NPDES PERMIT NO. OK0044903
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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Midship Project
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ISSUING OFFICE

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DATE PREPARED

September 18, 2018

PERMIT ACTION

It is proposed that the facility be issued a first-time 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 September 14, 2018.

RECEIVING WATER – BASIN

Various. See table below

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
CPP	Continuing Planning Process
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
HT	Hydrostatic Testing
IP	Procedures to Implement the Oklahoma Surface Water Quality standards
mg/L	Milligrams per Liter (one part per million)
MGD	Million gallons per and Intrastate Surface Waters
MQL	Minimum quantification level
NPDES	National Pollutant Discharge Elimination System
OAC	Oklahoma Administrative Code
ODEQ	Oklahoma Department of Environmental Quality
O&G	Oil and grease
OWQS	Oklahoma Surface Water Quality Standards
OWRB	Oklahoma Water Resources Board
RP	Reasonable potential
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
µg /L	Micrograms per Liter (one part per billion)
WET	Whole effluent toxicity
WQMP	Water Quality Management Plan
WQS	Water Quality Standards

I. APPLICANT LOCATION and ACTIVITY

Under the SIC code 4922, Natural Gas Transmission, the applicant plans to operate a natural gas pipeline that will transport gas out of the South Central Oklahoma Oil Province and the Sooner Trend Anadarko Basin Canadian and Kingfisher plays in Oklahoma, to natural gas pipelines, near Bennington, Oklahoma.

Midship Pipeline Company, LLC's proposed Midship Project ("Project") will include the construction and operation of the following new facilities:

• Approximately 199.6 miles of new 36-inch-diameter mainline pipeline (referred to as the "Mainline") beginning at the Okarche Gas Processing Plant near Okarche, Oklahoma, and ending at interconnects with existing pipelines at Bennington, Oklahoma. The Project also includes approximately 0.2 mile of new 24-inch-diameter pipeline (referred to as the "Tie-in Piping) extending laterally from the Mainline at milepost 15.3 to the Cana Meter Station near Calumet, Oklahoma. The Mainline will be located in Kingfisher, Canadian, Grady, Garvin, Stephens, Carter, Johnston, and Bryan counties, Oklahoma; and the Tie-in Piping will be located in Canadian County, Oklahoma. All the Midship pipelines are new pipelines.

• Approximately 20.5 miles of new 30-inch-diameter lateral pipeline (referred to as the "Chisholm Lateral") beginning at a gas supply facility near Kingfisher, Oklahoma, and ending at a tie-in with the Mainline near Okarche, Oklahoma. The Chisholm Lateral will be located entirely in Kingfisher County, Oklahoma.

• Approximately 13.8 miles of new 16-inch-diameter lateral pipeline (referred to as the "Velma Lateral") beginning at a gas supply facility near Velma, Oklahoma, and ending at a tie-in with the Mainline at the Tatums Compressor Station. The Velma Lateral will be located in Stephens, Carter, and Garvin counties, Oklahoma.

• Three (3) natural gas compressor stations will be located along the Mainline to compress natural gas in the pipeline, which include the following:

- O The "Calumet Compressor Station" will be located along the Mainline at approximate milepost 17.6 in Canadian County.
- O The "Tatums Compressor Station" will be located along the Mainline at approximate milepost 99.4 in the southwestern corner of Garvin County, Oklahoma.
- O The "Bennington Compressor Station" will be located along the Mainline at approximate milepost 198.4, approximately 1.5 miles southeast of Bennington in northeast Bryan County, Oklahoma.

• One (1) booster station (referred to as the "Sholem Booster Station") will be located along the Velma Lateral at approximate milepost VE7.3 in eastern Stephens County, Oklahoma.

• Seven (7) receipt meters at six (6) meter stations along the pipelines to receive natural gas supply, which include the following:

- O The "Okarche/MarkWest Meter Station" (2 receipt meters) will be located along the Mainline at approximate milepost 0.0, approximately 6 miles west of Okarche in southern Kingfisher County, Oklahoma.
- O The "Canadian Valley Meter Station" will be located along the Mainline at approximate milepost 10.7, approximately 1.3 miles southwest of Calumet in western Canadian County, Oklahoma.

