

**NPDES PERMIT NO. TX0134071
FACT SHEET**

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

APPLICANT

J.B. Henry Lease Produced Water
P.O. Box 3910
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ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
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PREPARED BY

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DATE PREPARED

December 17, 2019

PERMIT ACTION

This is a first-time issuance

RECEIVING WATER – BASIN

Unnamed intermittent stream to Leoncita Creek.

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

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)
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. CHANGES FROM THE PREVIOUS PERMIT

Not applicable since this is a new permit issuance.

II. APPLICANT LOCATION and ACTIVITY

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

Under the SIC code 1311, oil and gas field exploration, the treatment process consists of the following stages: production leaves two wellheads (Well No. 2 & 6) and is treated with a clarifier at the well. Water flows to 500-barrel gun barrel where oil and water is separated. Water leaves 500-barrel gun barrel via water leg and enters 400-barrel gun barrel to be polished prior to entering the first skimming pit. Water flows via 4" down comer pipe into second skimming pit. Water then discharges through 4" down comer pipe to ranch pasture for agricultural purposes west of 98th Meridian. Roark Ranch, LLC, owns the surface for approximately 1.1 miles downstream of the discharge point. The landowner utilizes the water for agricultural purposes due to it being produced from the freshwater Carrizo formation.

The only chemical to be used is RSI-8720 Water Clarifier. Approximately 4-5 quarts per day are used which should equal to approximately 20-25 ppm. An SDS was attached for the permit writer review.

Daily Water Production (bbl./day)

Well No. 2	Avg.: 1000*	Est. Max Water: 2000
Well No. 6**	Avg.: 0	Est. Max Water: 2000

* 1000 bbl/day = 42,000 gal/day

**Well currently not producing

Outfall coordinates:

Outfall 001: Latitude 28° 30' 31.51"; Longitude -98° 35' 2.58"

III. EFFLUENT CHARACTERISTICS

Water samples has been tested for the outfalls of Skimming Pit No.1 and Skimming Pit No. 2 (Outfall 001), submitted in the application in form 2C shows as follow:

Pollutant	Pit No. 1 (mg/l unless noted)	Pit No. 2 (Outfall 001) (mg/l unless noted)
Total Organic Carbon (TOC)	11.8	5.6
Total Suspended Solids (TSS)	20	< 2.5
Ammonia (as N)	< 0.07	0.73
Temperature (°C)	30.67	38.46
pH	8.76	8.36
Chlorine, Total Residual	123	114
Nitrogen, Total Organic (as N)	< 0.07	0.73
Oil and Grease	< 5	8.2
Aluminum, Total	0.251	0.528
Iron, Total	0.318	0.719

Pollutant	Pit No. 1 (mg/l unless noted)	Pit No. 2 (Outfall 001) (mg/l unless noted)
Magnesium, Total	1.51	1.49
Manganese, Total	0.0056	0.00926
Arsenic, Total	< 0.002	< 0.002
Cadmium, Total	< 0.0003	< 0.0003
Chromium, Total	< 0.002	< 0.002
Copper, Total	< 0.002	0.00634
Lead, Total	< 0.0003	0.00158
Mercury, Total	< 0.00008	< 0.00008
Nickel, Total	< 0.003	< 0.003
Selenium, Total	< 0.002	< 0.002
Silver, Total	< 0.001	< 0.001
Zinc, Total	0.0172	0.0386
Cyanide, Total	< 0.02	< 0.20
Phenols, total	< 0.00079	< 0.00079
Benzene	< 0.0002	0.00184
Naphthalene	< 0.002	0.0616

IV. DISCHARGE DESCRIPTION

Discharges from Outfall 001 initially discharges to an unnamed intermittent stream and thence to a perennial pool approximately 0.8 miles downstream. The outfall then discharges again to an unnamed intermittent stream to the point three miles downstream. The outfall then discharges to Leoncita Creek (intermittent) approximately 3.16 miles downstream and ultimately discharges to Texas Segment 2117 (classified, perennial), Frio River above Choke Canyon Reservoir approximately 5.64 miles downstream. The outfall is located in McMullen County, Texas in the Nueces River Basin.

