NPDES PERMIT NO. TX0134057
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:

December 5, 2017

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 December 1, 2017.

RECEIVING WATER – BASIN

Unnamed Ditch to Jones Creek (unclassified) to san Bernard River Tidal, Segment No. 1301 of the Brazos-Colorado Coastal 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. PROPOSED CHANGES FROM CURRENT PERMIT

The facility is a new discharger.

II. APPLICANT LOCATION and ACTIVITY

Under the SIC code 4612, the applicant plans to receive store and transfer crude oil and condensate products via pipelines. The proposed permit is for the discharge of hydrostatic test water.

As described in the application, the facility is located 1.5 miles south of the intersection of HWY 36 & Jones CK Terminal Road in Freeport, Brazoria County, Texas.

III. DISCHARGE LOCATION

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

Outfall Reference Number	Discharge Coordinates Latitude Deg° Min' Sec" Longitude Deg° Min' Sec"	County	Average Flow GPM	Receiving Water	Segment #
001	28° 56' 38" N 95° 25' 34" W	Brazoria	250	Jones Creek to San Bernard River Tidal	1301
002	28° 56' 42" N 95° 25' 24" W	Brazoria	250	Jones Creek to San Bernard River Tidal	1301
003	28° 57' 9" N 95° 25' 53" W	Brazoria	250	Jones Creek to San Bernard River Tidal	1301

IV. DISCHARGE DESCRIPTION

The project application is for the discharge of new and existing pipeline tank hydrostatic test water. Enterprise Crude Pipeline LLC operates the existing Seway Jones Creek Station located in Freeport, Brazoria County, Texas. Seway Jones Creek Station is a pipeline breakout station which receives, stores, and transfers crude oil and condensate products via pipelines. Enterprise will discharge hydrostatic test water from existing vessels (i.e. pipelines and aboveground storage tanks) currently located at the facility and any new vessels (i.e. pipelines and aboveground storage tanks) constructed throughout the duration of the permit.

The discharge from the facility will entirely be made up of hydrostatic test water. New vessels will be tested prior to being placed in service and existing vessels will be tested prior to being put back in service. The frequency of discharge will be dependent on a variety of factors but it is estimated that at least two discharges will occur per year. The facility is planning to obtain its water from Jones Creek. The hydrostatic test water will be discharged into Unnamed Creek to Jones Creek (Unclassified) to San Bernard River Tidal Segment Code No. 1301 of the Brazos-Colorado Coastal Basin.

In the event that treatment is needed, an advanced oxidation process which includes chemical treatment and filtration to insure water quality will be utilized. The hydro clean process utilizes a catalyzed oxidation technology that has been proven to be an excellent oxidizer of volatile organic compounds (VOC's), semi volatile compounds (SVOC's), mercaptans, hydrogen sulfide,

and other hydrocarbon-based compounds. The hydro clean process utilizes a proprietary catalyst. The catalyst is a complex organic compound and is combined with hydrogen peroxide (H_2O_2) to rapidly generate significant quantities of hydroxyl free radicals. The process simply requires deploying the catalyst with the hydrogen peroxide into the targeted wastewater. The reaction occurs very quickly, thereafter. Upon completion of the reactions, only CO_2, dissolved O_2 and water are the final products with complete oxidation.

Discharges from Outfalls 001, 002 & 003 flow to an unnamed ditch to Jones Creek (Unclassified) to San Bernard River Tidal Segment Code No. 1301 of the Brazos-Colorado Coastal Basin. The designated uses for Segment No.1301, San Bernard River Tidal are primary contact recreation and high aquatic life

Below are the facility's discharge characteristics as submitted with the NPDES application.

Table 1: Discharge Characteristics for Outfall 001, 002 & 003

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, GPM	250 – 3,000	
pH, su	6.0-9.0	
TSS	30	<30
BOD	20	
Oil & Grease	<15	<10
Ammonia	2.0	

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.

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.

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, 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). Numerical water quality based limitations have been placed in the permit for pH, TRC, & benzene. Technology-based effluent limitations are established in the proposed draft permit for TSS, oil & grease, BTEX, & TOC. The permittee shall not discharge if Benzene, BTEX, & TOC limits cannot be met. Narrative standards for oil, grease, or related residue have has been placed in the proposed permit. The proposed limitation for TSS is 45 mg/l maximum, 30 mg/l average, TOC is 50 mg/L, and Oil & Grease is 15 mg/l maximum. Concentration limits will be protective of the stream uses.