- O The "Cana Meter Station" will be located along the Mainline at approximate milepost 15.2, approximately 4.6 miles south of Calumet in western Canadian County, Oklahoma.
- O The "Grady Meter Station" will be located along the Mainline at approximate milepost 78.8, approximately 6.6 miles southwest of Lindsay in southwestern Garvin County, Oklahoma.
- O The "Chisholm Meter Station" will be located along the Chisholm Lateral at approximate milepost CH0.0, approximately 4.3 miles southwest of Cashion in southeastern Kingfisher County, Oklahoma.
- O The "Velma Meter Station" will be located along the Velma Lateral at approximate milepost VE0.15, approximately 0.7 mile west of Velma in eastern Stephens County, Oklahoma.

• Four (4) delivery meters at three (3) meter stations along the Mainline to deliver gas to other pipelines, which include the following:

- O The "NGPL 801 Meter Station" will be located along the Mainline at approximate milepost 119.1, approximately 5.9 miles west of Springer in northern Carter County, Oklahoma.
- O The "NGPL Meter Station" will be located along the Mainline at approximate milepost 198.4, approximately 1.5 miles southeast of Bennington in eastern Bryan County, Oklahoma.
- O The "Bennington Meter Station" (which includes both Bennington #1 and Bennington #2 delivery meters) will be located along the Mainline at approximate milepost 199.6, approximately 2.7 miles southeast of Bennington in eastern Bryan County, Oklahoma.

• Two (2) receipt taps along the Mainline, which include the following:

- O The "Bradley Receipt Tap" will be located along the Mainline at approximate milepost 74.1 in Grady County, Oklahoma.
- O The "Wildhorse Receipt Tap" will be located along the Mainline at approximate milepost 94.7 in Garvin County, Oklahoma.

Hydrostatic testing will be required for all aforementioned pipelines and facilities, except for the receipt taps, which will be hydrostatically tested along with the individual pipeline segments. The Mainline will be constructed in 14 distinct segments, each of which will be individually hydrostatically tested, resulting in a maximum of 14 discharge locations. Additionally, 11 features along the Mainline will be crossed using the horizontal directional drill (HDD) method. Prior to tie-in with the Mainline, each HDD segment will be individually hydrostatically tested, resulting in a maximum of 11 discharge locations. Note: The intake and discharge locations are shared for some pipeline segments and HDDs and are represented as a single outfall. As a result, the outfalls may have multiple discrete discharge events.

The Chisholm Lateral will be hydrostatically tested as one segment, with a maximum of one discharge location. No HDDs will be required along the Chisholm Lateral.

The Velma Lateral will be hydrostatically tested as one segment, with a maximum of one discharge location. Additionally, two features along the Velma Lateral will be crossed using the HDD method. Prior to tie-in with the Velma Lateral, each HDD segment will be individually hydrostatically tested, resulting in a maximum of two discharge locations.

The three compressor stations, seven receipt meters (at six-meter stations), four delivery meters (at three-meter stations), and the Sholem Booster Station will be individually hydrostatically

tested, resulting in a maximum of 13 discharge locations. The two receipt taps will be hydrostatically tested along with their corresponding pipeline segments.

The draft permit authorizes the discharge of new pipelines only.

II. PROCESS AND DISCHARGE DESCRIPTION

As described in the application, there are 39 discharge locations in the State of Oklahoma. The discharge point showing outfall number, discharge coordinates: latitude and longitude, county, average flow rate in millions gallons per day (MGD), receiving water, and the waterbody identification numbers are shown in the following table:

TABLE 1

Summary of Outfalls for Hydrostatic Testing of the Midship Project

Outfall ID	Latitude	Longitude	County	Average Flow (gpm)	Intake Source Name	Receiving Waterbody Name	Receiving Water ID#
001	35° 37' 48.100"	-98° 7' 37.206"	Canadian	1,500	North Canadian River	North Canadian River	OK520530000010_00
002	35° 17' 44.934"	-97° 58' 11.357"	Grady	1,500	Buggy Creek	Buggy Creek	OK520610020120_00
003	35° 31' 36.799"	-98° 6' 19.853"	Canadian	1,500	Ranch Pond	Trib to North Canadian River	OK520530000010_10
004	35° 22' 54.801"	-98° 1' 11.068"	Canadian	1,500	Municipal	Canadian River	OK520610020150_00
005	35° 16' 27.780"	-97° 56' 59.975"	Grady	1,500	Municipal	Trib to West Fork Salt Creek	OK310820010150_00
006	34° 58' 59.621"	-97° 45' 9.562"	Grady	1,500	Winter Creek Site 9 Reservoir	Winter Creek Site 9 Reservoir	OK310810020220_00
007	34° 55' 28.875"	-97° 44' 34.170"	Grady	1,500	Washita River	Laflin Creek	OK310810020200_00
008	34° 38' 37.816"	-97° 34' 28.763"	Stephens	1,500	Wildhorse Creek Site 90 Reservoir	Trib to Wildcat Creek	OK310810030090_00
009	34° 36' 9.701"	-97° 32' 21.018"	Garvin	1,500	Wildhorse Creek Site 86 Reservoir	Trib to Salt Creek	OK310810030080_00
010	34° 23' 11.266"	-97° 21' 55.980"	Carter	1,500	Caddo Creek Site 7 Reservoir	Trib to West Spring Creek	OK310800030230_00
011	34° 30' 15.747"	-97° 27' 59.823"	Carter	1,500	Wildhorse Creek	Wildhorse Creek	OK310810030010_00

