NPDES PERMIT NO. TX0134076
STATEMENT OF BASIS

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT:

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ISSUING OFFICE:

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DATE PREPARED:

April 23, 2019

PERMIT ACTION

It is proposed that the facility be issued an NPDES permit for a 5-year term in accordance with regulations contained in 40 Code of Federal Regulations (CFR) 122.46(a).

40 CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of February 1, 2019.

RECEIVING WATER – BASIN

Gum Branch Creek; Texas Segment 1011 in San Jacinto River Basin
Peach Creek; Texas Segment 1011 in San Jacinto River Basin
Caney Creek; Texas Segment 1010 in San Jacinto River Basin
Lake Conroe; Texas Segment 1012 in San Jacinto River Basin

DOCUMENT ABBREVIATIONS

For brevity, Region 6 used acronyms and abbreviated terminology in this Statement of Basis document whenever possible. The following acronyms were used frequently in this document:

BAT	Best Available Technology Economically Achievable
BOD_5	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
F&WS	United States Fish and Wildlife Service
GPD	Gallon per day
HT	Hydrostatic Testing
IP	Procedures to Implement the Texas Surface Water Quality Standards
µg/l	Micrograms per liter (one part per billion)
mg/l	Milligrams per liter (one part per million)
MGD	Million gallons per day
MSGP	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
RRC	Railroad Commission of Texas
RP	Reasonable potential
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TDS	Total dissolved solids
TMDL	Total maximum daily load
TOC	Total Organic Carbon
TRC	Total residual chlorine
TSS	Total suspended solids
TSWQS	Texas Surface Water Quality Standards
WET	Whole effluent toxicity
WQMP	Water Quality Management Plan
WQS	Water Quality Standards

I. APPLICANT LOCATION and ACTIVITY

The proposed permit allows only for hydrostatic discharge water from the 19-mile portion of new 24-inch diameter natural gas pipeline that is part of the Willis Lateral Project in the Liberty, Montgomery, and San Jacinto Counties, Texas. The facility plans to conduct hydrostatic testing of the pipeline project in four segments. Test water will be sourced from the nearby Boggy Creek, Peach Creek, and Lewis Creek Reservoir, as well as municipal water. One-time discharges of approximately 1.09 MGD, 0.06 MGD, 0.09 MGD, and 1.15 MGD will be discharged into Gum Branch Creek, Peach Creek, Camp Creek, and Lewis Creek Reservoir, respectively, totaling 2.39 MGD. These discharges will ultimately flow into Peach Creek, Caney Creek, and Lake Conroe.

Under the SIC Code 4923, Natural Gas Transmission, the applicant plans to engage in the transmission of natural gas. Beginning in October 2019, the applicant intends to conduct hydrostatic testing of new segments of steel pipe. The new pipeline will be filled with pressurized water to ensure pipeline integrity per Federal Department of Transportation rules and regulations. Since the tests are to be conducted on new pipe segments and the discharge will not be chemically treated, the applicant does not anticipate the addition of any pollutants from this activity. After the tests are completed, the water will be discharged into receiving waters at a rate of 200 gal/min through an energy dissipation device and/or filtration device to prevent erosion at each outfall.

II. DISCHARGE LOCATION

The discharge points showing Outfall number, discharge coordinates: latitude and longitude, county, average flow rate in million gallons per day (MGD), receiving water, and the waterbody identification numbers are shown in the following table:

Table 1 – Discharge Location for Outfalls 001 - 004

Outfall Reference Number	Discharge Coordinates Latitude Deg° Min' Sec" Longitude Deg° Min' Sec"	County	Average Flow MGD*	Receiving Water	Segment #
001	30° 23' 0" N 95° 13' 30" W	San Jacinto	1.09	Gum Branch Creek	Segment No. 1011
002	30° 24' 30" N 95° 18' 30" W	San Jacinto	0.06	Peach Creek	Segment No. 1011
003	30° 26' 0" N 95° 28' 0" W	Montgomery	0.09	Caney Creek	Segment No. 1010
004	30° 26' 0" N 95° 31' 0" W	Montgomery	1.15	Lake Conroe	Segment No. 1012

