REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

NPDES Permit No OK0044806

AUTHORIZATION TO DISCHARGE UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Keystone Pipeline Project (Cushing Extension)
717 Texas Street, Suite 2400
Houston, TX 77002

is authorized to discharge hydrostatic test water from a pipeline located in Lincoln, Creek, Okfuskee, Seminole, Hughes, Coal, Atoka and Bryan Counties, Oklahoma

from outfalls described on the attached table,

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Part I, Part II and Part III hereof.

This is a first-time permit and shall become effective on

This permit and the authorization to discharge shall expire at midnight, June 30, 2016

Issued on

William K. Honker, P.E.
Director
Water Quality Protection Division (6WQ)

Prepared by

Maria Okpala
Environmental Engineer
Permits & Technical Section (6WQ-PP)

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PERMIT OUTFALL TABLE

The permited Outfalls 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:

Outfall Reference Number	Discharge Coordinates Latitude Deg° Min' Sec" Longitude Deg° Min' Sec"	County	Average Flow MGD	Receiving Water	Waterbody ID #
001	35° 55' 30" N 96° 45' 13" W	Lincoln	4.32	Unnamed Trib. To Wildhorse Creek	OK620900010320
002	35° 55' 32" N 96° 45' 7" W	Lincoln	4.32	Unnamed Trib. To Wildhorse Creek	OK620900010320
003	35° 55' 14" N 96° 43' 51" W	Lincoln	4.32	Wildhorse Creek	OK620900010320
004	35° 45' 19" N 96° 38' 35" W	Lincoln	4.32	Salt Creek	OK520700030100
005	35° 39' 2" N 96° 35' 41" W	Creek	4.32	Canadian River, Deep Fork	OK520700030100
006	35° 25' 54" N 96° 30' 24" W	Okfuskee	4.32	North Canadian River	OK520510000010
007	35° 17' 30" N 96° 27' 0" W	Seminole	4.32	Unnamed Trib. to Little Wewoka Creek	OK520500020090
008	35° 16' 27" N 96° 26' 53" W	Seminole	4.32	Unnamed Trib. to Little Wewoka Creek	OK520500020090
009	34° 59' 24" N 96° 25' 29" W	Hughes	4.32	Little River	OK520800010010
010	34° 59' 11" N 96° 25' 25"W	Hughes	4.32	Unnamed Trib. to Little River	OK520800010010
011	34° 57' 27" N 96° 24' 16" W	Hughes	4.32	Unnamed Trib. to Canadian River	OK520600010010
012	34° 38' 48" N 96° 22' 10" W	Coal	4.32	Unnamed Trib. to Turkey Creek	OK410400030410
013	34° 38' 44" N 96° 22' 4" W	Coal	4.32	Unnamed Trib. to Turkey Creek	OK410400030410
014	34° 35' 6" N 96° 20' 26" W	Coal	4.32	Unnamed Trib. to Owl Creek	OK410400030380
015	34° 17' 41" N 96° 10' 54" W	Atoka	4.32	Unnamed Trib. to Fronterhouse Creek	OK410400020300
016	34° 14' 17.17" N	Atoka	4.32	Unnamed Trib. to	OK410400020010

Outfall Reference Number	Discharge Coordinates Latitude Deg° Min' Sec" Longitude Deg° Min' Sec"	County	Average Flow MGD	Receiving Water	Waterbody ID #
	96° 10' 11.79" W			Clear Boggy Creek	
017	34° 13' 46" N 96° 10' 0" W	Atoka	4.32	Clear Boggy Creek	OK410400020010
018	33° 59' 4" N 96° 0' 19" W	Bryan	4.32	Unnamed Trib. to Whitegrass Creek	OK410400010210

The additional discharge points 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:

