NPDES PERMIT NO. TX0124656
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:

March 25, 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 March 22, 2019.

RECEIVING WATER – BASIN

The facility discharges to a ditch 300 feet above an unnamed lake, which flows into an unnamed intermittent stream and then Little Cypress Creek in Segment 0409 of Cypress Creek 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
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)
Menu 8	Discharge to an intermittent water body within 3 miles of a lake or a water body that acts like a lake
MMCFD	Million cubic feet per day
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. Limitations and monitoring requirements for COD because the receiving stream is impaired for depressed dissolved oxygen.

II. APPLICANT LOCATION and ACTIVITY

Under the Standard Industrial Classification (SIC) Code No. 1311, the applicant is engaged in groundwater remediation – Oil & Gas Exploration and Production.

As described in the application, the facility is located at 2086 feet northeast of Bison and Cherokee Trace Road in Gilmer, Upshur County, Texas. Discharges of impacted groundwater from an air stripper system is to stock ponds with overflow to an unnamed tributary, thence to another tributary of little Cypress creek in Segment 0409 of Cypress Creek Basin.

Discharges are located on that water at:

Outfall 001: Latitude: 32º 46’ 36”; Longitude: 95º 01’ 28”

III. PROCESS AND DISCHARGE DESCRIPTION

The remediation system processes collected groundwater discharged from a natural spring. The affected groundwater enters the top of the process unit and flows downward by gravity through a series of four perforated, plastic trays and is collected in the bottom of the unit before final discharge. Concurrently, air flow from a blower (integral to the process unit) flows in an upward direction and removes the light hydrocarbon (benzene) in the groundwater by exchange under ambient conditions. The discharge from the air stripper is to a ditch 300 feet above an unnamed lake, which flows into an unnamed intermittent stream and then Little Cypress Creek, in Waterbody Segment No. 0409 Cypress Creek.

Table 1: Discharge Characteristics for Outfall 001

The table below shows facility’s pollutant concentrations obtained from the NPDES application.

Parameter	**Max Concentration, mg/L unless noted**	**Average Concentration, mg/L unless noted**
Flow, MGD	0.0098	0.0098
BOD	3.93	3.93
pH, su	4.3 -5.2	
TSS	57.5	57.5
Ammonia	0.114	0.114
TOC	2.86	2.86
Temperature, ºC	8.61(winter); 28.89 (summer)	
Xylene	0.1	0.1
Benzene	ND	
Toulene	ND	

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 January 30, 2019 and was deemed administratively complete on March 11, 2019.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

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

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, on best professional judgment (BPJ) in the absence of guidelines, and/or requirements pursuant to 40 CFR 122.44(d), whichever are more stringent. Technology-based effluent limitations are established in the proposed draft permit for oil and grease, benzene, total BETX (sum of benzene, ethyl benzene, toluene and xylene), and total petroleum hydrocarbon (TPH). Water quality-based effluent limitations are established in the proposed draft permit for pH.

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.

The proposed permit continues the limitations and monitoring requirements of the previous permit for Oil and grease of 15 mg/l; Benzene of 0.005 mg/l; Total BETX of 0.100 mg/l; and Total Petroleum Hydrocarbon (TPH) of 15 mg/l. These limitations are based on the nature of the treatment systems and is the best available technology economically achievable (BAT), based on the BPJ of the permit writer.

BETX is the sum of benzene, ethyl benzene, toluene and xylene. Oil and grease not to exceed 15 mg/l is also continued in the proposed permit.

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 2010 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 Segment 0409 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

The permittee stated in its application that the observed pH values of the discharged waters have exceeded the lower permit limit on numerous occasions. The permittee claimed that these low pH values are naturally occurring conditions of the groundwater in the area and are a combination of biological and geochemical processes. The remediation system only processes collected groundwater discharged from a natural spring, with no chemical additives or other alteration performed on the groundwater prior to discharge. The permittee believed that altering the natural pH of the discharge waters may have a negative effect on the local aquatic and riparian ecosystems that have developed down gradient of the discharge point of the remediation system. The permittee requested that the permit be modified to more closely match the natural groundwater chemical parameters. The previous permit has pH limits of the current standards for the Cypress Creek in Water Body Segment No. 0409 of the Cypress Creek Basin to the range of 5.5 to 8.5 s.u.

EPA notes that the above described situation does not fit within a temporary variance under §307.2(d)(5) of the Texas WQS. Based on state of Texas's 2016 Integrated Report, the pH criterion in all four assessment units for segment 0409 is attained.

Temporary standard provision also focuses on the surface WQS not being attained. Furthermore, a temporary standard under §307.2(g) would have to go through TCEQ. There's no mechanism for EPA to approve a temporary standard, without it being adopted and submitted by TCEQ. The reasons to justify a temporary standard are established at 40 CFR 131.10(g). From 40 CFR 131.10(g), the conditions under which temporary standards are applicable include:

> **(1)** Naturally occurring pollutant concentrations prevent the attainment of the use; or …" This is not applicable to the facility ***it's pH in groundwater (and possibly treatment processes)***
>
> **(3)** Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or … In order for this to be applicable to the facility, ***EPA would need more supporting information on why "altering the pH of the discharge waters would have a negative effect on aquatic resources."***

> **(6)** Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact. ***This might be possible, but the permittee would have to do an economic analysis and document the costs of additional treatment. It could very well come out as affordable, in which case a temporary standard is not appropriate.***

Even if a temporary standard could be justified, that would need to be adopted in a WQS triennial revision by TCEQ – next triennial revision will likely occur in 2022.