**Note: For the proposed activity this flow consists of a one-time total discharge*

III. DISCHARGE DESCRIPTION

Water for the hydrostatic tests will be drawn from Peach Creek/Boggy Creek (Outfall 001), Peach Creek (Outfall 002), Lewis Creek Reservoir (Outfall 004), and municipal (Outfall 003) sources. Outfalls 001,002, and 004 will be discharged back into their respective source water

segments, while Outfall 003 will be discharged into the Caney Creek water segment (No. 1010). The facility anticipates that the non-municipal source waters may contain a variety of Group A and Group B pollutants (See EPA Form 2D, Table 2D-2 for lists of Group A & B Pollutants). The facility requests a waiver for Group A and Group B water quality data. The designated uses of Water Segments 1010, 1011, and 1012 are primary contact recreation, high aquatic life, and public water supply.

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water;" more commonly known as the "swimmable, fishable" goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR 122.46(a). This is a first- time permit issuance. An NPDES Application for a Permit to Discharge (Form 1 & 2D) dated January 30, 2019, was received on February 1, 2019, and deemed incomplete on February 22, 2019 with a notification sent on March 4, 2019. A Form 2E was supplied for each of the permit's four Outfalls on April 3, 2019. This revised application was deemed administratively complete on April 11, 2019.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

A. OVERVIEW of TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITION FOR PERMIT ISSUANCE

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, on best professional judgment (BPJ) in the absence of guidelines, and/or requirements pursuant to 40 CFR 122.44(d), whichever are more stringent. Limitations for Oil & Grease, TSS, TRC, and pH are proposed in the permit. Technology-based effluent limitations are established in the proposed draft permit for TSS and Oil & Grease. Water quality-based effluent limitations are established in the proposed draft permit for pH and TRC.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

There are no published ELG's for this type of activity. Permit limits are proposed based on BPJ. Since hydrostatic test water discharges are batch discharges of short-term duration, with variable and intermittent flow, limits in this Permit will be expressed in terms of daily maximum concentrations rather than in terms of mass limitations, as allowed by 40 CFR 122.45(e) and (f). The proposed limitations for TSS are 45 mg/l maximum, and for Oil & Grease are 15 mg/l maximum. Narrative standards for oil, grease, or related residue have been placed in the proposed permit. A technology-based limit of 15 mg/l for Oil and Grease should assure that the narrative criterion is maintained.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality-based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in

conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The Clean Water Act in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR 122.44(d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant. If the discharge poses the reasonable potential to cause an in-stream violation of narrative standards, the permit must contain prohibitions to protect that standard. Additionally, the TWQS found at 30 TAC Chapter 307 states that "surface waters will not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life." The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards" (IP) is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater which: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

The IP document is not a state water quality standard, but rather, a non-binding, non-regulatory guidance document. See IP at page 2 stating that "this is a guidance document and should not be interpreted as a replacement to the rules. The TWQS may be found in 30 TAC Sections (§§) 307.1-.10."). EPA does not consider the IP to be a new or revised water quality standard and has never approved it as such. EPA did comment on and conditionally “approve” the IP as part of the Continuing Planning Process (CPP) required under 40 CFR §130.5(c) and the Memorandum of Agreement between TCEQ and EPA, but this does not constitute approval of the IP as a water quality standard under CWA Section 303(c). Therefore, EPA is not bound by the IP in establishing limits in this permit – but rather, must ensure that the limits are consistent with the EPA-approved state WQS. However, EPA has made an effort, where we believe the IP procedures are consistent with all applicable State and Federal regulations, to use those procedures.

The general criteria and numerical criteria which make up the stream standards are provided in the 2018 EPA-approved Texas Water Quality Standards, Texas Administrative Code (TAC), 30 TAC Sections 307.1 - 307.9, effective November 2, 2018.

4. Reasonable Potential - Procedures

EPA develops draft permits to comply with State WQS, and for consistency, attempts to follow the IP where appropriate. However, EPA is bound by the State’s WQS, not State guidance, including the IP, in determining permit decisions. EPA performs its own technical and legal review for permit issuance, to assure compliance with all applicable State and Federal requirements, including State WQS, and makes its determination based on that review.