012	34° 17' 34.761"	-97° 8' 30.229"	Carter	1,500	Ranch Pond	Trib to Buzzard Creek	OK310800030050_00
013	34° 19' 37.511"	-97° 13' 53.997"	Carter	1,500	Henry House Creek	Henry House Creek	OK310800030170_00
014	34° 16' 19.908"	-96° 58' 54.302"	Carter	1,500	Washita River	Washita River	OK310800020010_00
015	34° 14' 53.675"	-96° 53' 44.428"	Johnston	1,500	Washita River	Trib to Oil Creek	OK310800010240_00
016	34° 14' 41.614"	-96° 50' 5.582"	Johnston	1,500	Washita River	Courtney Creek	OK_310800010190_00
017	34° 14' 29.500"	-96° 48' 57.920"	Johnston	1,500	Ranch Pond	Mill Creek	OK310800010190_00
018	34° 13' 55.295"	-96° 36' 38.810"	Johnston	1,500	Ranch Pond	Ranch Pond	OK310800010090_00
019	34° 15' 48.336"	-96° 43' 48.734"	Johnston	1,500	Rock Creek	Trib to Rock Creek	OK310800010170_00
020	34° 15' 54.107"	-96° 41' 31.386"	Johnston	1,500	Municipal	Pennington Creek	OK310800010120_00
021	34° 7' 58.982"	-96° 23' 1.129"	Bryan	1,500	Martin Lake / Res. 013015	Trib to Blue River	OK410600010290_00
022	34° 8' 6.570"	-96° 23' 43.988"	Bryan	1,500	Municipal	Trib to Blue River	OK410600010290_00
023	35° 46' 8.349"	-97° 51' 55.017"	Kingfisher	1,500	Uncle John Creek Site 13 Res.	Clear Creek	OK620910050040_00
024	34° 29' 55.390"	-97° 32' 24.231"	Carter	1,500	Wildhorse Creek	Sandy Bear Creek, West Fork	OK310810030180_00
025	34° 29' 53.085"	-97° 32' 33.563"	Carter	1,500	Wildhorse Creek	Sandy Bear Creek, West Fork	OK310810030010_00
026	34° 30' 13.280"	-97° 30' 33.056"	Carter	1,500	Wildhorse Creek	Trib to Wildhorse Creek	OK310810030010_00
027	35° 30' 24.810"	-98° 6' 37.907"	Canadian	1,000	Municipal	Trib to North Canadian River	OK520530000010_10
028	34° 31' 15.953"	-97° 28' 42.958"	Garvin	1,000	Municipal	Trib to Wildhorse Creek	OK310810030010_00
029	33° 59' 3.655"	-96° 1' 8.458"	Bryan	1,000	Municipal	Trib to Sulphur Creek	OK410600010030_00
030	34° 29' 41.482"	-97° 34' 45.742"	Stephens	1,000	Municipal	Trib to Wildhorse Creek Tributary A	OK310810030270_00
031	35° 43' 45.969"	-98° 5' 7.235"	Kingfisher	1,000	Municipal	Trib to Winter Creek Camp	OK620910050085_00

032	35° 35' 17.944"	-98° 8' 12.955"	Canadian	1,000	Municipal	Trib to Sixmile Creek	OK520530000110_00
033	35° 32' 7.058"	-98° 6' 10.797"	Canadian	1,000	Municipal	Trib to North Canadian River	OK520530000010_10
034	34° 45' 13.404"	-97° 39' 54.759"	Garvin	1,000	Municipal	Unnamed Pond	OK310810020140_00
035	34° 19' 50.236"	-97° 14' 53.381"	Carter	1,000	Municipal	Trib to Henry House Creek	OK310800030170_00
036	33° 59' 4.830"	-96° 1' 4.641"	Bryan	1,000	Municipal	Trib to Sulphur Creek	OK410600010030_00
037	33° 58' 29.388"	-96° 0' 25.250"	Bryan	1,000	Municipal	Wolf Creek	OK410600010040_00
038	35° 46' 14.725"	-97° 44' 41.986"	Kingfisher	1,000	Municipal	Unnamed Pond	OK620910040010_20
039	34° 27' 40.605"	-97° 41' 8.537"	Stephens	1,000	Municipal	Trib to Wildhorse Creek	OK310810040250_00