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.

The general criteria and numerical criteria which make up the stream standards are provided in the 2014 EPA-approved Texas Water Quality Standards, Texas Administrative Code (TAC), 30 TAC Sections 307.1 - 307.9, effective March 6, 2014.

2. 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 all Outfalls the hydrostatic test water will be drawn and discharged back into the same water body. Test water will be obtained from Jones Creek and discharged into Jones Creek, and to San Bernard River Tidal. As a result, intake credits are authorized for all outfalls. Intake credits account for in-situ waterbody conditions for only TSS.

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

The daily minimum and daily maximum permit limits of 6.0 standard units to 9.0 standard units 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."

Wastewater discharges from the facility will flow into waterbody segment 1301. pH shall be limited to the criteria listed for this Segment. For all outfalls, pH shall be limited to 6.5 – 9.0 s.u..

b. Benzene

Studies show that benzene is an appropriate BAT parameter representing the toxic hydrocarbons which may be present in hydrostatic test water discharges from existing natural gas pipelines. Studies also show that the daily maximum level of benzene representing BAT is selected as 50 µg/L. The TCEQ WQS standard for Benzene is 0.005 mg/l (5 µg/l). Since the TCEQ WQS is more stringent than the BAT, benzene limit of 5 µg/l is proposed in the draft permit.

c. BTEX

Benzene, toluene, ethylbenzene, and xylenes are among the hydrocarbons typically found in water contaminated by liquid or gaseous petroleum hydrocarbons. Hydrocarbon condensates left by the natural gas are the major source of toxic pollutants in hydrostatic test water discharges from existing natural gas pipelines. The daily maximum level of BTEX representing BAT is 100µg/l. The TCEQ does not have BTEX standard. As a result, a BTEX daily maximum limit of 100µg/l is proposed in the draft permit.

d. 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, 002 & 003.

"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."

e. 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 Jones Creek, to conduct its hydrostatic testing. Hydrostatic test water will contact both new and existing tanks and pipelines. The facility may use an advanced oxidation process to treat any contaminated wastewater.

Based on the TCEQ's implementation procedure, Outfall 001, 002 & 003 is MENU 2 (Discharge is to an intermittent water body within three miles of a perennial freshwater ditch, river or stream). The Outfall discharges into an unnamed ditch upstream of Jones Creek, a perennial unclassified stream. Jones Creek flows into San Bernard River Tidal. San Bernard River Tidal is Texas Segment 1301.

CRITICAL FLOWS:

USGS Gage 08117900 is used as a reference gage. The Harmonic Mean and 7Q2 Low Flow for the gage are as follows:

Harmonic Mean (HM) = 0.28 cubic feet per second (cfs), 7Q2 = 0.01 cfs,
Contributing Area (CA) = 13.95 Square Miles (sq mi)

Outfall 001 has a CA= 10.61 sq mi and critical flows are calculated in the following way:

HARMONIC MEAN = Gage HM * (Outfall CA/Gage Ca) + Permit HM =0.28*10.61/13.95+0
= 0.21 Cubic Feet per Second

7Q2 = Gage 7Q2 * (Outfall CA/Gage Ca) + Permit 7Q2 =0.01*10.61/13.95+0
= 0.01 Cubic Feet per Second.

Outfall 002 has a CA= 10.17 sq mi and critical flows are calculated in the following way:

HARMONIC MEAN = Gage HM * (Outfall CA/Gage Ca) + Permit HM =0.28*10.17/13.95+0
= 0.21 Cubic Feet per Second

7Q2 = Gage 7Q2 * (Outfall CA/Gage Ca) + Permit 7Q2 =0.01*10.17/13.95+0
= 0.01 Cubic Feet per Second.

Outfall 003 has a CA= 9.57 sq mi and critical flows are calculated in the following way:

HARMONIC MEAN = Gage HM * (Outfall CA/Gage Ca) + Permit HM =0.28*8.57/13.95+0
= 0.21 Cubic Feet per Second

7Q2 = Gage 7Q2 * (Outfall CA/Gage Ca) + Permit 7Q2 =0.01*9.57/13.95+0
= 0.01 Cubic Feet per Second.