Outfall Reference Number	Discharge Coordinates Latitude Deg° Min' Sec" Longitude Deg° Min' Sec"	County	Average Flow MGD	Receiving Water	Waterbody ID #
055	35° 55' 14.07" N 96° 43' 50.60" W	Lincoln	4.32	Wildhorse Creek	OK620900010320
056	35° 55' 14.07" N 96° 43' 50.60" W	Lincoln	4.32	Wildhorse Creek	OK620900010320
057	35° 39' 11.32" N 96° 35' 44.94" W	Creek	4.32	Unnamed Trib to Deep Fork River	OK520700030010
058	35° 16' 18.80" N 96° 26' 52.26" W	Seminole	4.32	Unnamed Trib. to Little Wewoka Creek	OK520500020090
059	34° 59' 25.26" N 96° 25' 29.38" W	Hughes	4.32	Little River	OK520800010010
060	34° 13' 46.27" N 96° 9' 58.22" W	Atoka	4.32	Clear Boggy Creek	OK410400020010
061	35° 45' 19.73" N 96° 38' 33.90" W	Lincoln	4.32	Unnamed Trib. to Salt Creek	OK520700030100
062	35° 25' 54.75" N 96° 30' 22.85" W	Okfuskee, just north of the Seminole N. border	4.32	Unnamed Trib. to North Canadian River	OK520500020090
063	34° 59' 10.69" N 96° 25' 24.04" W	Hughes	4.32	Unnamed Trib. to Little River	OK520800010010

Outfall Reference Number	Discharge Coordinates Latitude Deg° Min' Sec" Longitude Deg° Min' Sec"	County	Average Flow MGD	Receiving Water	Waterbody ID #
064	34° 35' 9.76" N 96° 20' 32.12"W	Hughes	4.32	Unnamed Trib. to Little River	OK520800010010
065	34° 17' 41.56" N 96° 10' 53.04" W	Atoka	4.32	Unnamed Trib. to Fronterhouse Creek	OK410400020300
066	34° 14' 17.17" N 96° 10' 11.79" W	Atoka	4.32	Clear Boggy Creek	OK410400020010

PART I – REQUIREMENTS FOR NPDES PERMITS

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

The proposed permit modification would not authorize discharges where the source water would be withdrawals of water from the South Canadian River.

1. Outfalls 001 through 004, 007, 008, 012, 013, 014,015, 061, 064, and 065 - Final Effluent Limits

During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee is authorized to discharge hydrostatic wastewater from the Outfalls described above in the Permit Outfall Table to the receiving waters described therein. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS Standard Units		MONITORING REQUIREMENTS	
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	00400	6.5	9.0	Daily (*1)	Grab

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS lbs/day, unless noted		DISCHARGE LIMITATIONS mg/l, unless noted		MONITORING REQUIREMENTS	
POLLUTANT	STORET CODE	MON AVG	DAY MAX	MON AVG	DAY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	50050	Report MGD	Report MGD (*2)	N/A	N/A	Daily (*1)	Estimate (*2)
Oil & Grease	00556	Report	Report	N/A	15	Daily (*1)	Grab
Total Residual Chlorine	50060	N/A	N/A	N/A	0.033	Daily (*1)	Grab
Total Suspended Solids	00530	Report	Report	30	45	Daily (*1)	Grab

2. Outfalls 005, 009(*7), 010(*7), 016, 017, 055, 057, 060, 062, and 066 - Final Effluent Limits

During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee is authorized to discharge hydrostatic wastewater from the Outfalls described above in the Permit Outfall Table to the receiving waters described therein. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS Standard Units		MONITORING REQUIREMENTS	
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	00400	6.5	9.0	Daily (*1)	Grab

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS lbs/day, unless noted		DISCHARGE LIMITATIONS mg/l, unless noted		MONITORING REQUIREMENTS	
POLLUTANT	STORET CODE	MON AVG	DAY MAX	MON AVG	DAY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	50050	Report MGD	Report MGD (*2)	N/A	N/A	Daily (*1)	Estimate (*2)
Oil & Grease	00556	Report	Report	N/A	15	Daily (*1)	Grab
Total Suspended Solids, Intake from Stream (*3, *4)	00530	N/A	N/A	Report	Report	Daily (*1)	Grab
Total Suspended Solids, Effluent Net Value (*5)	00530	Report	Report	30 (*5)	45 (*5)	Daily (*1)	Grab