Hydrostatic test water will be sourced from either surface water in the Project area or municipal water, dechlorinated (if obtained from a municipal source), and discharged in an upland location through energy dissipaters and a sediment filter. Hydrostatic test water discharges will be completed using appropriate best management practices. No additives will be added to the hydrostatic test water.

The facility provided an estimate of the daily maximum and average concentrations for Outfalls 001 through 039. The pollutants are listed below:

Pollutants	Max Concentration, mg/l	Average Concentration, mg/l
BOD	<30	<30
Oil & Grease	<15	<15
Flow	2.16 MGD	2.16 MGD
TSS	<100	<100
Ammonia (as N)	<3	<3
pH	6-9	6-9
Temperature (Winter)	14 º C	23ºC
Temperature (Summer)	30 º C	23 º C
TRC	2.0	1.0

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). An NPDES Application for a Permit to Discharge (Form 1) and Form 2E were received on April 9, 2018. Additional application information was received on June 12, 2018, and June 20, 2018. The permit was deemed administratively complete on June 28, 2018.

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, TSS, Oil and grease. Water quality-based effluent limitations are established in the proposed draft permit for pH and TRC.

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.

Effluent Limitations

There are no published ELG's for this type of activity. Permit limits are proposed based on BPJ. Since hydrostatic test water discharges are batch discharges of short term duration, limits in this Permit will be expressed in terms of daily maximum concentrations rather than in terms of mass limitations, as allowed by 40 CFR 122.45(e) and (f). Limitations for Oil & Grease, TSS, and pH are proposed in the permit. The proposed limitations for TSS are 30mg/l average, 45 mg/l maximum; and Oil & Grease is 15 mg/l maximum. The draft permit will not propose mass limits since the flow is variable and intermittent. Concentration limits will be protective of the stream uses.

B. WATER QUALITY SCREENING

1. General Comments

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.

The narrative and numerical stream standards are provided in OWQS, as amended (OAC 785:45), and implementation criteria contained in OACs 785:46 and 252:690, promulgated by the OWRB, effective as of Effective May 10, 2016, and Department of Environmental Quality (DEQ), respectively. This is to ensure that no point-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.

2. Reasonable Potential

EPA develops draft permits to comply with State WQS, and for consistency, attempts to follow OWQS, OWQS implementation criteria in OAC 785:46 and OAC 252:690, and the CPP document where appropriate. ODEQ develops WQBELs following both a 1991 EPA Region 6 approach and the method prescribed in the 1991 EPA Technical Support Document for water Quality-Based Toxics Control, EPA/505/2-90-001 ("TSD"). However, EPA is bound by the State's WQS, not State guidance, including the OWQSIP, 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.

In the RP screening process, the 95th percentile effluent concentration, or estimate thereof if the effluent data set is not sufficiently large to determine it directly, is used to compute an instream concentration according to the regulatory mixing zone equations defined in OAC 785:46. The computed instream concentrations are then compared with the applicable criteria to determine whether RP is exhibited. If RP is exhibited, in accordance with 40 CFR 122.44(d)(1)(vi) and

OAC 252:690, a wasteload allocation and criterion long term average is computed for each applicable criterion. Water quality-based permit limitations are calculated for each pollutant exhibiting RP for all applicable criteria. The most stringent of the resulting monthly average permit limitations and its associated daily maximum limitations are established in the draft permit for each pollutant requiring such limitations.

The applicant proposes to draw water from surface water and where surface water is not available, the applicant will use municipal water supply. For outfalls where municipal water supply is used, the permittee plans to use treatment chemicals. The affected Outfalls where municipal water is used as the source water are: Outfalls 004, 005, 020, 022, 027 through 039. The affected discharges where surface water is used as the source water are: Outfalls 001 through 003; 006 through 019; 021; 023 through 026.

For Outfalls where hydrostatic test water is to discharged back into the same water body from which it was taken, intake credits could normally be authorized to account for in-situ waterbody conditions for only TSS. The affected Outfalls are:001, 002, 006, 011, 013, 014 & 018.

