special Permit Segment 4



Attachment A-4 - Special Permit Segment 5



Last Page of the FEA and FONSI