NPDES PERMIT NO. TX0000485
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:

June 12, 2019

PERMIT ACTION

It is proposed that the facility be reissued 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 May 31, 2019.

RECEIVING WATER – BASIN

Unnamed intermittent freshwater creek and thence to the Sabine River Above Toledo Bend Reservoir (perennial, freshwater, classified segment 0505) approximately 2.46 miles and 2.25 miles (from Outfalls 001 and 002 respectively) downstream.

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
IP	Procedures to Implement the Texas Surface Water Quality Standards
µg/l	Micrograms per litter (one part per billion)
mg/l	Milligrams per liter (one part per million)
Menu 2	Intermittent stream within 3 miles of perennial pools
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. PROPOSED CHANGES FROM PREVIOUS PERMIT

1. Total aluminum limitations and monitoring requirements have been removed from Outfall 001 based on new application information.
2. Monitoring requirements for total copper have been removed at Outfall 002 based on new application information.
3. Dissolved Oxygen limitation and monitoring requirements have been established in the draft permit based on the most recent Texas list of impaired waters.

II. APPLICANT LOCATION and ACTIVITY

Under the SIC Code 1321, the applicant operates a natural gas processing plant.

As described in the application, the facility is a natural gas processing and fractionation plant located at 3407 Camp Switch Road, Longview, Gregg County, Texas. A stabilized raw gasoline product is also produced from Liquefied Petroleum Gas (LPG) product that is trucked in to the facility. This product is temporarily stored and transported out of the facility via pipeline and/or truck. Natural Gas liquids are recovered from the incoming gas and fractionated into an ethane/propane product, and a butane/gasoline product. Wastewater discharges from the facility flows into an unnamed Creek, thence 2.2 miles to the Sabine River in Water Body Segment No. 0505 of the Sabine River Basin.

Discharges from Outfall 001 consist of cooling tower/boiler blowdown, engine/compressor drain and process stormwater surface drains. Cooling tower blowdowns, boiler blowdowns, compressor engine drains, and process stormwater surface drains are routed to the north API separator for treatment and separation. This separator contains two oil belt skimmers, a diaphragm pump, and two electric pumps. These pumps route skimmed oil to the waste oil tank and the water to the saltwater storage tank. The valve leading to outfall 001 is operated normally in a closed position, therefore Outfall 001 intermittently discharges. The permittee had stated that no discharge has occurred during the last permit period.

Discharges from Outfall 002 consist of cooler backwash and steam tracing blowdown. condensed steam from heat tracing, heater treater containment, and process stormwater surface drains are routed to the south separator for treatment and separation. This separator has one oil belt skimmer where separated oil is pumped back to an oil storage tank. Separated water is pumped to the saltwater tank for disposal as needed. Water from this separator may intermittently flow to the two south stormwater detention pits. Outfall 002 is the outfall from the lower stormwater detention pit, which rarely discharges to an unnamed creek. Outfall 002 has discharged during the previous two years only following large rain events (i.e., >2” in 24-hour rain events). Ponds are included as part of the waste water treatment system. There is one settlement pond prior to Outfall 001 and two settlement ponds prior to Outfall 002.

Discharges are located on that water at:

Outfall 001: Latitude 32^{o} 30’ 17.48”; Longitude 94^{o} 52’ 7.40”

Outfall 002: Latitude 32^{o} 30’ 7.77”; Longitude 94^{o} 52’ 7.22”

III. PROCESS AND DISCHARGE DESCRIPTION

The facility obtains its water from the City of White Oak municipal water supply.

Cooling tower water is treated with sodium hypochlorite which inhibits corrosion; acetic acid, an antifoulant used as an organic dispersant; and chlorine bleach (Sodium hypochlorite solution) used to control growth of micro-organisms. The pH is maintained between 7.5 and 8.7.

The boiler water is treated with Sodium Hydroxide, an alkalinity builder to keep water from getting acidic; Sodium bisulfite, an oxygen scavenger to prevent pitting of iron; a boiler polymer that prevents sediment deposits in boilers; and cyclohexylamine, morpholine to control corrosion in the steam condensate system.

The Engine cooling system water is treated with sodium nitrite to inhibit corrosion.