Waste load allocations (WLA's) are calculated using estimated effluent dilutions, criteria outlined in the TWQS, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentrations that can be discharged and still meet instream criteria after mixing with the receiving stream. From the WLA, a long-term average (LTA) is calculated, for both chronic and acute toxicity, using a log normal probability distribution, a given coefficient of variation (0.6), and either a 90th or a 99th percentile confidence level. The 90th percentile confidence level is for discharges to rivers, freshwater streams and narrow tidal rivers with upstream flow data, and the 99th percentile confidence level is for the remainder of cases. For facilities that discharge into receiving streams that have human health standards, a separate LTA will be calculated. The implementation procedures for determining the human health LTA use a 99th percentile confidence level, along with a given coefficient of variation (0.6). The lowest of the calculated LTA; acute, chronic and/or human health, is used to calculate the daily average and daily maximum permit limits.

Procedures found in the IP for determining significant potential are to compare the reported analytical data either from the DMR history and/or the application information, against percentages of the calculated daily average water quality-based effluent limitation. If the average of the effluent data equals or exceeds 70% but is less than 85% of the calculated daily average limit, monitoring for the toxic pollutant will usually be included as a condition in the permit. If the average of the effluent data is equal to or greater than 85% of the calculated daily average limit, the permit will generally contain effluent limits for the toxic pollutant. The permit may specify a compliance period to achieve this limit if necessary.

Procedures found in the IP require review of the immediate receiving stream and effected downstream receiving waters. Further, if the discharge reaches a perennial stream or an intermittent stream with perennial pools within three-miles, chronic toxicity criteria apply at that confluence.

For Outfalls 001, 002, and 004, hydrostatic test water will be both drawn from and discharged back to the Peach Creek (Outfalls 001 and 002) and Lake Conroe (Outfall 004) Texas water segments. Since intake and discharge of the hydrostatic test water will involve the same water segments, intake credits for TSS are allowed for Outfalls 001, 002, and 004.

5. Permit-Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

Daily minimum and daily maximum permit limits of 6.0 standard units to 9.0 standard units are typically used on hydrostatic test general permits developed by other EPA Regions and States. TAC 307.10 states, "The pH criteria are listed as minimum and maximum values expressed in standard units at any site within the segment."

However, wastewater discharges from the facility will flow into Peach Creek (Texas Segment 1011), Caney Creek (Texas Segment 1010), and Lake Conroe (Texas Segment 1012). Peach Creek and Caney Creek have Texas WQS for pH of 6.0-8.5 s.u. Therefore, pH for Outfalls 001, 002, and 003 shall be limited to 6.0-8.5 s.u., the criteria listed for Segments 1010 and 1011. Lake Conroe has Texas WQS for pH of 6.5-9.0 s.u. Therefore, pH for Outfall 004 shall be limited to 6.5-9.0 s.u., the criteria listed for Segment 1012.

b. Narrative Limitations

Narrative protection for aesthetic standards will require that surface waters shall be maintained so that oil, grease, or related residue will not produce a visible film or globules of grease on the surface or coat the banks or bottoms of the watercourse; or cause toxicity to man, aquatic life, or terrestrial life.

The following narrative limitations in the proposed permit represent protection of water quality for all Outfalls.

"The effluent shall contain no visible film of oil or globules of grease on the surface or coat the banks or bottoms of the watercourse."

c. Total Residual Chlorine

TRC shall be limited to 0.019 mg/l in Outfall 003 because the source water is from municipal water supply. The EPA chlorine criteria are 19 µg/L for acute exposure and 11µg/L for chronic exposure. Limits must be protective of WQS per 40 CFR 122.4(d) and 122.44(d). Since the acute conditions do not allow dilution that limit must be met at end-of-pipe, though chronic standards do allow dilution. The permit shall use the most stringent WQS for the permit limit.