The critical dilution, CD, is calculated as:

CD = Qe/(F·Qa + Qe), where:
Qe = facility flow (0.56 cfs)
F = fraction of stream allowed for mixing (1.0)
Qa = critical low flow of the receiving waters (.01 cfs)
CD = [0.56cfs/(.56cfs + 0.01)]*100
= 98.25%

Chronic toxic criteria apply for 98% at the point of discharge. The discharges did not show potential to violate Texas WQS from specific pollutants identified in the application.

f. 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.

g. Turbidity

Waste discharges must not cause substantial and persistent changes from ambient conditions of turbidity or color.

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.

For outfall 001, 002 & 003 monitoring for flow, TSS, Oil & Grease, benzene, BTEX, TOC, and pH shall be daily by grab sample, when discharging.

E. WHOLE EFFLUENT TOXICITY TESTING

Biomonioring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Existing tanks and pipelines have the potential for contamination, in addition, in the permit application it

was indicated that the facility is planning to treat wastewater with an advanced oxidation process to insure water quality, if necessary. Therefore, it appears that the discharge will have a potential for toxicity. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

OUTFALL 001, 002, 003

According to TCEQ implementation procedures, permittees that discharge into intermittent streams with perennial pools will conduct chronic testing. In Section V.C.5.d. above; "Toxics", it was stated that the critical dilution, CD, for the facility is 98%. Based on the nature of the discharge; industrial, the estimated average flow; .56 cfs, the nature of the receiving water; intermittent freshwater within 3 miles of a perennial stream; 2003 TCEQ IP directs the WET test to be a 7 day chronic test using chronic test species *Ceriodaphnia dubia* and *Pimephales promelas* at a quarterly frequency (when discharging) for the first year of the permit. If all WET tests pass during the first year, the permittee may request a monitoring frequency reduction for the either or both of the test species for the following 2-5 years of the permit. The invertebrate species (*Ceriodaphnia dubia*) may be reduced to twice per year and the vertebrate species (*Pimephales promelas*) may be reduced to once per year. If any tests fail during that time the frequency will revert back to the once per three months frequency for the remainder of the permit term. Both test species shall resume monitoring at a quarterly frequency on the last day of the permit. The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations shall be 31%, 41%, 55%, 74%, and 98%.

EPA concludes based on the nature of the discharge described as hydrostatic test wastewater, this effluent will not cause or contribute to an exceedance of the State water quality standards. Therefore WET limits will not be established in the proposed permit.

During the period beginning the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001, 002 & 003 - the discharge to Unnamed Ditch to Jones Creek (Unclassified) to the San Bernard River Tidal in Waterbody Segment Code No. 1301 of the Brazos-Colorado Coastal Basin. Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY (7-Day Chronic NOEC) (*1)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Pimephales promelas	Report	Once/Quarter	24-Hr Composite
Ceriodaphnia dubia	Report	Once/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.

Electronic Reporting Rule

The EPA published the electronic reporting rule in the federal register (80 FR 64063) on October 22, 2015. The rule became effective on December 21, 2015. One year after the effective date of the final rule, NPDES regulated entities that are required to submit DMRs (including majors and non-majors, individually permitted facilities and facilities covered by general permits) must do so electronically. All DMRs shall be electronically reported effective December 21, 2016, per 40 CFR 127.16. If you are submitting on paper before December 21, 2016, you must report on the Discharge Monitoring Report (DMR) Form EPA. No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically, however when submitting paper form EPA No. 3320-1, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and other agencies as required. (See Part III.D.IV of the permit.). To submit electronically, access the NetDMR website at www.epa.gov/netdmr and contact the R6NetDMR@epa.gov in-box for further instructions. PA and authorized NPDES programs will begin electronically receiving these DMRs from all DMR filers and start sharing these data with each other.

Sufficiently Sensitive Analytical Methods (SSM)

The permittee must use sufficiently sensitive EPA-approved analytical methods (SSM) (under 40 CFR part 136 or required under 40 CFR chapter I, subchapters N or O) when quantifying the presence of pollutants in a discharge for analyses of pollutants or pollutant parameters under the permit. In case the approved methods are not sufficiently sensitive to the limits, the most SSM with the lowest method detection limit (MDL) must be used as defined under 40 CFR 122.44(i)(1)(iv)(A). If no analytical laboratory is able to perform a test satisfying the SSM in the region, the most SSM with the lowest MDL must be used after adequate demonstrations by the permittee and EPA approval.

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

According to the 2014 State of Texas 303(d) List for Assessed River/Stream Reaches Requiring Total Maximum Daily Loads (TMDLs), the receiving stream, San Bernard River Tidal, is listed as impaired for bacteria. This impairment is under TCEQ's category 5c, which implies additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected.