The designated uses of Segment No. 2117 are primary contact recreation, high aquatic life and public water supply system.

V. 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 the 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. Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program.

The application was dated September 11, 2018. It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR §122.46(a).

VI. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

A. OVERVIEW of TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 require that NPDES permit limits be developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for O&G and TSS. Water quality-based effluent limitations are established in the proposed draft permit for pH.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

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 pursuant to 40 CFR 125.3(c)(2). 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.

2. Effluent Limitation

Produced Water discharges are covered under the effluent guideline for onshore oil and gas operations. These activities are subject to the Oil and Gas Extraction Point Source Category (40 CFR Part 435). The Oil and Gas Extraction Point Source Category Subpart C - Onshore Subcategory establishes the effluent limitation for produced water from Onshore operations as "No Discharge" [40 CFR 435.32 (a)]. However, Subpart E - Agricultural and Wildlife Water Use Subcategory, allows the discharge of produced water from facilities west of the 98th meridian for use in agricultural and wildlife propagation. J.B. Henry Lease Produced Water is located west of the 98th meridian and discharges west of the 98th meridian has a use in agricultural and wildlife propagation. The effluent guideline further requires "... that the produced water is of good enough quality to be used for wildlife or livestock

watering or other agricultural uses and that the produced water is actually put to such use during periods of discharge.” The technology based limit for oil and grease is 35 mg/l.

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 2014 EPA-approved Texas Water Quality Standards, Texas Administrative Code (TAC), 30 TAC Sections 307.1 - 307.10, effective August 17, 2014. The designated uses of the receiving water for discharge 001 are primary contact recreation, high aquatic life and public water supply system.

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. The 99th percentile confidence level is for discharges to lakes, reservoirs, bays, estuaries, wide tidal rivers, and narrow tidal rivers without upstream flow data. 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 smaller LTA value between acute and chronic condition is used to calculate the daily average (DLY AVG) and daily maximum (DLY MAX) concentration limits as follow:

$DLY\ AVG = 1.47\ LTA$ and $DLY\ MAX = 3.11\ LTA$

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. Discharges within three miles of perennial water or perennial pools with significant aquatic life uses are designed to protect against chronic toxicity and to protect human health in those waters.

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

Criteria for pH is between 6.5 and 9.0 s.u. for the water segment pursuant to 30 TAC 307.10.

b. Oil and Grease

To ensure that this discharge is of sufficient quality for livestock and wildlife water use, and therefore meets the requirements of Subpart E, the proposed permit establishes a more stringent Oil and Grease limit of 10 mg/L monthly average, with a daily maximum limit of 15 mg/l. This limit is based on BPJ in accordance with 40 CFR 125.3(h)(1) and is consistent with other produced water permits issued by other EPA Regions.

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 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.”

d. Oxygen Demand and Total Petroleum Hydrocarbons

In order 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.

Produced wastewater discharges may contain various organic chemicals, inorganic chemicals, metals, and naturally occurring radioactive materials (NORM). Monitoring and reporting requirements for Total Petroleum Hydrocarbons will be proposed based on Best Professional Judgment, BPJ. The data reported for these pollutants will be evaluated during the next permit cycle to see if a discharge limit is required.

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 facility discharges initially to an unnamed intermittent stream and thence to a perennial pool approximately 0.8 miles downstream. The outfall then discharges again to an unnamed intermittent stream to the point three miles downstream to Leoncita Creek (intermittent) approximately 3.16 miles downstream and ultimately discharges to Texas Segment 2117 (classified, perennial), Frio River above Choke Canyon Reservoir approximately 5.64 miles downstream. The Outfall 001 is MENU 7 (Discharge is to an intermittent water body with perennial pools).