3. Outfalls 006, 011(*7), 018(*6), 056, 059, 063, and 058 - Final Effluent Limits

During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee is authorized to discharge hydrostatic wastewater from the Outfalls described above in the Permit Outfall Table to the receiving waters described therein. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS Standard Units		MONITORING REQUIREMENTS	
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	00400	6.5	9.0	Daily (*1)	Grab

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		lbs/day, unless noted		mg/l, unless noted			
POLLUTANT	STORET CODE	MON AVG	DAY MAX	MON AVG	DAY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	50050	Report MGD	Report MGD (*2)	N/A	N/A	Daily (*1)	Estimate (*2)
Oil & Grease	00556	Report	Report	N/A	15	Daily (*1)	Grab
Total Suspended Solids	00530	Report	Report	30	45	Daily (*1)	Grab
Turbidity, NTU	00070	NA	NA	NA	50 NTU	Daily (*1)	Grab
Total Residual Chlorine(*6)	50060	N/A	N/A	N/A	0.033	Daily (*1)	Grab

Footnotes:

*1 When discharging.

*2 The discharge flow rate shall be controlled to prevent the erosion of soils, to minimize the disturbance and re-suspension of bottom sediments and to avoid adverse impact to any wetlands or other materials and the consequent addition of suspended solids to the discharge. In particular, contact with unvegetated or disturbed ground surfaces shall be avoided.
"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. Flow may be estimated using best engineering judgment.

*3 Applicable if an intake credit is being used. Discharge shall be into the same stream segment as the source of the intake water. The intake credit is not authorized if any part of the test water source is from municipal or industrial water sources, groundwater and/or well water or any other waters not from the same water segment as the direct point of discharge. Intake Credits are also not authorized in impaired waters.

*4 Total suspended solids of the intake water. The sample for the intake water shall be taken when the volume of the structure/pipeline being tested is approximately fifty (50) percent full.

*5 The effluent net value is the discharge concentration less the concentration of the stream intake reported as (*4). The sample shall be taken within the first thirty (30) minutes of discharge.

*6 Outfall 018 shall also be limited for Total Residual Chlorine since the source water is from municipal water supply.

*7 Outfalls 009, 010, and 011 shall be limited for end-of-pipe oil and grease limit of 5 mg/l since the receiving streams for these Outfalls are listed in 2008 edition of the 303(d) list of impaired waters.

FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

The discharge shall not cause oil, grease, or related residue which produces a visible film or globules of grease on the surface or coat the banks or bottoms of the watercourse; or toxicity to man, aquatic life, or terrestrial life.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge point prior to the receiving stream.

OTHER REQUIREMENT

All hydrostatic test water shall be free from any kind of welding scrap or other foreign material before being discharged into the receiving waters.

B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

NONE

C. MONITORING AND REPORTING (MINOR DISCHARGERS)

1. Monitoring information shall be on Discharge Monitoring Report Form(s) EPA 3320-1 as specified in Part III.D.4 of this permit and shall be submitted quarterly. Each quarterly submittal shall include separate forms for each month of the reporting period.

2. Reporting periods shall end on the last day of the months March, June, September, and December.

3. The first Discharge Monitoring Report(s) shall represent facility operations from the effective date of the permit through the last day of the current reporting period.

4. Thereafter, the permittee is required to submit regular quarterly reports as described above and shall submit those reports postmarked no later than the 28th day of the month following each reporting period.

5. NO DISCHARGE REPORTING - If there is no discharge from any outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

6. If any daily maximum or monthly average value exceeds the effluent limitations specified in Part I. A, the permittee shall report the excursion in accordance with the requirements of Part III. D.

7. Any daily maximum or monthly average value reported in the required Discharge Monitoring Report which is in excess of the effluent limitation specified in Part I. A shall constitute evidence of violation of such effluent limitation and of this permit.

8. All reports shall be sent both to EPA and the Oklahoma Department of Environmental Quality at the addresses shown in Part III of the permit.

PART II - OTHER CONDITIONS

A. GENERAL

1. In accordance with 40 CFR 122.62, the permit may be reopened and modified during the life of the permit if relevant portions of Oklahoma Water Quality Standards and/or Implementation of the State WQS via Permitting are revised, new water quality standards are established and/or remanded and any other policy, or if procedures and implementation guidelines are adopted by the State that change applicable water quality standards and permit implementation.