In light of the nature of the facility and its' operations, the discharger is not likely to contribute to bacteria. 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. 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 US Fish and Wildlife Service (USFWS), https://ecos.fws.gov/ipac/location/Y52J2ACC6VCVPDBMHX3B475TD4/resources#endangered-species, nine species are listed as either endangered or threatened. The Whooping Crane (*Grus Americana*), Hawksbill Sea Turtle (*Eretmochelys imbricate*), Kemp's Ridley Sea Turtle (*Lepidochelus kempii*), Leatherback Sea Turtle (*Dermochelys coriacea*) are listed as endangered. The Piping Plover (*Charadrius melodus*) and the Red Knot (*Calidris canutus rufa*), West Indian Manatee (*Trichechus manatus*), Green Sea Turtle (*Chelonia mydas*), and Loggerhead Sea Turtle (*Caretta caretta*), are listed as threatened. The description of the species and its effect is described below.

The Whooping Crane (*Grus Americana*)

At nearly 5 feet (1.5 m) tall, whooping cranes are the tallest birds in North America. They have a wingspan of 7.5 feet (2.3 m). The whooping crane breeds in the wetlands of Wood Buffalo National Park in northern Canada and spends the winter on the Texas coast at Aransas National Wildlife Refuge near Rockport. Whooping cranes begin their fall migration south to Texas in mid-September and begin the spring migration north to Canada in late March or early April. Whooping cranes winter on the Aransas National Wildlife Refuge's 22,500 acres of salt flats and marshes. The area's coastal prairie rolls gently here and is dotted with swales and ponds. They summer and nest in poorly drained wetlands in Canada's Northwest Territories at Wood Buffalo National Park.

Hawksbill Sea Turtle (*Eretmochelys imbricate*)

Adults range in size from 30 to 36 inches (0.8-1.0 meters) carapace length, and weigh 100 to 200 pounds (45-90 kilograms). Its carapace (upper shell) is an attractive dark brown with faint yellow streaks and blotches and a yellow plastron (under shell). The name "hawksbill" refers to the turtle's prominent hooked beak. The cause for decline of this species includes modification to nesting areas, artificial lighting, beach driving, commercial exploitation, activities in open water, and marine debris.

Kemp's Ridley Sea Turtle (*Lepidochelus kempii*)

The Kemp's ridley turtle is the smallest of the sea turtles, with adults reaching about 2 feet in length and weighing up to 100 pounds. The adult Kemp's ridley has an oval carapace that is almost as wide as it is long and is usually olive-gray in color. The carapace has five pairs of costal scutes. In each bridge adjoining the plastron to the carapace, there are four infra-marginal scutes, each of which is perforated by a pore. The head has two pairs of prefrontal scales. Hatchlings are black on both sides. The Kemp's ridley has a triangular-shaped head with a somewhat hooked beak with large crushing surfaces. This turtle is a shallow water benthic feeder with a diet consisting primarily of crabs. The Kemp's ridley population underwent a devastating decline in the mid-1900's, primarily due to over-harvest of eggs and loss of juveniles and adults due to commercial fishing.

Leatherback Sea Turtle (*Dermochelys coriacea*)

The leatherback is the largest, deepest diving, and most migratory and wide ranging of all sea turtles. The adult leatherback can reach 4 to 8 feet in length and 500 to 2000 pounds in weight. Its shell is composed of a mosaic of small bones covered by firm, rubbery skin with seven longitudinal ridges or keels. The skin is predominantly black with varying degrees of pale spotting; including a notable pink spot on the dorsal surface of the head in adults. A tooth-like cusp is located on each side of the gray upper jaw; the lower jaw is hooked anteriorly. The paddle-like clawless limbs are black with white margins and pale spotting. The cause for decline of this species includes modification to nesting areas, artificial lighting, beach driving, commercial exploitation, activities in open water, and marine debris.

Piping Plover (*Charadrius melodus*)

The piping plover is a small shore bird, about 7 1/4 inches long with a 15 inch wingspan. These shorebirds live on sandy beaches and lakeshores. Gulf Coast beaches from Florida to Mexico, and Atlantic coast beaches from Florida to North Carolina provide winter homes for plovers. Habitat alteration and destruction are the primary causes for the decline of the Piping Plover. Loss of sandy beaches and lakeshores due to recreational, residential, and commercial development has reduced available habitat on the Great Lakes, Atlantic Coast, and the Gulf of Mexico. Winter habitats along the Gulf coast are threatened by industrial and urban expansion and maintenance activities for commercial waterways. Pollution from spills of petrochemical products and other hazardous materials is also a concern.