Based on the above discussion, EPA Region 6 concludes that the pH of the wastewater discharges from the facility shall continue to be limited to the range of 5.5 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 discharge shall not present a hazard to humans, wildlife, or livestock.

The following narrative limitations in the proposed permit represent protection of water quality for Outfall 001:

"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.

For Outfall 001, TEXTOX menu 8 (Discharge to an intermittent water body within 3 miles of a lake or a water body that acts like a lake.), was used to calculate reasonable potential for toxics. Discharge from the facility is 0.0098 MGD and the lake is approximately 250 feet wide at the discharge point. This means that chronic criteria apply at 15%, acute criteria apply at 60%, and human health criteria apply at 8% (short notation is MZ = 15%; ZID = 60%; HH = 8%).

Information obtained from the application shows that almost all of the toxic pollutants were marked believed absent. In addition, ITWQS, table 5, segment specific values for pH, TSS, total hardness, TDS, chloride, and sulfate values were also used in menu 8 to calculate reasonable potential. The result of the Menu 8 model run revealed that none of the pollutants showed reasonable potential to violate TSWQS.

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.

Flow shall be monitored continuously using recording flow meter. pH, oil & grease, benzene, total BETX, and total TPH shall continue to be monitored once a month, using grab sample.

E. WHOLE EFFLUENT TOXICITY LIMITATIONS

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. The facility, a minor discharger, does not use any chemical additives in the treatment process. In addition, the pollutants of concern were non-detect and as a result, biomonitoring test is not proposed in the draft permit.

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 Cypress creek in Segment 0409 of Cypress Creek Basin. Cypress creek is listed on the Texas 2014 Clean Water Act Section 303(d) List for bacteria and depressed dissolved oxygen. Bacteria impairment is under TCEQ's category 5c which implies that additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected. Depressed dissolved Oxygen is also listed under 5c. Information contained in the application show a low BOD level and a COD level

of 105 mg/L. To protect water quality from impacts to DO in the receiving water, a Chemical Oxygen Demand limit of 100 mg/l, daily maximum is established in the draft permit based on BPJ. The COD limit is consistent with other permits issued in Region 6.

Considering the nature of the discharge, the discharger is not likely to contribute to impairment of bacteria. Therefore, no additional requirements beyond the previously described technology-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. 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, oil & grease, total BETX, TPH, and benzene. A COD limitation and monitoring requirements have been established in the draft permit because the receiving stream is impaired for depressed dissolved oxygen.

X. ENDANGERED SPECIES

According to the most recent county listing available at US Fish and Wildlife Service (USFWS) website, http://ecos.fws.gov/ipac/wizard/chooseLocation!prepare.action, three species are listed as endangered or threatened in Upshur County, Texas. The listed species are the Least Tern (*Sterna antillarum*), Red Knot (*Calidris canutus*), and Piping Plover (*Charadrius melodus).*

Available information from the U.S. Southwest Region Ecological Services web page presents the occurrence of the listed threatened and endangered species in Upshur County as follows:

LEAST TERN (*Sterna Antillarum*)

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

RED KNOT (*Calidris canutus*)

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).

PIPING PLOVER (*Charadrius melodus*)

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 nonbreeding plovers lose the dark bands. In Laguna Madre, Texas, non-breeding home ranges were larger in winter than in fall or spring. 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. Strong threats related primarily to human activity; disturbance by humans, predation, and development pressure are pervasive threats along the Atlantic coast.

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 Upshur 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. The State Historic Preservation Officer had previously concurred with the facility in the last permit cycle that no survey is required and that the project may proceed.

XII. PERMIT REOPENER

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

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. COMPLIANCE HISTORY

The effluent from the facility has been monitored under the conditions of the current permit with October 8, 2015, effective date. Five years of Discharge Monitoring Reports data have been reviewed and facility was in compliance with its permit limits, except pH. During the last permit

cycle, there were numerous pH violations. The permittee had requested that the pH be modified to more closely match the natural groundwater chemical parameters. (See discussion above under pH).

The draft permit continues a pH limit of 5.5 – 8.5 consistent with the current standards for the Cypress Creek in Water Body Segment No. 0409 of the Cypress Creek Basin. The permittee may consider treating the pH to the current standards for the Cypress Creek before discharging. If the permittee, decides to use any chemical in its treatment, this information will need to be sent to EPA and the RRC and the permit may be opened and modified to address any process/chemical treatment.

XV. CERTIFICATION

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

XVI. FINAL DETERMINATION

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

XVII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION

NPDES Application for Permit to Discharge, Form 1 & 2C, received on January 30, 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.

Texas Surface Water Quality Standards, 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 Michael A. McBee, Jr. VP Operations, McBee Operating Company, dated March 11, 2019, informing applicant that its NPDES application received January 30, 2019, is administratively complete.