2. In accordance with 40 CFR Part 122.62, the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance.

3. Sanitary waste is not authorized in this permit.

4. The use of any chemicals in the hydrostatic test waters, such as but not limited to, corrosion inhibitors and/or oxygen scavengers is prohibited in this permit. A permit modification is required if the permittee decides to use any chemicals in the hydrostatic test waters.

5. If a new or revised TMDL is determined for any of the receiving streams for the Outfalls listed on the Permit Outfall Table above, the permit may be reopened, and new limitations based on the TMDL may be incorporated into the permit.

6. Unless otherwise specified in this permit, monitoring shall be conducted according to the analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 in effect on the effective date of this permit. Appendices A, B, and C to 40 CFR Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated after the effective date of this permit shall supersede these requirements as applicable.

B. INTAKE CREDIT PROVISION

When the source of the intake water used for the hydrostatic test is taken from the same State waterbody segment as the outfall of the HTW, an intake credit is authorized to account for in-situ waterbody conditions for TSS. To qualify for this intake credit, for each separate test, the permittee shall be required to sample the intake water prior to hydrostatic testing.
The intake credit is not authorized if any part of the test water source is from municipal or industrial water sources, groundwater and/or well water or any other waters not from the same water segment as the direct point of discharge. The sample for the intake water shall be taken when the volume of the structure/pipeline being tested is approximately fifty (50) percent full. The effluent net value is the discharge concentration less the concentration of the stream intake.

In the event of a "net difference" value equal to or less than zero (0), meaning that the discharge concentration is either equal to or less than the intake water concentration, the permittee shall report a zero (0) on the DMR form. The discharge sample shall be taken within the first thirty (30) minutes of discharge.

TSS intake credit shall not apply to Outfalls 006, 011 & 018 because the respective receiving streams for these Outfalls are impaired for turbidity. Also TSS is a surrogate for turbidity.

APPENDIX A of PART II

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE and CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thalllium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury *1	0.0005		
	0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		
ACID COMPOUNDS			
2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
	BASE/NEUTRAL		
Acenaphthene	10	Dimethyl Phthalate	10
Anthracene	10	Di-n-Butyl Phthalate	10
Benzidine	50	2,4-Dinitrotoluene	10
Benzo(a)anthracene	5	1,2-Diphenylhydrazine	20
Benzo(a)pyrene	5	Fluoranthene	10
3,4-Benzofluoranthene	10	Fluorene	10
Benzo(k)fluoranthene	5	Hexachlorobenzene	5
Bis(2-chloroethyl)Ether	10	Hexachlorobutadiene	10
Bis(2-chloroisopropyl)Ether	10	Hexachlorocyclopentadiene	10
Bis(2-ethylhexyl)Phthalate	10	Hexachloroethane	20
Butyl Benzyl Phthalate	10	Indeno(1,2,3-cd)Pyrene	5
2-Chloronapthalene	10	Isophorone	10
Chrysene	5	Nitrobenzene	10
Dibenzo(a,h)anthracene	5	n-Nitrosodimethylamine	50
1,2-Dichlorobenzene	10	n-Nitrosodi-n-Propylamine	20
1,3-Dichlorobenzene	10	n-Nitrosodiphenylamine	20
1,4-Dichlorobenzene	10	Pyrene	10
3,3'-Dichlorobenzidine	5	1,2,4-Trichlorobenzene	10
Diethyl Phthalate	10		
	PESTICIDES AND PCBS		
Aldrin	0.01	Beta-Endosulfan	0.02
Alpha-BHC	0.05	Endosulfan sulfate	0.02
Beta-BHC	0.05	Endrin	0.02
Gamma-BHC	0.05	Endrin Aldehyde	0.1
Chlordane	0.2	Heptachlor	0.01
4,4'-DDT and derivatives	0.02	Heptachlor Epoxide	0.01
Dieldrin	0.02	PCBs	0.2
Alpha-Endosulfan	0.01	Toxaphene	0.3

(MQL's Revised November 1, 2007)

Footnotes:

*1 Default MQL for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MQL shall be 0.0005