

NPDES PERMIT NO. TX0124648
STATEMENT OF BASIS

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

APPLICANT:

Clean Energy Texas LNG
12114 Longstreet Road
Willis, TX 77318

ISSUING OFFICE:

U.S. Environmental Protection Agency
Region 6
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PREPARED BY:

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DATE PREPARED:

April 23, 2014

PERMIT ACTION

It is proposed that the facility be issued an NPDES permit for a 5-year term in accordance with regulations contained in 40 Code of Federal Regulations (CFR) 122.46(a).

40 CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of April 18, 2014.

RECEIVING WATER – BASIN

Lewisville Creek Reservoir, unclassified water in the San Jacinto River Basin. Overflow from Lewisville Creek Reservoir will discharge to Lake Conroe in Segment 1012 of the San Jacinto River 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 7	Intermittent stream with perennial pools
MGD	Million gallons per day
MSGP	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System
MLQ	Minimum quantification level
O&G	Oil and grease
RRC	Railroad Commission of Texas
RP	Reasonable potential
SIC	Standard industrial classification
SWP3	Storm Water Pollution Prevention Plan
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. TRC limit of 33µg/L is changed to a limit of 11µg/L, which is EPA's chronic chlorine criterion.
2. Updates have been made to the Class I and Class II penalty amounts in Part III.E.3 of the final permit.
3. Electronic DMR reporting requirements have been included in the proposed permit.
4. WET limit has been established in the draft permit based on failure to report WET test results during the last permit cycle.
5. Fecal Coliform limit is replaced with E. coli bacteria limit in the draft permit based on the current Texas Water Quality Standards.

II. APPLICANT LOCATION and ACTIVITY

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

As described in the application, the facility is located at 12114 Longstreet Road in Willis, Montgomery County, Texas. Wastewater discharges from the facility are from non contact cooling water, aerobic septic system, and stormwater to Lewisville Creek Reservoir, an unclassified water in the San Jacinto River Basin, then to Lake Conroe in Segment 1012 of San Jacinto River Basin.

Discharges from Outfall 001 consist of non contact cooling water, aerobic septic system and stormwater.

Discharges are located on that water at:

Outfall 001: Latitude: 30° 26' 79"; Longitude: 95° 31' 26"

III. PROCESS AND DISCHARGE DESCRIPTION

The facility processes compressed gas from pipeline. Liquid amine is used in direct contact with the gas stream to remove carbon dioxide. The gas stream is then directed to a dryer containing molecular sieve for water removal. A mixed refrigerated liquid system (MRL) is used to condense the hydrocarbons. The cooling and condensing occurs in the heat exchangers located in the cold box. A distillation process occurs in the cold box allowing for the separation of the heavier hydrocarbons which are then returned to the pipeline. The remaining methane is further purified and transferred to storage at -260°F. The Willis plant produces a tail gas, which is sent to the power plant across the street to generate power. The refrigerant system (containing hydrocarbons) is designed to contain the hydrocarbons without venting when the system is shut down.

Table 1: Discharge Characteristics for Internal Outfall 101, Cooling Water Unit

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

Parameter	Max Concentration, mg/L unless noted
Flow, MGD	0.0037
pH, su	6.5 – 9

Parameter	Max Concentration, mg/L unless noted
TSS	N/A
TOC	N/A
COD	132.4
BOD	3.4

Table 2: Discharge Characteristics for Internal Outfall 103, Septic System

Parameter	Max Concentration, mg/L unless noted
Flow, MGD	0.000095
pH, su	6.5 – 9
TSS	N/A
TOC	N/A
COD	3.5
BOD	35.4

Table 1: Discharge Characteristics for Outfall 001

Parameter	Max Concentration, mg/L unless noted
Flow, MGD	0.0037
pH, su	6.5 – 9
TSS	36.4
TOC	N/A
BOD	2.9
Fecal Coliform, CFU/100 ml	960

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 23, 2013, and was deemed administratively

incomplete on March 7, 2014. Additional permit application information was submitted and received on April 7, 2014 and April 16, 2014. The permit was administratively complete on April 21, 2014.

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 draft permit for BOD and TSS. Water quality-based effluent limitations are established in the draft permit for pH and fecal coliform.

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. 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.

There are no published ELG's for this type of activity. Final effluent requirements are based on Technology requirements and are based on Best Available Technology Economically Achievable (BAT) and/or TCEQ water quality standards for Segment No. 1012.

