

**NPDES PERMIT NO. TX0134047**  
**STATEMENT OF BASIS**

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

**APPLICANT:**

Valley Crossing Pipeline, LLC  
5400 Westheimer Court  
Houston, TX 77056

**ISSUING OFFICE:**

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Region 6  
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**DATE PREPARED:**

August 14, 2017

**PERMIT ACTION**

This is a modification of an existing permit issued on December 5, 2017, with an effective date of January 1, 2018, and an expiration date of December 31, 2022. In accordance with 40 CFR 124.5(c)(2), only those conditions proposed to be modified are open for review and comment.

This permit modification is prepared in response to a letter from Valley Crossing Pipeline, LLC dated October 6, 2017, requesting modification of the current permit. Valley Crossing is requesting addition of discharges of hydrostatic test waters from new outfalls. A draft permit based on the original application had already been proposed and the permittee requested that the permit be modified after issuance rather than repurposed, which would have delayed the effective date for the permit authorizations already proposed.

**RECEIVING WATER – BASIN**

Discharges from Outfall 001 flow into Saint Martin Lake, to the Brownsville Ship Channel Segment Code No. 2494.

Discharges from Outfall 002 flow into Paso Corvinas, Latitude 25° 59' 34" N; Longitude 97° 21' 23" W.

Discharges from Outfall 003 flow into Paso Corvinas, to the Brownsville Ship Channel Segment Code No. 2494.

Discharges from Outfall 004 flow into South Bay, Segment Code No. 2493.

Discharges from Outfall 005 flow into Brazos Santiago Pass, Brownsville Ship Channel to the Laguna Madre Segment Code No. 2491.

Discharges from Outfall 006 flow into Saint Martin Lake tidal upstream of Brownsville Ship Channel Segment No. 2494.

Discharges from Outfall 011 flow into San Martin Lake, thence to Brownsville Ship Channel Segment Code No. 2494.

Discharges from Outfall 012 flow into the Brownsville Ship Channel Segment Code No. 2494.

Discharges from Outfall 013 flow into to Brazos Santiago Pass, Brownsville Ship Channel to the Laguna Madre Segment Code No. 2491.

Discharges from Outfall 014 flow into the Gulf of Mexico Segment Code No. 2501.

Discharges from Outfall 015 flow into the Gulf of Mexico Segment Code No. 2501.

## **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 <sub>5</sub>	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

1. Authorize hydrostatic test water discharges from new Outfalls 011, 012, 013, 014, and 015.

## II. APPLICANT LOCATION and ACTIVITY

Under the SIC code 4922, 4923, 4924, and 4925 the applicant plans to transmit and distribute natural gas.

As described in the application, the facility is located in Cameron County, Texas.

## III. DISCHARGE LOCATIONS

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	Duration (hours)	Receiving Water	Segment #
001	26° 0' 24.480 97° 17' 22.290" W	Cameron	5,000	65	Saint Martin Lake Tidal upstream of Brownsville Ship Channel	2494
002	26° 1' 48.130" N 97° 14' 53.240" W	Cameron	1,000	9	Pasos Corvinas Tidal upstream of Brownsville Ship Channel	2494
003	26° 2' 13.510" N 97° 14' 12.510" W	Cameron	1,000	4	Pasos Corvinas Tidal upstream of Brownsville Ship Channel	2494

004	26° 1' 51.090" N 97° 12' 35.430" W	Cameron	1,000	8	South Bay	2493 (Oyster Waters)
005	26° 3' 37.040" N 97° 9' 25.820" W	Cameron	1,000	8	Brazos Santiago Pass, Brownsville Ship Channel	2491 (Oyster Waters), Laguna Madre
006	25° 59' 34.730" N 97° 21' 23.510" W	Cameron	5,000	65	Saint Martin Lake tidal upstream of Brownsville Ship Channel	2494
011	25° 59' 32" N 97° 21' 23" W	Cameron	4,800	36.8	San Martin Lake Tidal to Brownsville Ship Channel	2494
012	26° 1' 37" N 97° 13' 47" W	Cameron	4,800	30.2	Brownsville Ship Channel	2494
013	26° 3' 37" N 97° 9' 26" W	Cameron	4,800	.43	Brazos Santiago Pass, Brownsville Ship Channel	2491 (Oyster Waters), Laguna Madre
014	26° 2' 38" N 97° 8' 15" W	Cameron	4,800	.23	Gulf of Mexico	2501 (Oyster Waters)
015	26° 2' 36" N 97° 8' 14" W	Cameron	4,800They	16.3	Gulf of Mexico	2501 (Oyster Waters)

#### IV. DISCHARGE DESCRIPTION

The project application is for the discharge of new pipeline and tank hydrostatic test water. This is a new facility and no discharge has occurred. The discharge from the facility will entirely be made up of hydrostatic test water. No additives or chemicals will be used in conjunction with the hydrostatic testing. Discharge from all outfalls will be intermittent with durations ranging from .23- 36.8 hours. The facility will obtain its source water from a local well but may supplement with municipal sources if necessary. The hydrostatic test water will be discharged into the Brownsville Ship Channel and the Gulf of Mexico.