3. Reasonable Potential-Calculations

a. pH

The daily minimum and daily maximum permit limits of 6.0 standard units to 9.0 standard units on hydrostatic test permits are developed by other EPA Regions and States. OAC 785:45-5-12(f)(3) states, "pH values shall be between 6.5 and 9.0 in waters designated for fish and wildlife propagation; unless pH values outside that range are due to natural conditions." The water quality–based daily minimum pH limit of 6.5 is more stringent than the technology-based daily minimum pH limit of 6.0 standard units. As a result, the Oklahoma Water Quality Based limits of 6.5 standard units to 9.0 standard units are established in the proposed permit.

1. Aesthetic Standards

According to OWQS, OAC 785:45-5-12(f) (4) which states that 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. A narrative condition prohibiting the discharge of any visible sheen of oil or globules of oil or grease will be included in the proposed permit. In addition, the technology-based limit of 15 mg/l for Oil and Grease should assure that the narrative criterion is maintained.

2. Public and Private Water Supplies (OAC 785:45-5-10)

Test water being discharged from hydrostatic testing should not contain substances listed in Raw Water Numerical Criteria (785:45-5-10(1)) and Water Column Criteria to protect for the consumption of fish, flesh and water (785:45-5-10(6)) at levels which would have reasonable potential to violate numerical criteria.

3. Emergency Public and Private Water Supplies (OAC 785:45-5-11)

(a) During emergencies, those waters designated Emergency Public and Private Water Supplies may be put to use.
(b) Each emergency will be handled on a case-by-case basis, and be thoroughly evaluated by

the appropriate State agencies and/or local health authorities.

4. Fish and Wildlife Propagation (OAC 785:45-5-12)

Test water being discharged from hydrostatic testing should not contain substances listed in Toxic Substances (785:45-5-12(f)(6)) and Water Column Criteria to protect for the consumption of fish, flesh and water (785:45-5-10(6)) at levels which would have reasonable potential to violate numerical criteria.

Warm Water Aquatic Community means a subcategory of the beneficial use category "Fish and Wildlife Propagation" where the water quality and habitat are adequate to support climax fish communities. (OAC 785:45-5-12(c).

5. Agriculture/Livestock (OAC 785:45-5-13)

The levels of chloride, sulfate and total dissolved solids in the test water should be the same as in the receiving water. Hydrostatic testing should not result in significant increases in levels of chloride, sulfate or total dissolved solids in the test water above levels contained in the fill water.

6. Primary Body Contact Recreation (OAC 785:45-5-16)

Hydrostatic test wastewater should not contain coliform bacteria, Escherichia coli, and Enterococci at significant levels.

e. Total Residual Chlorine

The facility will obtain water from municipal water supply for discharges through Outfalls 004, 005, 020, 022, 027 through 039. Water treatment chemicals may also be used at these Outfalls.

TRC shall be limited to 0.019 mg/l for these Outfalls because the source water is from a municipal source. 0.019 mg/l is EPA's acute criteria for chlorine. The ODEQ does not have TRC standard. The effluent shall contain NO MEASURABLE total residual chlorine (TRC) at any time. NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136.

C. TECHNOLOGY BASED VERSUS WATER QUALITY STANDARDS BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at 40 CFR122.44(l)(2)(ii), 122.44(d), and 130.32(b)(6), the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR122.44(a), on the results of or on State Water Quality Standards and requirements pursuant to 40 CFR122.44(d), or on the results of an established and EPA approved Total Maximum Daily Load (TMDL), whichever are more stringent.

Numerical water quality based limitations have been placed in the permit for pH, & TRC. Technology-based effluent limitations are established in the proposed draft permit for TSS & oil & grease. Narrative standards for oil, grease, or related residue have has been placed in the proposed permit. A technology-based limit of 15 mg/l for Oil and Grease should assure that the narrative criterion is maintained.

D. MONITORING FREQUENCY

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 discharge

For ALL outfalls, monitoring for flow, TSS, Oil & Grease and pH shall be daily by grab sample, when discharging. TRC shall be monitored daily by instantaneous grab sample.

E. WHOLE EFFLUENT TOXICITY TESTING

Biomonioring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. According to OAC 785:45-5-12(e)(6)(A), "Surface waters of the state shall not exhibit acute toxicity and shall not exhibit chronic toxicity outside the [chronic] mixing zone. The facility indicated that it may add water treatment chemicals for discharges using municipal water supply. Because the facility may use water treatment chemicals, there appear that the discharge will have a potential for toxicity. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The following chemicals may be added: sodium biosulfate, sulfur dioxide, sodium thiosulfate pentahydrate, or Vita-D-Chlor. As a result, biomonitoring requirements are established at Outfalls 004, 005, 020, 022, 027 through 035, 036, 037, 038, 039, when water treatment chemicals are used and when discharge occurs.