The reasonable potential calculations were performed based on data obtained from the permit application. Segment specific values for pH, TSS, Total Hardness, TDS, Chloride and Sulfate values were obtained from table D of the IP. These values were also used in Menu 7 to calculate reasonable potential. The result of the Menu 7 model run revealed that Total Lead exceeded the 85% aquatic life and therefore will have a limit. Total Lead limit will be 1.24 ug/L. Total Zinc exceeded the 70% aquatic life and therefore will have a monitoring requirement only.

TDS, sulfate and chloride are present in the discharge and were screened using the procedures found on pages 175/176 of the ITWQS. Using these procedures, the daily average effluent concentration of TDS obtained from the permit application was compared to the screening value to determine whether a TDS permit limit is needed. The screening procedure follows:

Screen for TDS at the intermittent stream using the following default screening equation:

$$C_{TDS} = (C_c / 500 \text{ mg/L}) * 2,500 \text{ mg/L}$$

where: C_{TDS} = TDS concentration (mg/L) used to determine the TDS screening value

C_c = TDS criterion (mg/L) at the first downstream Segment = 935 mg/L

$$C_{TDS} = (935 \text{ mg/L} / 500 \text{ mg/L}) * 2,500 \text{ mg/L} = 4,675 \text{ mg/L}$$

According to page 176 of ITWQS, if C_{TDS} is greater than 2,500 mg/L but less than 6,000 mg/L, then, $C_{SV} = C_{TDS} = 4,675 \text{ mg/L}$, where C_{SV} is the TDS screening value. Since the effluent concentration (2,370 mg/L) is less than the TDS screening value (4,675 mg/L), TDS limitations and monitoring requirements are not established in the draft permit.

TDS screening guidelines for intermittent streams are intended to protect livestock, wildlife, shoreline vegetation, and aquatic life during periods when the stream is flowing; the screening is also intended to preclude excessive TDS loading in watersheds that could eventually impact distant downstream perennial waters.

Similarly, sulfate and chloride concentrations were also screened using equation 1b found on page 177 of the ITWQS as shown below:

$$Cl \text{ or } SO_4 C_{SV} = (TDS C_{SV} / TDS \text{ Criterion}) * Cl \text{ or } SO_4 \text{ Criterion}$$

$$C_{SO_4} = (4,675/935) * 300 \text{ mg/L} = 1,500 \text{ mg/L};$$

$$C_{Cl} = (4,675 / 935) * 400 \text{ mg/L} = 2,000 \text{ mg/L}$$

According to page 175 of ITWQS, the values of 1,500 mg/L and 2,000 mg/L are both less than 2,500 mg/L. As a result, 2,500 mg/L is their respective screening value. The respective effluent concentrations

of sulfate and chloride are both less than 2,500 mg/L. As a result, the proposed permit did not establish limitation and monitoring requirements for sulfate and chloride.

Produced wastewater discharges may contain various organic chemicals, inorganic chemicals, metals, and naturally occurring radioactive materials (NORM). Monitoring and reporting requirements for Benzene, BETX (sum of benzene, ethyl benzene, toluene and xylene), radium 226, radium 228, radium 226 + radium 228 and adjusted gross alpha will be proposed based on Best Professional Judgment, BPJ. The data reported for these pollutants will be evaluated during the next permit cycle to see if a discharge limit is required.

Solids and Foam

The prohibition of the discharge of floating solids or visible foam in other than trace amounts is established 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 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 measured weekly. pH, oil & grease, TDS, sulfate, chloride, and dissolved oxygen shall be monitored twice a month, using grab sample. For any monitoring event, the first sample of any event shall be collected at least seven (7) days from the first sample of the previous monitoring event.

Total Petroleum Hydrocarbon, Benzene, BETX (sum of benzene, ethyl benzene, toluene and xylene), radium 226, radium 228, radium 226 + radium 228, adjusted gross alpha, Total Lead and Total Zinc shall be monitored once per three months using grab sample.