Discharges from Outfall 011 flow into San Martin Lake Tidal, to the Brownsville Ship Channel Segment Code No. 2494. The Designated Uses for Segment No. 2494 are non-contact recreation and exceptional aquatic life.

Discharges from Outfall 012 flow into the Brownsville Ship Channel. The Designated Uses for Segment No. 2494 are non-contact recreation and exceptional aquatic life.

Discharges from Outfall 013 flow into Brazos Santiago Pass, Brownsville Ship Channel to the Laguna Madre Segment Code No. 2491 and 2491 Oyster Waters (OW). The Designated Uses for Segment No. 2491 are primary contact recreation, exceptional aquatic life and oyster waters.

Discharges from Outfall 014 flow into the Gulf of Mexico, Segment Code No. 2501. The Designated Uses for Segment No. 2501 are primary contact recreation, exceptional aquatic life and oyster waters.

Discharges from Outfall 015 flow into the Gulf of Mexico, Segment Code No. 2501. The Designated Uses for Segment No. 2501 are primary contact recreation, exceptional aquatic life and oyster waters.

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

**Table 1: Discharge Characteristics for Outfalls 011, 012, 013, 014 & 015**

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

<b>Parameter</b>	<b>Max Concentration, mg/L unless noted</b>
Flow, GPM	4,800
pH, su	6.0-9.0
TSS	30
BOD	20
Oil & Grease	15
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. Technology-based effluent limitations are not established in the proposed draft permit. 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.

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). Limitations for Oil & Grease, TSS, TRC and pH are proposed in the permit. The proposed limitations for TSS are 30 mg/l average, 45 mg/l maximum; TRC 0.019 mg/l maximum (in the event that municipal source water is used), and Oil & Grease is 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. 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.

### 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 segments 2491 (OW), 2494, 2493 (OW) & 2501 (OW). pH shall be limited to the criteria listed for these segments. For Outfall 011, 012, 013, 014, & 015 6.5 – 9.0 s.u..

b. Total Residual Chlorine

The facility will obtain its source water from a local well but may supplement with municipal sources if necessary. In the even that municipal water is used, TRC shall be limited to 0.019 mg/l in Outfalls 011, 012, 013, 014, & 015.

0.019 mg/L is EPA's acute criteria for chlorine.

The draft permit shall establish 0.019 mg/L limit. However, TRC is toxic at measurable amounts, so in addition to the 0.109 mg/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.

c. 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 011, 012, 013, 014, & 015.

"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."

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 critical low flow, 7Q2 does not apply. Based on the TCEQ's implementation procedure, Outfalls 011, 012, 013, 014, & 015 are MENU 5 (Discharge is directly to a bay, estuary or tidal water body with no upstream flow information).

Although the facility has not had any actual discharges, it submitted information in its application that would describe the nature of the discharge. This is a new facility and the hydrostatic test water will contact only new pipeline. The discharge from the facility will entirely be made up of hydrostatic test water and no additives or chemicals will be used in conjunction with the hydrostatic testing. Due to the nature of the discharge and the lack of upstream flow information, no water quality modeling will be performed.

#### 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.

#### 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 outfalls 011, 012, 013, 014, & 015 monitoring for TSS, Oil & Grease, TRC, and pH shall be daily by grab sample, when discharging. For outfalls 011, 012, 013, 014, & 015 monitoring for flow shall be by estimate using best engineering judgement.

### 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 requirements are not proposed in the draft permit because the water will not be chemically treated when discharged. The discharge will not have a potential for toxicity.

### 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](http://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 for Outfall 011 & 012, The Brownsville Ship Channel, is listed as impaired for bacteria. This impairment is under TCEQ's category 5c, which implies that a TMDL is underway, scheduled, or will be scheduled. The receiving stream for Outfall 004, South Bay, is not listed as impaired for any water quality parameters. The receiving stream for Outfall 013, Laguna Madre (Oyster Wates) is listed as impaired for bacteria, depressed dissolved oxygen, and bacteria (oyster waters). The receiving stream for Outfalls 014 & 015, the Gulf of Mexico are listed as impaired for bacteria and mercury.

In light of the nature of the facility and its' operations, the discharger is not likely to contribute to bacteria or dissolved oxygen. 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 most recent county listing available at US Fish and Wildlife Service (USFWS), <https://ecos.fws.gov/ipac>, fourteen species are listed as either endangered or threatened. The Gulf Coast Jaguarundi (*Herpailurus yagouaroungi cacomitli*), Ocelot (*Leopardus pardalis*), Least Tern (*Sterna antillarum*), Northern Aplomado Falcon (*Falco femoralis spetentrionalis*), Hawksbill Sea Turtle (*Eretmochelys imbricate*), Kemp's Ridley Sea Turtle (*Lepidochelus kempii*), Leatherback Sea Turtle (*Dermochelys coriacea*), South Texas Ambrosia (*Ambrosia cheiranthifolia*), Texas Ayenia (*Ayenia limitaris*), West Indian Manatee (*Trichechus manatus*), Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), Green Sea Turtle (*Chelonia mydas*), and the Loggerhead Sea Turtle (*Caretta caretta*). One species Red-crowned Parrot (*Amazona viridigenalis*) is listed as a candidate.