Critical dilution is ((0.1395 cfs - 0.0093 cfs - 0.093 cfs)/((0.1395 cfs – 0.0093 cfs -0.093 cfs) + 0.204 cfs))(100) = 15.4%. The in-stream TRC concentration after allowing for dilution is: 11 µg/L ÷ 0.154 = 71.4 µg/L. Since this value is more than the 19 µg/L end-of-pipe acute standard, the 19 µg/L is more stringent and will be more protective. The draft permit shall establish the 19 µg/L limit. However, TRC is toxic at measurable amounts, so in addition to the 19 µg/L chemical specific limitation, the narrative limit for TRC shall be "No Measurable."

Hence, the effluent shall contain NO MEASURABLE TRC at any time. NO MEASURABLE will be defined as no quantifiable level of TRC as determined by any approved method established in 40 CFR 136 that is greater than the established MQL. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes. TRC shall be measured within fifteen (15) minutes of sampling. In addition, EPA has established a MQL for TRC at 33 µg/L. Values less than 33 µg/L can be reported as zero.

d. Toxics

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR

§122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

The applicant proposes to draw water from the Peach Creek, Caney Creek, and Lake Conroe water segments, as well as a municipal drinking water source, to conduct its hydrostatic testing. The applicant states that all hydrostatic testing water will contact only clean pipe, and no chemicals will be added. As a result, no contaminants are expected to be present in the hydrostatic test water discharge at amounts that would pose a reasonable potential to exceed State WQS.

Solids and Foam

The prohibition of the discharge of floating solids or visible foam in other than trace amounts is proposed in the draft permit. In addition, there shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

e. Monitoring Frequency for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). The monitoring frequencies are based on BPJ, taking into account the nature of the facility.

For Outfall 001, 002, 004 monitoring for flow, TSS, Oil & Grease, and pH shall be daily by grab sample, when discharging. For Outfall 003 monitoring for flow, TSS, TRC, Oil & Grease, and pH shall be daily by grab sample, when discharging.

f. Whole Effluent Toxicity Testing

The applicant has stated that no chemical additives, such as corrosion inhibitors, are being added to the HT water. It does not appear that the discharge will have a potential for toxicity. The draft permit does not propose any biomonitoring of the HT water.

g. Final Effluent Limitations

See the draft permit for limitations.

VI. FACILITY OPERATIONAL PRACTICES

A. WASTE WATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve the operating efficiency and extend the useful life of the treatment system.

B. OPERATION AND REPORTING

The permittee must submit Discharge Monitoring Report's (DMR's) quarterly, beginning on the effective date of the permit, lasting through the expiration date of the permit or termination of the permit, to report on all limitations and monitoring requirements in the permit.

VII. IMPAIRED WATER - 303(d) LIST AND TMDL

According to the 2014 Texas Integrated Report Index of Water Quality Impairments, the receiving waters for Outfalls 001, 002, 003, Peach and Caney Creeks, are listed as impaired for bacteria under TCEQ's category 4a. The facility does not add bacteria to its discharge, therefore no additional requirements beyond the previously described technology-based or water quality-based effluent limitations and monitoring requirements are established in the proposed permit.

VIII. ANTIDEGRADATION

The Texas Commission on Environmental Quality, Texas Surface Water Quality Standards, Antidegradation, Title 30, Part 1, Chapter 307, Rule §307.5 sets forth the requirements to protect designated uses through implementation of the State WQS. The limitations and monitoring requirements set forth in the proposed permit are developed from the State WQS and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements and exemption to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR Part 122.44(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless new information is available which was not available at the time of permit issuance. Since this is a first time NPDES Permit for this discharge, antibacksliding does not apply.

X. ENDANGERED SPECIES

The effects of EPA's permitting action are considered in the context of the environmental baseline. The environmental baseline is established by the past and present impacts of all Federal, State, or private actions and other human activities in an action area; the anticipated impacts of all proposed Federal projects in an action area that have already undergone formal or early ESA §7 consultation; and the impact of State or private actions that are contemporaneous with the consultation in process (50 CFR §402.02). Hydrostatic test water discharges occur after a pipeline has already been put in place following earth disturbing activities that have had to have received appropriate federal, state, and local authorizations putting the construction of pipeline itself into the environmental baseline. The scope of the evaluation of the effects of the discharge authorized by this permit was therefore limited to the effects related to the authorized discharge.