Two types of WET tests are used to implement the narrative toxicity criteria: the 48-hour acute test is used to protect against acute toxicity, and the 7-day chronic test is used to protect against chronic toxicity outside the chronic regulatory mixing zone. Two test species are used. The vertebrate species is *Pimephales promelas* (Fathead minnow-tested for survival and growth), and the invertebrate species are *Daphia pulex* (acute testing) and *Ceriodaphnia dubia* (chronic testing).

In accordance with OAC 252:690-3-31, the type of WET test(s) required is based on the value of Q* ($Q_{e(30)}/Q_{u(7Q2)}$) as follows:

- Where Q* < 0.054, acute testing only will be required.
- Where Q* > 0.33, chronic testing only will be required.
- Where $0.054 \leq Q^* \leq 0.33$, both acute and chronic testing will be required.

For the Outfalls 004, 005, 020, and 022,

Upstream 7Q2 flow rate Q(u)(7Q2) = 1.0 cfs (default for streams without data)
High thirty day average flow rate is Q(e)(30) = 3.34 cfs

Q* ($Q_{e(30)}/Q_{u(7Q2)}$) = 3.34 cfs

For Outfalls 027, 028, 029, 030, 031, 032, 033, 034, 035, 036, 037, 038, and 039,

Upstream 7Q2 flow rate Q(u)(7Q2) = 1.0 cfs (default for streams without data)
High thirty day average flow rate is Q(e)(30) = 2.23 cfs
Q* ($Q_{e(30)}/Q_{u(7Q2)}$) = 2.23 cfs

Since Q* > 0.33, chronic testing only will be required for the listed outfalls above, when water treatment chemicals are used and when discharge occurs. According to Appendix D of the Oklahoma Implementation Procedure, critical dilution is 100 because Q* > 0.33.

The dilution series for the chronic test is as follows:100%, 75%, 56%, 42%, and 32%, plus a dilution water control. 100% is the critical dilution.

Outfalls 004, 005, 020, 022, 027 through 035, 036, 037, 038 and 039

The 2016 ODEQ Implementation Plan (OAC 252:690-3-41 and 42) directs the WET test to be a 7-day chronic test, using chronic test species Ceriodaphnia dubia and Pimephales promelas at a quarterly frequency for the first year of the permit. If all WET tests pass during the first year, the permittee may request a monitoring frequency reduction for either or both of the test species for the following 2-5 years of the permit. The invertebrate species (Ceriodaphnia dubia) may be reduced to twice per year and the vertebrate species (Pimephales promelas) may be reduced to once per year. If any tests fail during that time, the frequency will revert back to the once per three months' frequency for the remainder of the permit term. Both test species shall resume monitoring at a quarterly frequency on the last day of the permit.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical low-flow dilution) is defined as 100% effluent.

Since the facility is a new discharger, there is no WET data; as a result, EPA will not perform reasonable potential analysis.

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 Outfalls 004, 005, 020, 022, 027 through 039 to their respective receiving stream. Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (7-Day Chronic Static Renewal NOEC) (*1)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE (*2)
Ceriodaphnia dubia	Report	Once/Quarter (*3)	Composite
Pimephales promelas	Report	Once/Quarter (*3)	Composite

FOOTNOTES

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

Biomonitoring shall apply when the facility uses water treatment chemicals and when discharge occurs.

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.

Sufficiently Sensitive Analytical Methods (SSM)

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

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

According to the 2016 edition of the 303(d) list of impaired waters, the receiving stream for Outfall 001, North Canadian River of the Upper Canadian River Basin (OK5205300000_00) is listed for Enterococcus and E. Coli. Similarly, the receiving stream for Outfall 002, Buggy Creek (OK520610020120_00) is also listed for Enterococcus and E. Coli. The receiving stream for Outfall 004, Canadian River (OK520610020150_10) is listed for Enterococcus and Lead.