Limitations for Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD₅) are proposed in the permit and are expressed in terms of concentration. The proposed limitations for BOD₅ for cooling tower blowdown are 30 mg/l maximum, 20 mg/l average, while the BOD₅ & TSS limitations for treated sanitary wastewater are each 45 mg/l maximum and 30 mg/l average. The draft permit will not propose mass limits since flow is variable and intermittent. Concentration limits will be protective of the stream uses. These limitations are based on the BPJ of the permit writer and are consistent with natural gas industry.

The narrative limitation for Oil & Grease is also continued in the draft permit based on the TCEQ narrative standard to limit Oil & Grease.

Stormwater has been identified by the permittee as a component of the discharge through Outfall No. 001. Stormwater pollution prevention requirements are continued in the draft permit. It is proposed that the facility conduct annual inspection of the facility to identify areas contributing to the storm water discharge and identify potential sources of pollution which may affect the quality of storm water discharges from the facility.

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

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The Clean Water Act in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR 122.44(d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant. If the discharge poses the reasonable potential to cause an in-stream violation of narrative standards, the permit must contain prohibitions to protect that standard. Additionally,

the TWQS found at 30 TAC Chapter 307 states that "surface waters will not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life." The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards" (IP) is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater which: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

The IP document is not a state water quality standard, but rather, a non-binding, non-regulatory guidance document. See IP at page 2 stating that "this is a guidance document and should not be interpreted as a replacement to the rules. The TWQS may be found in 30 TAC Sections (§§) 307.1-.10."). EPA does not consider the IP to be a new or revised water quality standard and has never approved it as such. EPA did comment on and conditionally "approve" the IP as part of the Continuing Planning Process (CPP) required under 40 CFR §130.5(c) and the Memorandum of Agreement between TCEQ and EPA, but this does not constitute approval of the IP as a water quality standard under CWA section 303(c). Therefore, EPA is not bound by the IP in establishing limits in this permit – but rather, must ensure that the limits are consistent with the EPA-approved state WQS. However, EPA has made an effort, where we believe the IP procedures are consistent with all applicable State and Federal regulations, to use those procedures.

The general criteria and numerical criteria which make up the stream standards are provided in the 2010 EPA-approved Texas Water Quality Standards, Texas Administrative Code (TAC), 30 TAC Sections 307.1 - 307.9, effective August 24, 2012.

The designated uses of Lake Conroe in Segment 1012 of San Jacinto River Basin are primary contact recreation, public water supply and high aquatic life.

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 pH of the cooling water and boiler water are adjusted and controlled with acids and bases. As a result, pH is used as a control parameter to indicate the acidity and basicity of the resulting discharge. Wastewater discharges from the facility flows into Lewisville Creek Reservoir. Overflow from the reservoir is an intermittent stream within 3 miles of the San Jacinto River, perennial water. Since the immediate receiving is an intermittent stream, and there is no mixing established for this discharge, the limitation of pH in the discharge for Outfall 001 is limited to the standards for waterbody Segment 1012, of the San Jacinto River Basin. However, the limitation of pH for internal Outfall 103, treated sanitary wastewater, shall be limited to the range 6.0 to 9.0 su's; technology-based limits for pH.

b. Narrative Limitations

Narrative protection for aesthetic standards will propose that surface waters shall be maintained so that oil, grease, or related residue will not produce a visible film or globules of grease on the surface or coat the banks or bottoms of the watercourse; or cause toxicity to man, aquatic life, or terrestrial life.

The following narrative limitations in the draft 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. Bacteria

Since the previous permit issuance, Texas has adopted *E. coli* as the State bacteria standard for freshwater in lieu of Fecal Coliform bacteria. However, the WQS stream specific criteria require

a geometric mean criterion for E. Coli of 126 /100 ml. For primary contact recreation, the geometric mean criterion for E. Coli is 126 per 100 ml and the single sample criterion for E. Coli is 399 per 100 ml. Therefore, the draft permit will propose E. Coli limits of 126 /100 ml monthly geometric average and a 399/100 ml single maximum, which are more restrictive than the current permit.

d. Total Residual Chlorine

Information obtained from the application shows that chlorine is not present in the discharge. However, reviews of the DMRs also show that chlorine is detected in the discharge. As a result, the TRC limitation and monitoring requirement is continued in the draft permit.

EPA notes that TCEQ has not adopted a TRC criterion and may impose a BPJ limit for chlorine if necessary. As the permitting authority, EPA must assure compliance with State water quality standards. EPA has a chlorine criterion for protection of aquatic life as well as an MQL for TRC.