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, at http://ecos.fws.gov/ipac/wizard/chooseLocation!prepare.action, four species are listed as endangered or threatened in the Liberty, Montgomery, and San Jacinto counties. These species include: Least Tern (Sterna antillarum), Piping Plover (Charadrius melodus), Red Knot (*Calidris canutus rufa*), and Red-Cockaded Woodpecker (*Picoides borealis)*.

A description of the species and their effects to the proposed permit follows:

LEAST TERN (*Sterna Antillarum*)

The Least Tern populations have declined due to habitat destruction by permanent inundation, destruction by reservoir releases, channelization projects, alterations of Natural River or lake dynamics resulting in vegetational succession of potential nesting sites, and recreational use of potential nesting sites. Issuance of this permit is found to have no impact on the habitat of this species, as none of the aforementioned listed activities is authorized by this permitting action.

PIPING PLOVER *(Charadrius melodus)*

Piping Plover is listed in San Augustine County as threatened. A small plover has wings approximately 117 mm; tail 51 mm; weight 46-64 g (average 55 g); length averages about 17-18 cm. Inland birds have more complete breast band than Atlantic coast birds. The non-breeding plovers lose the dark bands. The breeding season begins when the adults reach the breeding grounds in mid- to late April or in mid-May in northern parts of the range. The adult males arrive earliest, select beach habitats, and defend established territories against other males. When adult females arrive at the breeding grounds several weeks later, the males conduct elaborate courtship rituals including aerial displays of circles and figure eights, whistling song, posturing with spread tail and wings, and rapid drumming of feet. The plovers defend territory during breeding season and at some winter sites. Nesting territory may or may not contain the foraging area. Home range during the breeding season generally is confined to the vicinity of the nest. Plovers are usually found in sandy beaches, especially where scattered grass tufts are present, and sparsely vegetated shores and islands of shallow lakes, ponds, rivers, and impoundments.

Food consists of worms, fly larvae, beetles, crustaceans, mollusks, and other invertebrates. The plovers prefer open shoreline areas, and vegetated beaches are avoided. It also eats various small invertebrates. It obtains food from surface of substrate, or occasionally probes into sand or mud. Destruction of habitat, disturbance and increased predation rates due to elevated predator densities in piping plover habitat are described as the main reasons for this species' endangered status and continue to be the primary threats to its recovery. The remaining populations, whether on the breeding or wintering grounds, mostly inhabit public or undeveloped beaches. These populations are vulnerable to predation and disturbance.

Research of available material finds that the primary cause for the population decreases leading to threatened or endangered status for these species is destruction of habitat. Issuance of the

permit will have no effect on this species, in that the discharge is not expected to lead to the destruction of habitat.

RED KNOT *(Calidris Canutus rufa)*

Red Knot is a medium-sized shorebird and the largest of the "peeps" in North America, and one of the most colorful. It makes one of the longest yearly migrations of any bird, traveling 15,000 km (9,300 mile) from its Arctic breeding grounds to Tierra del Fuego in southern South America.

Their diet varies according to season; arthropods and larvae are the preferred food items at the breeding grounds, while various hard-shelled molluscs are consumed at other feeding sites at other times.

The Red Knot nests on the ground, near water, and usually inland. The nest is a shallow scrape lined with leaves, lichens and moss. Males construct three to five nest scrapes in their territories prior to the arrival of the females. The female lays three or more usually four eggs, apparently laid over the course of six days. Both parents incubate the eggs, sharing the duties equally. The incubation period last around 22 days.

The birds have become threatened as a result of commercial harvesting of horseshoe crabs in the Delaware Bay which began in the early 1990s. Delaware Bay is a critical stopover point during spring migration; the birds refuel by eating the eggs laid by these crabs (with little else to eat in the Delaware Bay).