The three systems described above contribute water to the North API separator. The cooling tower blowdown and the boiler blowdown drains are relatively continuous feeds. Liquid from engine room sumps are occasional and can also contain oil leaked through packing glands or seals on the scrubber pumps. The system may also receive a portion of the process stormwater. The North API separator uses two belt skimmers for the separation and removal of oil. The separated oil is pumped to the waste oil tank. The waste oil is removed from the plant and trucked offsite. Wastewater is pumped from the North API separator and goes into the saltwater disposal tank to be transported offsite via pipeline for disposal. Water is released with a manual valve from the North API separator to Outfall 001 in case the saltwater tank disposal system malfunctions, or the rain water into the North API separator exceeds the capacity of the pumps. The valve leading to outfall 001 is normally operated in a closed position, therefore Outfall 001 intermittently discharges.

The sources of process water to the south separator are backwashing of heat exchangers, condensed steam from heat tracing, and stormwater from heater treater containment. The process water entering this pit is only a very small fraction of what goes to the North API pit. The backwashing involves closing the inlet of the exchanger, and opening the drain, which allows cooling tower water to escape. The cyclohexylamine, morpholine is the only chemical that leaves the boiler and enters the condensed steam. The condensed steam is estimated at 0.0002 million gallons per day for four months of the year. The south separator is equipped with a belt skimmer for the separation of oil. Separated water is pumped to the saltwater tank for disposal as needed. Water from this separator may intermittently flow to the two south stormwater detention pits. Steam tracing condensate with some organics may reach Outfall 002 during heavy rain events. Outfall 002 captures storm water from the facility. It also acts as tertiary containment for a SPCC regulated storage area. In the event a spill makes it out of the secondary containment area, the ponds may act as tertiary containment. Outfall 002 is the outfall from the lower stormwater detention pit, which rarely discharges as most water is pumped from the separator to the storage tanks or evaporates in the pits.

Table 1: Discharge Characteristics for Outfall 001

The table below shows facility's pollutant concentrations contained in the NPDES application.

Parameter	Max Concentration, mg/L unless noted	Average Concentration, mg/L unless noted
Flow, MGD	0.0001	0.0001
pH, su	8.1	7.9
TSS	43.6	39.8
TOC	69.1	50.75
COD	305	247.5
BOD	122	65.47
Ammonia (as Nitrogen)	1.71	1.26
Total Residual Chlorine	ND	ND
TDS	282	282
Sulfate	29.6	29.6
Chloride	14.4	14.4
Aluminum	4.39	0.471
Antimony	0.00102	0.00101
Arsenic	0.00108	0.00079
Cadmium	0.00221	0.000381
Chromium	0.0173	0.00423
Copper	0.169	0.009664
Lead	0.00129	0.000895
Selenium	0.00316	0.00208
Nickel	0.00165	0.001325
Zinc	0.72	0.0575

Table 1: Discharge Characteristics for Outfall 002

Parameter	Max Concentration, mg/L unless noted	Average Concentration, mg/L unless noted
Flow, MGD	0.03486	0.012955
Chromium total	0.00458	0.00289
TDS	204	204
Sulfate	16.2	16.2
Chloride	11.6	11.6
Aluminum	0.36	0.18243
Arsenic	0.0079	0.0042
Barium	0.126	0.1067
Boron	0.0996	0.0982
Chromium	0.00458	0.00289
Copper	0.00535	0.00325
Cobalt	0.0003	0.00167
Iron	0.784	0.4785
Magnesium	4.42	4.105
Manganese	0.0186	0.01074
Tin	0.0043	0.00343

Parameter	Max Concentration, mg/L unless noted	Average Concentration, mg/L unless noted
Selenium	0.00814	0.00457
Nickel	0.00125	0.001235
Zinc	0.0226	0.0204

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 renewal of an existing permit. An NPDES Application for a Permit to Discharge (Form 1 & 2C) was received on April 27, 2018 and was deemed administratively incomplete on October 11, 2018. Additional permit application information was submitted via email on October 22, 2018; May 23, 2019. The permit application was deemed administratively complete on June 3, 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. Technology-based effluent limitations are established in the proposed draft permit for BOD_5. Water quality-based effluent limitations are established in the proposed draft permit for pH, and TRC.

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.

Limitations for BOD_5 are proposed in the permit and are expressed in terms of concentration. The draft permit will not propose mass limits since the effluent flow is variable and intermittent. The proposed limitation for BOD_5 at Outfalls 001 and 102 is 30 mg/l maximum and 20 mg/l average. Concentration limits will be protective of the stream uses. These limitations are based on the BPJ of the permit writer and are consistent with natural gas industry.

Stormwater has been identified by the permittee as a component of the discharge through Outfall 002. A requirement to develop a Stormwater Pollution Prevention Plan (SWP3) is proposed in the draft permit. It is proposed that the facility conduct an annual inspection of the facility to identify areas contributing to the storm water discharge and identify potential sources of pollution which may affect the quality of storm water discharges from the facility.