The description of the species and its effect is described below.

#### **Gulf Coast Jaguarindi (*Herpailurus yagouaroungi cacomitli*)**

Slightly larger than a domestic cat; appearance is unlike any other cat and looks like large weasel or otter; uniform in color with a dark gray-brown to chestnut brown coat. Darker animals are usually found in the dense forest while the lighter individuals are found in more arid and open areas. The body is long and low with short legs; small, flattened head with weasel-like ears and narrow brown eyes; long, flattened tail. The main threats to the jaguarundi throughout its range

are habitat loss, degradation, and fragmentation. Other threats include predation, fragmentation and mortality due to roads, competition with other small cats, and hunting.

**Ocelot** (*Leopardus pardalis*)

Ground colours of the short fur of the ocelot, varies from creamy, or tawny yellow, to reddish grey and grey. The underside of the body, tail, and insides of the limbs is whitish. Rather more blotched than spotted, the chain-like spots are bordered with black. Ocelots have both solid and open dark spots which sometimes run in lines along the body. The back of the ears is black with a central yellowy/white band. Solid black spots mark the head and limbs. There are two black stripes on the cheeks and one or two transverse bars on the insides of the forelegs. The tail is either ringed or marked with dark bars on its upper surface. The eye sockets or orbits are incomplete at the back, and the anterior upper premolars are present. Initially, habitat loss and hunting pushed the species to the brink of extinction. Now, continuing habitat loss, collisions with vehicles, and inbreeding resulting from small and isolated groups are keeping the species' population numbers low.

**Least Tern** (*Sterna antillarum*)

Least terns are the smallest member of the gull and tern family. They are approximately 9" in length. Unlike gulls, terns will dive into the water for small fish. Least Terns arrive at breeding areas from early April to early June, and spend 3 to 5 months on the breeding grounds. Upon arrival, adult terns usually spend 2 to 3 weeks in noisy courtship. Nesting habitat of the Least Tern includes bare or sparsely vegetated sand, shell, and gravel beaches, sandbars, islands, and salt flats associated with rivers and reservoirs. The birds prefer open habitat, and tend to avoid thick vegetation and narrow beaches. Channelization, irrigation, and the construction of reservoirs and pools have contributed to the elimination of much of the tern's natural nesting habitat in the major river systems.

**Northern Aplomado Falcon** (*Falco femoralis spententrionalis*)

Adults are characterized by rufous (rust) underparts, a gray back, a long and banded tail, and a distinctive black and white facial pattern. Aplomado falcons are smaller than peregrine falcons and larger than kestrels. The causes for decline of this subspecies have included widespread shrub encroachment resulting from control of range fires, intense overgrazing, and agricultural development in grassland habitats used by the falcon. Pesticide exposure was also a likely significant cause of the subspecies' extirpation from the U.S.

**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.

#### **South Texas Ambrosia** (*Ambrosia cheiranthifolia*)

South Texas ambrosia is a herbaceous, perennial plant with erect stems. It is grayish-green in color with yellow flowers. Because the plant reproduces by sending out root-like stems that develop into new clones, hundreds of above-ground stems could represent one individual. This could greatly decrease the genetic diversity available in South Texas ambrosia populations and, therefore, could decrease the plant's ability to adapt to changing environments. Furthermore, South Texas ambrosia's small, scattered populations exacerbate the threats from habitat destruction and alteration this species faces.

#### **Texas Ayenia** (*Ayenia limitaris*)

Texas ayenia is a small shrub and is a member of the chocolate family (Sterculiaceae). Habitat loss and encroachment of invasive grasses are the cause for decline of this species.

#### **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.

#### **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 under tail coverts white; upper tail 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.

**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.

**Red-crowned Parrot** (*Amazona viridigenalis*)

Green parrot with striking red forehead. Blue postocular stripe extends down sides of neck. Red speculum. Dark blue primaries. Yellow tips to outer-tail feathers. Female and immature have less red on crown. The red-crowned parrot is native to Mexico and is currently found in northeastern Mexico, inhabiting lush areas in arid lowlands and foothills, particularly gallery forests, deciduous woodlands, and dry, open, pine-oak woodlands on ridges up to 3,281 ft.

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:

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. 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 Cameron 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 May 3, 2017, The Texas Historical Commission stated that it had completed its review of the project site under Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas. The letter stated that the project would have no adverse effect on the Properties identified within the project survey corridor on state lands. As a precautionary measure, the State Historic Preservation Office requested monitoring of overburden removal for the portions of the Brazos Santiago Depot that will be subjected to subsurface impacts. As a result, the issuance of the permit should not have any impact on historical and/or archeological sites.

## **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 Modification, Form 1 & 2E, Permit Application received on October 6, 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

<https://ecos.fws.gov/ipac>

D. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136