RED-COCKADED WOODPECKER (*Picoides borealis*)

Red-cockaded woodpecker is about 8.5 inches long, with a wingspan of about 14 inches, and a weight of about 1.5 ounces. Its back is barred with black and white horizontal stripes. The Red-cockaded Woodpecker's most distinguishing feature is a black cap and nape that encircle large white cheek patches. The Red-cockaded Woodpecker feeds primarily on ants, beetles, cockroaches, caterpillars, wood-boring insects, and spiders, and occasionally fruit and berries. Red-cockaded Woodpeckers are a territorial, non-migratory, cooperative breeding species, frequently having the same mate for several years. The nesting season runs from April to June. The Red-cockaded Woodpecker makes its home in mature pine forests.

The Red-cockaded Woodpecker plays a vital role in the intricate web of life of the southern pine forests. A number of other birds and small mammals use the cavities excavated by Red-cockaded Woodpeckers, such as chickadees, bluebirds, titmice, and several other woodpecker species, including the Downy, Hairy, and Red-bellied Woodpeckers. Larger woodpeckers may take over a Red-cockaded Woodpecker cavity, sometimes enlarging the hole enough to allow Eastern Screech Owls, Wood Ducks, and even Raccoons to move in later. Its preference for longleaf pine and the destruction of that habitat have resulted in the woodpecker becoming an endangered species. The specificity of the bird’s breeding habitat makes it extremely vulnerable to habitat loss. Red heart fungus was once common in trees at least 70 years old, but most pines are cut before they reach that age, resulting in a shortage of nesting sites. Fire prevention and

suppression policies have also negatively impacted the species, allowing underbrush to clog the open forests it prefers. Consequently, conservation efforts have focused on the installation of artificial cavities for nesting and controlled burns.

Issuance of this permit is found to have no impact on the habitat of this species, since the discharge is not expected to lead to the destruction of habitat.

Determination:

The Environmental Protection Agency has evaluated the potential effects of issuance of this permit upon listed endangered or threatened species. After review, EPA has determined that this issuance of this permit will have "*no effect*" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1. The proposed permit establishes limits to meet the current state water quality standards for the area of discharge. The limits established in the proposed permit are protective and will have no impact on the habitats of this species. The permit includes limitations and/or monitoring requirements for pH, oil & grease, and TRC. These requirements are also consistent with the State of Texas implementation guidance.

2. Based on information described above, EPA Region 6 has determined that discharges proposed to be authorized by the proposed permit will have no effect on the listed species in Liberty, Montgomery, and San Jacinto counties.

The standard reopener clause in the permit will allow EPA to reopen the permit and impose additional limitations if it is determined that changes in species or knowledge of the discharge would require different permit conditions.

Operators have an independent ESA obligation to ensure that any of their activities do not result in prohibited "take" of listed species. Section 9 of the ESA prohibits any person from "taking" a listed species, e.g., harassing or harming it, with limited exceptions. See ESA Sec 9; 16 U.S.C. §1538. This prohibition generally applies to "any person," including private individuals, businesses and government entities. Operators who intend to undertake construction activities in areas that harbor endangered and threatened species may seek protection from potential "take" liability under ESA section 9 either by obtaining an ESA section 10 permit or by requesting coverage under an individual permit and participating in the section 7 consultation process with the appropriate FWS or NMFS office. Operators unsure of what is needed for such liability protection should confer with the appropriate Services.

XI. HISTORICAL AND ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

Based on supplemental information submitted by the facility dated September 28, 2018 and January 7, 2019, the State Historic Preservation Officer concurred that the "project will have no

effect on historic properties." Based on these, the issuance of the permit will have no impact on historical and/or archeological preservation.

XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of the Texas WQS are revised or remanded. In addition, the permit may be reopened and modified during the life of the permit if relevant procedures implementing the WQS are either revised or promulgated. Should the State adopt a new WQS, and/or develop a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standard and/or water quality management plan, in accordance with 40 CFR §122.44(d). Modification of the permit is subject to the provisions of 40 CFR §124.5.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. COMPLIANCE HISTORY

This is a first-time permit issuance.