The proposed permit requires the permittee to develop a site map. The site map shall include all areas where storm water may contact potential pollutants or substances which can cause pollution. It is also proposed that all spilled product and other spilled wastes be immediately cleaned up and properly disposed. The permit prohibits the use of any detergents, surfactants or other chemicals from being used to clean up spilled product. Additionally, the permit requires all waste fuel, lubricants, coolants, solvents or other fluids used in the repair or maintenance of vehicles or equipment be recycled or contained for proper disposal. All diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area. The permittee shall amend the SWP3 whenever there is a change in the facility or change in operation of the facility.

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.

The designated uses of Sabine River above Toledo Bend Reservoir, Segment 0505 are primary contact recreation, high aquatic life, and public water supply.

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.

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

Wastewater discharges (both Outfalls 001 and 002) from the facility flow into an unnamed intermittent freshwater creek and thence to the Sabine River Above Toledo Bend Reservoir (perennial, freshwater, classified segment 0505) approximately 2.46 miles and 2.25 miles downstream respectively. The designated uses of Sabine River above Toledo Bend Reservoir, Segment 0505 are contact recreation, high aquatic life, and public water supply. pH for both Outfalls shall be limited to the standards for the Sabine River in Water Body Segment No. 0505 of the Sabine River Basin to the range of 6.0 to 8.5 s.u.

b. Narrative Limitations

Narrative protection for aesthetic standards will propose 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 Outfall 001 and 002:

"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. 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 critical low flow, 7Q2 for the receiving stream is 47.27cfs, while the harmonic mean is 146.01cfs. The facility discharges (both Outfalls 001 and 002) into an unnamed intermittent freshwater creek and thence to the Sabine River Above Toledo Bend Reservoir (perennial, freshwater, classified segment 0505) approximately 2.46 miles and 2.25 miles downstream respectively. Outfalls 001and 002 is Menu 2 (Discharge is to an intermittent water body within three miles of a perennial freshwater ditch, stream or river).

The reasonable potential calculations were performed based on data obtained from the permit application. Segment specific values for pH, TSS, total hardness, TDS, chloride, and sulphate values were obtained from table D-5 of the IP. These values were also used in Menu 2 to calculate reasonable potential. The result of the Menu 2 model run revealed none of the toxic pollutants showed reasonable potential to violate TSWQS at both Outfalls. As a result, total Aluminum limitations and reporting requirement have been removed from Outfall 001 based on the results of the water quality screening. Also monitoring requirements for total copper has also been removed from Outfall 002 based on the results of the water quality screening.

Since the facility obtains its water from the municipal water supply and chlorine bleach is one of the chemical treatments used in the cooling tower. TRC limit is continued in discharges through Outfalls 001 and 002. The effluent shall contain NO MEASURABLE total residual chlorine (TRC) at any time. NO MEASURABLE will be defined as no detectable concentration of TRC limitation at 0.019 mg/L, which is less than the established MQL of 0.033 mg/L. Values less than 0.033 mg/L can be reported as zero. 0.019 mg/L is EPA's acute chlorine criteria.

On June 12, 2019, the facility submitted one sample test result for TDS, chloride and sulfate. The facility is expected to submit two additional sample results for TDS, chloride and sulfate during the public comment period. If the facility fails to submit additional sample results for these parameters, the final permit will establish end-of- pipe limitations and monitoring requirements for these parameters.

Solids and Foam

The prohibition of the discharge of floating solids or visible foam in other than trace amounts is continued in the proposed 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.

D. 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, the previous permit, and past compliance history.

For both Outfalls, flow shall continue to be measured daily when discharging; $BOD_{5,}$ TRC, and pH shall continue to be monitored once per two weeks, using grab sample. For any monitoring event, the first sample of any event shall be collected at least seven (7) days from the first sample of the previous monitoring event.

E. WHOLE EFFLUENT TOXICITY LIMITATIONS

Biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

According to the procedures to implement Texas Surface Water Quality Standards, Permittees that discharge into intermittent streams that flow into a perennial stream within a moderate distance downstream (normally 3 miles) will conduct either a 48-hour acute or a chronic test. The type of test depends on the size of the discharge relative to the flow of the perennial water downstream.
If the effluent flow equals or exceeds 10% of the low-flow of the perennial water, the permittee will conduct chronic testing with a critical dilution representative of the percentage of effluent in the perennial stream during low-flow. If the effluent flow is less than 10% of the low-flow in the perennial stream, the permittee will conduct 48-hour acute toxicity tests with a critical dilution of 100% effluent. Since the effluent flow for Outfall 001 is less than 10% of the low flow, 4.727cfs (3.05 MGD), the permittee will conduct 48-hour acute toxicity test with a critical dilution of 100% effluent.