E. WHOLE EFFLUENT TOXICITY

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

Based on the IP, discharges into intermittent streams with perennial pools will conduct chronic testing with a critical dilution of 100% effluent. Accordingly, the proposed permit requires that discharge to outfall 001 be monitored by a 7-day chronic toxicity test, with quarterly monitoring according to the provisions indicated in Parts I and II of this permit.

OUTFALL 001

The 2003 TCEQ Implementation Plan directs the WET test to be a 7-day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a quarterly frequency. If all WET tests pass during the first year of the permit, the permittee may request a monitoring frequency reduction for the either or both test species for the following 2-5 years of the permit. The vertebrate species (*Pimephales promelas*) may be reduced to

once per year. The invertebrate species (*Ceriodaphnia dubia*) may be reduced to twice per year. If any tests fail during that time the frequency will revert back to quarterly frequency for the remainder of the permit term. Both species shall resume quarterly monitoring at a quarterly frequency on the last day of the permit.

Since the facility is a new discharger, there is no WET data; as a result, EPA will not perform reasonable potential analysis. The draft permit proposes biomonitoring requirements.

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 100%, 75%, 56%, 42% and 32%.

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** - Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE <u>LIMITATION</u>	MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING (7-Day Chronic Static Renewal/NOEC) (1/)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<i>Ceriodaphnia dubia</i>	Report	Once/Quarter	24-Hr Composite
<i>Pimephales promelas</i>	Report	Once/Quarter	24-Hr Composite

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.

The permittee must submit monitoring results to EPA on either the electronic or paper Discharge Monitoring Report (DMR) approved formats. Monitoring results can be submitted electronically in lieu of the paper DMR Form. All DMRs shall be electronically reported effective December 21, 2016, per 40 CFR 127.16. To submit electronically, access the NetDMR website at www.epa.gov/netdmr and contact the R6NetDMR@epa.gov in-box for further instructions. Until the permittee is approved for Net DMR, it 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.)

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. EPA 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. TMDL REQUIREMENTS

The receiving stream, water segment 2117, is listed in 2014 Texas 303(d) List, which EPA approved on November 19, 2015. The parameter listed is bacteria with Category 5c defined additional data or information will be collected and evaluated before a management strategy is selected. EPA believes that the discharge will not cause bacteria concentrations to be negatively impacted, the discharge monitoring of this pollutant is not necessary. No additional requirements beyond the already proposed technology-based and/or water-quality based requirements are needed in the proposed permit. The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirements on new or revised TMDLs are completed.

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.

X. ENDANGERED SPECIES CONSIDERATIONS

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). The scope of the evaluation of the effects of the discharge authorized by this permit was therefore limited to the effects related to the authorized discharge.

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://www.fws.gov/southwest/es/ES_ListSpecies.cfm, Gulf Coast jaguarondi (*Herpailurus yagouaroundi cacaomilti*) and Ocelot (*Leopardus pardalis*).

The description of the species and its effect on the discharge is described below for McMullen County in Texas.

GULFT COAST JAGUARUNDI (*Herpailurus yagouaroundi cacomilti*)

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

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

OCELOT (*Leopardus pardalis*)

Ground colours of the short fur of the ocelot, varies from creamy, or tawny yellow, to reddish gray 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.

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

The Environmental Protection Agency has evaluated the potential effects of issuance of this permit modification upon listed endangered or threatened species. After review, EPA has determined that this permit modification 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 the listed 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.

XI. HISTORICAL AND ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The issuance of the permit should have no impact on historical and/or archeological sites.

XII. PERMIT REOPENER

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

None

XIV. 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.

XV. FINAL DETERMINATION

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

XVI. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION

NPDES Application for Permit to Discharge, Form 1 & 2C and other related documents dated on September 11, 2018.

B. State of Texas References

2012 Texas Integrated Report - Texas 303(d) List

Texas Surface Water Quality Standards, 30 TAC Sections 307.1 - 307.10, effective June 30, 2010

C. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136

D. MISCELLANEOUS

NPDES Permit Writers' Manual, September 2010

E-mail from permittee dated 12/5/2017 with additional information from application

E. Endangered Species References

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