The receiving stream for Outfall 005, tributary to West Fork Salt Creek (OK310820010150_00) is not listed as impaired in 2016 list of the 303(d) list of impaired waters. The receiving stream

for Outfall 006, Winter Creek Site 9 Reservoir (OK3108210020220_00) is listed as impaired for fishes Bioassessments. The receiving stream for Outfall 008, tributary to Wildcat Creek (OK310810030090_00) is not listed in the 2016 list of impaired waters. The receiving stream for Outfall 009, tributary to Salt Creek (OK310810030080_00) is listed for Enterococcus and E. Coli. The receiving stream for Outfall 010, tributary to West Spring Creek (OK310800030230_00) is not listed in the 2016 list of impaired waters. The receiving stream for Outfall 011, Wildhorse Creek (OK310810030010_00) is listed for Fishes Bioassessments and Enterococcus in the 2016 list of impaired waters. The receiving stream for Outfall 012, tributary to Buzzards Creek (OK310800030050_00) and Outfall 013, Henry House Creek (OK310800030170_00) are not listed as impaired in the 2016 edition of 303(d) list of impaired waters. The receiving stream for Outfall 014, Washita River (OK310800020010_00) is listed as impaired for Enterococcus and Lead. The receiving stream for Outfall 015, tributary to Oil Creek (OK310800010240_00) is listed for Dissolved oxygen. The receiving stream for Outfall 016, Courtney Creek (OK_00_00) is not listed in the 2016 list of impaired waters. The receiving stream for Outfall 017, Mill Creek (OK310800010190_00) is listed for Enterococcus. The receiving stream for Outfall 018, Ranch Pond does not discharge to water of the State. The receiving streams for Outfall 019, tributary to Rock Creek (OK310800010170_00); Outfall 020, Pennington Creek (OK310800010120_00); Outfall 021 & 022, tributary to Blue River (OK410600010290_00); Outfall 023, Clear Creek(OK620910050040_00); Outfall 024, Sandy Bear Creek, West Fork (OK310810030180_00) & Outfall 025, Wildhorse Creek (OK310810030010_00) are not listed in the 2016 list of impaired waters. Outfall 027 & 033, North Canadian River (OK520530000010_10) is listed for Enterococcus. The receiving stream for Outfall 026 & 028, tributary to Wildhorse Creek (OK310810030010_00) is listed as impaired for fishes Bioassessments and Enterococcus. The receiving stream for Outfalls 029 & 036, Sulphur Creek (OK410600010030_00) ares listed for Enterococcus while the receiving stream for Outfall 030, Wildhorse Creek Tributary A is listed for chloride. The receiving stream for Outfall 031, unnamed tributary of Winter Camp Creek (OK620910050085_00) is listed for Enterococcus. The receiving stream for Outfall 035, tributary to Henry House Creek (OK310800030170_00 and Outfall 0037, Wolf Creek (OK410600010040_00) are not listed in the list of impaired waters. Finally, the receiving stream for Outfall 038, Cottonwood Creek (OK620910040010_20) is listed for Enterococcus while the receiving stream for Outfall 039, Velma Creek (OK310810040250_00) is listed for chloride. Below is an Outfall table with respect to the cause of impairment.

OUTFALL ID	**RECEIVING WATERBODY NAME**	**RECEIVING WATERBODY ID**	**CAUSE OF IMPAIRMENT**
001	North Canadian River	OK5205300000_00	Enterococcus and E. Coli
002	Buggy Creek	OK520610020120_00	Enterococcus and E. Coli
004	Canadian River	OK520610020150_10	Enterococcus and Lead
006	Winter Creek Site 9 Reservoir	OK3108210020220_00	Fishes Bioassessments
009	Trib to Salt Creek	OK310810030080_00	Enterococcus and E. Coli.
011	Wildhorse Creek	OK310810030010_00	Fishes Bioass. & Enterococcus
014	Washita River	OK310800020010_00	Enterococcus and Lead
015	Trib. To Oil Creek	OK310800010240_00	Dissolved Oxgen
017	Mill Creek	OK310800010190_00	Enterococcus
026	Trib. To Wildhorse Creek	OK310810030010_00	Fishes Bioass. & Enterococcus

OUTFALL ID	RECEIVING WATERBODY NAME	RECEIVING WATERBODY ID	CAUSE OF IMPAIRMENT
027	North Canadian River	OK520530000010_10	Enterococcus
028	Trib. To Wildhorse Creek	OK310810030010_00	Fishes Bioass. & Enterococcus
029	Sulfur Creek	OK410600010030_00	Enterococcus
030	Wildhorse Creek Tributary A	OK310810030270_00	Chloride
031	Trib. To Winter Creek Camp	OK620910050080_00	Enterococcus
033	North Canadian River	OK520530000010_10	Enterococcus
036	Sulfur Creek	OK410600010030_00	Enterococcus
038	Cottonwood Creek	OK620910040010_20	Enterococcus
039	Velma Creek	OK310810040250_00	Chloride

Based on the above impairment cause, the facility is not anticipated to discharge bacteria and chloride. The proposed permit also has biomonitoring requirements when the facility uses water treatment chemicals and is not expected to have any effect on dissolved oxygen of the receiving streams. The proposed permit is also limited for turbidity end-of-pipe of 50 NTUs for Outfall 014 and 036 based on the TMDL. Hence no additional requirements beyond the previously described technology-based or water quality-based effluent limitations and monitoring requirements, are established in the draft permit.