Red Knot (*Calidris canutus rufa*)

Length is 25-28 cm. Adults in spring are finely mottled with grays, black and light ochre, running into stripes on crown; throat, breast and sides of head cinnamon-brown; dark gray line

through eye; abdomen and undertail coverts white; uppertail coverts white, barred with black. Red knots migrate long distances in flocks northward through the contiguous United States mainly April-June, southward July-October. A small plump-bodied, short-necked shorebird that in breeding plumage, typically held from May through August, is a distinctive and unique pottery orange color. The Red Knot prefers the shoreline of coast and bays and also uses mudflats during rare inland encounters.

West Indian Manatee (*Trichechus manatus*)
Manatees have large, seal-shaped bodies with paired flippers and a round, paddle-shaped tail. They are typically grey in color (color can range from black to light brown) and occasionally spotted with barnacles or colored by patches of green or red algae. The muzzle is heavily whiskered and coarse, single hairs are sparsely distributed throughout the body. Adult manatees, on average, are about nine feet long and weigh about 1,000 pounds. Hunting is thought to be largely responsible for the initial decline of the species. Today, the greatest threats to manatee survival are collisions with boats.

Green Sea Turtle (*Chelonia mydas*)
The green sea turtle grows to a maximum size of about 4 feet and a weight of 440 pounds. It has a heart-shaped shell, small head, and single-clawed flippers. Color is variable. Hatchlings generally have a black carapace, white plastron, and white margins on the shell and limbs. The adult carapace is smooth, keelless, and light to dark brown with dark mottling; the plastron is whitish to light yellow. Adult heads are light brown with yellow markings. Identifying characteristics include four pairs of costal scutes, none of which borders the nuchal scute, and only one pair of prefrontal scales between the eyes. The cause for decline of this species includes modification to nesting areas, artificial lighting, beach driving, commercial exploitation, activities in open water, and marine debris.

Loggerhead Sea Turtle (*Caretta caretta*)

Loggerheads were named for their relatively large heads, which support powerful jaws and enable them to feed on hard-shelled prey, such as whelks and conch. The carapace (top shell) is slightly heart-shaped and reddish-brown in adults and sub-adults, while the plastron (bottom shell) is generally a pale yellowish color. The neck and flippers are usually dull brown to reddish brown on top and medium to pale yellow on the sides and bottom. Mean straight carapace length of adults in the southeastern U.S. is approximately 36 in (92 cm); corresponding weight is about 250 lbs (113 kg). The cause for decline of this species includes modification to nesting areas, artificial lighting, beach driving, commercial exploitation, activities in open water, and marine debris.
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. 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. There is no designated critical habitat in the area of the facility.

3. 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 Brazoria 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.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

In a letter dated October 31, 2017, the State Historic Preservation officer concurred that no historic properties would be affected by the project, authorizing the project to proceed.

XI. 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.

XII. FINAL DETERMINATION

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

XIII. ADMINISTRATIVE RECORD

The following information was used to develop the permit:

A. APPLICATION

NPDES Application for Permit to Discharge, Form 1 & 2E, Permit Application received on September 13, 2017.

B. State of Texas References

2014 Texas Integrated Report of Surface Water Quality, Texas Commission on Environmental Quality, November 19,2015.

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

2014 Texas Surface Water Quality Standards, 30 TAC Sections 307.1 - 307.9, effective March 6, 2014.

C. Endangered Species References

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

D. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136

E. MISCELLANEOUS CORRESPONDENCE

Letter from Dorothy Brown, EPA, to Mr. Bradley Cooper, Enterprise LLC, dated October 3, 2017 informing the applicant that its' NPDES application received September 18, 2017 was administratively incomplete.

Letter from Dorothy Brown, EPA, to Mr. Bradley Cooper, Enterprise LLC, dated December 13, 2017 informing the applicant that its' NPDES application received September 18, 2017 was administratively complete.

Email from Shannon Cass, to Nichole Young, EPA, dated 10/9/17, 11/1/17, 11/21/17, 12/8/17 on additional permit application information.

Email from Michael Daniel, EPA, to Nichole Young, EPA, dated December 1, 2017 on critical conditions information.