The procedures described in the “Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses” (EPA 440/5-84-030) indicate that except possibly where a locally important species is very sensitive, freshwater aquatic organisms and their uses should not be affected unacceptably if the four-day average concentration of total residual chlorine does not exceed 11µg/L more than once every three years on the average and if the one-hour average concentration does not exceed 19µg/L more than once every three years on the average. (See Page 17/18 of the 1985 Ambient Water Quality Criteria for Chlorine). In addition, EPA has established a MQL for TRC at 33µg/l. Values less than 33µg/L can be reported as zero. 19µg/L is EPA’s acute chlorine criteria while 11µg/L is chronic chlorine criteria. Limits must be protective of WQS per 40 CFR 122.4(d) and 122.44(d).

A review of the DMR shows that TRC was detected in the discharge. Since discharge is to an intermittent waterbody within 3 miles of a lake, a chronic criterion applies. As a result, TRC limit is changed to 11µg/L which is EPA’s chronic chlorine criteria. EPA Region 6’s MQL for TRC remain 33µg/L. Also note that any level of TRC below the MQL may be reported as not detected. The previous permit established a TRC limit of 33µg/L.

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.

For Outfall 001, TEXTOX menu 8 (discharge is 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 criteria using the following information: Mixing zone (MZ) =15 %, Zone of Initial Dilution (ZID) = 60%, and Human Health (HH) = 8%. 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. See attachment for TEXTOX spreadsheet calculation of reasonable potential for toxics.

Information obtained from the application shows that none of the toxic pollutants showed reasonable potential to violate Texas WQS.

Solids and Foam

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

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.

The permittee shall continue to perform monthly monitoring for pH and weekly monitoring for flow at Outfall 001 on BPJ. E. Coli bacteria shall be monitored monthly at Outfall 001. Total Residual Chlorine shall also be monitored monthly at Outfall 001 by grab sample. WET testing shall continue to be performed semiannually. For internal Outfall 101 – Cooling tower blowdown, flow shall be monitored weekly while BOD5 shall be monitored monthly by grab sample. Also for internal Outfall 103 – treated sanitary wastewater, flow shall continue to be monitored weekly; while BOD5, TSS, and pH shall continue to be monitored monthly by grab sample.

E. WHOLE EFFLUENT TOXICITY LIMITATIONS

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

The previous permit requires that discharge to outfall 001 be monitored by a 7-day chronic toxicity test, with semiannual monitoring according to the provisions indicated in Parts I and II of this permit.

A review of the DMR reveals that the facility did not report 70% of their WET results (from July 2009 to February, 2012). Three data points were used to perform reasonable potential and the attached spreadsheet shows that reasonable potential exists. As a result, the draft permit includes limitation and monitoring requirements for WET.

The critical dilution is 100% and the dilution series are 32%, 42%, 56%, 75%, and 100%. A 7-day chronic No Observed Effect Concentration (NOEC) freshwater criterion applies at the point of discharge.

OUTFALL 001

Based on the nature of the discharge; industrial, the estimated average flow; 0.0037 MGD, the nature of the receiving water; an intermittent water body within 3 miles of a lake or a water body that acts like a lake; and the critical dilution; 100%, the TCEQ IP directs the WET test to be a 7-day chronic toxicity testing using *Ceriodaphnia dubia* and *Pimephales promelas*. Monitoring

frequency shall continue to be performed semi-annually for both the vertebrate and the invertebrate test.

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

During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee is authorized to discharge from Outfall 001 – combined cooling tower blowdown, treated sanitary wastewater, and stormwater runoff to Lewisville Creek Reservoir, unclassified water in the San Jacinto River Basin. Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>	
	<u>30-DAY AVG MINIMUM</u>	<u>7-DAY MINIMUM</u>
Whole Effluent Lethality (PCS 22414) (7-Day NOEC) <u>1/</u>	100 %	100%
<u>Ceriodaphnia dubia</u>	REPORT	REPORT
<u>Pimephales promelas</u>	REPORT	REPORT

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>FREQUENCY</u>	<u>TYPE</u>
Whole Effluent Lethality (7-Day NOEC) <u>1/</u>		
<u>Ceriodaphnia dubia</u>	Once/ 6 Months	24-Hr. Composite
<u>Pimephales promelas</u>	Once/ 6 Months	24-Hr. Composite

FOOTNOTES

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

F. FINAL EFFLUENT LIMITATIONS

See the draft permit for limitations.

VI. FACILITY OPERATIONAL PRACTICES

A. WASTE WATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve the operating efficiency and extend the useful life of the treatment system.

B. OPERATION AND REPORTING

The permittee must submit Discharge Monitoring Report's (DMR's) quarterly, beginning on the effective date of the permit, lasting through the expiration date of the permit or termination of the permit, to report on all limitations and monitoring requirements in the permit.