VIII. ANTIDEGRADATION

The OWRB- OWQS, antidegradation policy, OAC 785:46, Subchapter 13, 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 antidegradation restrictions listed in Appendix A of the OWQS for the various respective receiving stream to which the facility discharges. As a result, no further protection beyond the Tier1 level (maintenance and protection of designated uses, as herein described).

IX. ANTIBACKSLIDING

The proposed permit is a first-time issuance.

X. ENDANGERED SPECIES

The effects of EPA's permitting action are considered in the context of the environmental baseline. The environmental baseline is established by the past and present impacts of all Federal, State, or private actions and other human activities in an action area; the anticipated impacts of all proposed Federal projects in an action area that have already undergone formal or early ESA §7 consultation; and the impact of State or private actions that are contemporaneous with the consultation in process (50 CFR §402.02). Hydrostatic test water discharges occur after a pipeline has already been put in place following earth disturbing activities that have had to

have received appropriate federal, state, and local authorizations putting the construction of pipeline itself into the environmental baseline. The scope of the evaluation of the effects of the discharge authorized by this permit was therefore limited to the effects related to the authorized discharge.

The facility is currently consulting with the Fish and Wildlife Service. EPA will not finalize the permit until consultation with the Service is completed.

XI. HISTORICAL AND ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

In a cover letter dated June 8, 2018, the permittee stated that it has reviewed the NPDES locational data for the Project against areas that have been surveyed for cultural resources as part of the Section 106 process of the National Historic Preservation Act. Cultural resources surveys were completed for all 39 proposed discharge sites. The facility reported that no resources were encountered at any of the discharge sites. These finding have undergone Section 106 review by the Oklahoma State Historic Preservation Office (OKSHPO) and the Oklahoma Archaeological Surveys (OAS). Both the OKSHPO and OAS concurred with the survey findings in these areas. Therefore, the issuance of the permit will have no impact on historical and/or archeological preservation.

XII. PERMIT REOPENER

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

This is a first-time permit issuance.

XV. CERTIFICATION

The permit is in the process of certification by the Oklahoma Department of Environmental quality 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 & 2E, dated June 8, 2018, and received on June 12, 2018, was deemed administratively complete on June 28, 2018.

B. REFERENCES

"Implementation of the Oklahoma Water Quality Standards," Oklahoma Water Resources Board, Title 785, Chapter 46, https://www.epa.gov/sites/production/files/2014-12/documents/okwqs_chapter46.pdf effective as of July 1, 2013.

Implementation of Oklahoma Water Quality Standards in Permits, OAC 252:690, effective September 15, 2017, http://www.deq.state.ok.us/rules/690.pdf

Oklahoma Water Quality Standards, (Title 785, Chapter 45) promulgated by the Oklahoma Water Resources Board including all amendments which are effective as of effective May 10, 2016. https://www.epa.gov/wqs-tech/water-quality-standards-regulations-oklahoma

http://www.fws.gov/southwest/es/EndangeredSpecies/lists/ListSpecies.cfm

C. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136

D. MISCELLANEOUS CORRESPONDENCE

Letter from Brent Larsen, EPA, to Ms. Catherine Mayhew, Midship Pipeline Project dated June 28, 2018, informing applicant that its' NPDES application received April 9, 2018, is administratively complete.

Letter from Brent Larsen, EPA, to Ms. Catherine Mayhew, Midship Pipeline Project dated May 11, 2018, informing applicant that its' NPDES application received April 9, 2018, is administratively incomplete.

E-mails from Allison Cornel, TRC Solutions to Maria Okpala, EPA, dated 6/21/2018, 6/20/2018, 6/8/2018, 5/17/2018, & 2/27/2018 on additional facility information.

Email from Christy Flatt, Associate Coordinator, Regulatory Project Development, Cheniere Energy, Inc.to Maria Okpala, EPA, dated 5/15/2018, on permit application information.

Email from Michael Daniel, EPA to Maria Okpala, EPA, dated 6/27/2018 and 6/25/2018, on critical condition information.