The EPA Reasonable Potential Analyzer for outfall 001 indicates that RP exists for *Daphnia pulex* and *Pimephales promelas* but since reasonable potential for an excursion of the narrative criterion to protect the aquatic life against toxicity does not actually exist because toxic events were not demonstrated, WET limits will not be established in the proposed permit for the invertebrate or vertebrate species for outfall 001. EPA concludes that this effluent does not cause or contribute to an exceedance of the State water quality standards. Therefore, WET limits will not be established in the proposed permit.

OUTFALL 001

During the period beginning on the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001 - the discharge to an unnamed Creek, thence 2.46 miles to the Sabine River in Water Body Segment No. 0505 of the Sabine River Basin. Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	
	30-DAY AVG MINIMUM	48-Hr. MINIMUM
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) 1/		
Daphnia pulex	REPORT	REPORT
Pimephales promelas	REPORT	REPORT

EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	
	FREQUENCY	TYPE
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) 1/		
Daphnia pulex	1/Quarter	24-Hr. Composite
Pimephales promelas	1/Quarter	24-Hr. Composite

FOOTNOTES

1/ Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

F. 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

Wastewater discharges from the facility flow into an unnamed Creek, thence 2.46 & 2.25 miles for the respective Outfall 001 and 002 to the Sabine River in Water Body Segment No. 0505 of the Sabine River Basin. The receiving stream is not listed as impaired in the 2014 State of Texas 303(d) List for Assessed River/Stream Reaches requiring Total Maximum Daily Loads

(TMDLs). No additional requirements beyond the already proposed technology-based and/or water-quality based requirements are needed 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. There are no increases of pollutants being discharged to the receiving waters authorized in the proposed permit.

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 information is available which was not available at the time of permit issuance. The proposed permit maintains the limitation requirements of the previous permit for pH, BOD_5, TRC and WET and establishes new limits for Dissolved Oxygen.

X. ENDANGERED SPECIES

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://ecos.fws.gov/ipac/wizard/chooseLocation!prepare.action, Least Tern is endangered while Piping Plover and Red Knot are threatened species listed in Gregg County.

LEAST TERN *(Sterna antillarum)*

Least tern is listed as endangered in Gregg County. 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 Gregg 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).

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 the reissuance 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. No pollutants are identified by the permittee-submitted application at levels which might affect species habitat or prey species. Issuance of this permit is found to have no impact on the habitats of these species.

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 Gregg County.

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

The reissuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of the New Mexico 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

The effluent from the facility has been monitored under the conditions of the current permit with a November 1, 2013, effective date. Five years of Discharge Monitoring Report data has been reviewed and the facility had BOD exceedance, pH, and TRC violations on March 31, 2016.

XV. CERTIFICATION

This permit is in the process of certification by the State agency 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, Form1 & 2C, was received on April 27, 2018, and was deemed administratively incomplete on October 11, 2018. Additional permit application information was submitted via email on October 22, 2018; May 23, 2019 and June 12, 2019.

B. State of Texas References

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.

2018 EPA-approved Texas Water Quality Standards, Texas Administrative Code (TAC), 30 TAC Sections 307.1 - 307.9, effective November 2, 2018.

http://ecos.fws.gov/ipac/wizard/chooseLocation!prepare.action,

D. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136

E. MISCELLANEOUS CORRESPONDENCE

Letter from Dorothy Brown, EPA, to Mr. Shawn Flannigan Contractor for American Midstream, dated June 3, 2019, informing applicant that its' NPDES application received April 27, 2018, is administratively complete.

Email from Shawn Flannigan, contractor for American Midstream, dated May 23, on additional permit application information.

Email from Joseph Landry, American Midstream Gas Solutions, to Maria Okpala, EPA, dated December 7, 2018; November 13, 2018; November 5, 2018; October 25, 2018, on additional Permit application information.

Letter from Brent Larsen, EPA, to Mr. Joseph Landry, American Midstream Gas Solutions, dated October 11, 2018, informing applicant that its' NPDES application received April 27, 2018, is administratively incomplete.

Email from Michael Daniel, EPA, to Maria Okpala, EPA, dated February 21, 2019, on critical conditions information.