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

Wastewater discharges from the facility flow into Lewisville Creek Reservoir, an unclassified water in the San Jacinto River Basin. Overflow from Lewisville Creek Reservoir will discharge to Lake Conroe in Segment 1012 of San Jacinto River Basin. Lake Conroe in Segment 1012 of San Jacinto River Basin is not listed in the 2012 State of Texas 303(d) List for Assessed River/Stream Reaches Requiring Total Maximum Daily Loads (TMDLs). 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 draft 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 draft permit.

IX. ANTIBACKSLIDING

The draft 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

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_Lists_Main.cfm, red-cockaded woodpecker is the only listed endangered species in Montgomery County. Based on the following discussion, EPA has determined that the issuance of this permit will have no effect on these federally endangered species.

Red-Cockaded Woodpecker

The red-cockaded woodpecker (*Picoides borealis*) is approximately seven inches long. Their backs and tops of their heads are black and there are small white spots arranged horizontally across their backs. These birds inhabit open old-growth pine forests, preferably longleaf pine (*Pinus palustris*). Red-cockaded woodpeckers need living pines that are at least 85 years old and infected by heartrot. Heartrot is a disease that causes decay in the heartwood of pines. This deterioration in the heartwood makes it easier for red-cockadeds to excavate cavities in trees. Insects and spiders are the main meals for red-cockaded woodpeckers. Red-cockaded woodpeckers live in clans. Clans consist of one female and two to five males.

The main reason the red-cockaded woodpecker has been forced to the brink of extinction is habitat loss. This loss of habitat can be attributed to clearcutting for agriculture and logging, plus the unchecked growth of the hardwood understory. Historically, fires swept through pine forests killing this understory. Today, fire is repressed in these forests and the hardwood understory is able to grow and create shade, preventing young pines from growing. Other factors contributing to the decline are the use of pesticides, nest predation, and competition for cavities by other species.

Determination

The permit renewal reflected here does not change the nature or volume of the pollutants from the current. EPA is unaware, at this time, of any service concerns regarding this discharge and believes that the change in permit term will have no effect on listed species and designated critical habitat. The permit has retained the limitations and conditions of the expiring permit. EPA believes these limitations are adequate to protect the listed species for Montgomery County.

Based on information described above, EPA Region 6 has determined that discharges proposed to be authorized by this permit renewal would not cause the decline of red-cockaded wood pecker.

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 since no construction activities are planned in the reissuance. In an email from Sarah Birtchet (State Historic Preservation Officer (SHPO) to Luca Ferroni (Clean Energy) stated that the proposed project is not an undertaking that has the potential to effect historic properties, therefore SHPO did not issue any comments on the project submission.

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

During the last permit cycle, the facility was cited on three violations during an inspection conducted by EPA on June 19, 2012. The violations include: failure to report effluent Fecal Coliform and WET results; failure to submit monitoring information using the DMR Form; and failure to develop and implement SWP3 within six months of the effective date of the final permit. The facility have corrected the violations and paid the negotiated fine.

XV. CERTIFICATION

This permit is in the process of certification by the Texas Railroad Commission 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 draft permit:

A. APPLICATION

NPDES Application for Permit to Discharge, Form 1 & 2C, received on January 23, 2014. Additional Permit application information submitted and received on April 7, 2014 and April 16, 2014. The permit was administratively complete on April 21, 2014.

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, January 2003.

2010 Texas Surface Water Quality Standards, 30 TAC Sections 307.1 - 307.9, effective August 24, 2012.

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

C. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136

D. MISCELLANEOUS CORRESPONDENCE

Letter from Dorothy Brown, EPA, to Mr. Tony Bratton, Clean Energy, Texas LNG, dated April 22, 2014, informing applicant that its' NPDES application received January 23, 2014, is administratively complete.

Letter from Dorothy Brown, EPA, to Mr. Tony Bratton, Clean Energy, Texas LNG, dated March 7, 2014, informing applicant that its' NPDES application received January 23, is administratively incomplete.

Email from Sarah Birtchet, State Historic Preservation Officer (SHPO), to Luca Ferroni, Clean Energy, dated on April 14, 2014, on the no effect status of the proposed on historic properties.

Email from Luca Ferroni (Clean Energy) to Maria Okpala, EPA, dated on April 14, 2014, on the response from the Texas Historical Commission regarding the EPA's request on the March 7, 2014 letter.

Letter from Mr. Tony Bratton, Clean Energy to Maria Okpala, EPA, dated April 7, 2014, on additional Permit application information.

Email from Andrea Abshire, EPA, to Maria Okpala, EPA, dated March 18, 2014, on critical conditions information.