XV. CERTIFICATION

This permit is in the process of certification by the Texas Railroad Commission following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XVI. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XVII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION

NPDES Application for Permit to Discharge, Form 1 & 2D with supplemental, received on February 1, 2019. A notice of incompleteness was designated on February 22, 2019 and issued on March 4, 2019, requesting submission of Form 2E as opposed to 2D. A Form 2E for each Outfall (4 total) was received via email on April 3, 2019. The revised permit was designated administratively complete on April 11, 2019.

B. State of Texas References

2014 Texas Integrated Report - Texas 303(d) List

The State of Texas Water Quality Inventory, 13th Edition, Publication No. SFR-50, Texas Commission on Environmental Quality, December 1996.

"Procedures to Implement the Texas Surface Water Quality Standards via Permitting," Texas Commission on Environmental Quality, June 2010.

Texas Surface Water Quality Standards, 30 TAC Sections 307.1 - 307.9, effective November 2, 2018.

C. Endangered Species References

http://www.fws.gov/southwest/es/ES_Lists_Main.cfm

D. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136

E. MISCELLANEOUS CORRESPONDENCE

Email from Matias Fernandez, EPA, to Patricia Taylor and Michael Daniel, EPA, requesting critical conditions information on February 19, 2019. Email from Michael Daniel, EPA, to Matias Fernandez, EPA, dated February 26, 2019, with preliminary critical conditions information containing water segment information.

Letter from Dorothy Brown, EPA, to Mr. Cale LeBlanc, Director of Environmental, New Projects, Gulf South Pipeline Company, LP (Willis Lateral Project) on March 4, 2019 informing them that their permit application received on February 1, 2019 was designated administratively incomplete.

Phone message from Marshall Olson, Perennial Environmental Services LLC, to Matias Fernandez, EPA, on March 12, 2019 followed by phone conversation regarding ‘Incomplete Permit’ designation and Form 2E vs 2D clarification. Mr. Olsen additionally asked whether source testing is required for hydrostatic discharge water or an estimate is sufficient. Given that source/discharge water remains within same water segment and no pollutants will be added by the facility, was advised to estimate source water pollutants.

Matias Fernandez, EPA, received hard copy of letter notifying permitee of application incompleteness from Dorothy Brown, EPA, with email correspondence requesting issuance of notification attached on March 20, 2019. Matias Fernandez noted a typo in his listed contact email on the issued letter.

Email from Matias Fernandez, EPA, to Marshall Olson, Perennial Environmental Services LLC, on March 22, 2019 regarding a typo in the contact email listed in the letter notifying an incomplete permit application.

Phone message from Marshall Olson, Perennial Environmental Services LLC, to Matias Fernandez, EPA, on April 1, 2019 requesting clarification regarding proper input of pollutant values on Form 2E.

Email from Marshall Olson, Perennial Environmental Services LLC, to Matias Fernandez, EPA, on April 3, 2019 with four Form 2E PDF documents, one for each outfall of the permit.

Phone conversation between Matias Fernandez, EPA, and Marshall Olson, Perennial Environmental Services LLC, on April 8, 2019 regarding questions about Form 2E left in April 1, 2019 phone message and clarification on listed municipal water supply source for the permit's Outfall 003 hydrostatic discharge.

Email from Matias Fernandez, EPA, to Marshall Olson, Perennial Environmental Services LLC, on April 8, 2019 requesting further clarification on nature of Outfall 003 and whether the water supply for hydrostatic discharge is treated effluent from a wastewater plant or from municipal drinking water supply. Mr. Olson responded via email on April 9, 2019 with an updated Form 2E for Outfall 003 with adjusted pollutant values, stating that the water source is potable municipal water and that the updated values were based on measurements by the city of Willis and other nearby cities.

Email from Matias Fernandez, EPA, to Marshall Olson, Perennial Environmental Services LLC, on April 10, 2019 requesting further clarification on provided Outfall Lat/Long and discharge flows. Mr. Olson responded via email on April 11, 2019 with clarification.

Email from Matias Fernandez, EPA, to Quang Nguyen, EPA, on April 11, 2019 requesting completion of critical conditions previously begun by Michael Daniel, EPA. Received response with completed critical conditions via email on April 12, 2019. Received additional response with revised critical conditions via email on April 22, 2019.