REGION 6
1201 Elm Street, Suite 500
DALLAS, TEXAS 75270

NPDES Permit No TX0134086

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"),

TransCanada Keystone Pipeline, LP
700 Louisiana Street, Suite 700
Houston, TX 77002

is authorized to discharge hydrostatic test wastewater from the Beaumont Interconnects Project. It is comprised of an approximately 4-mile long of 36-inch diameter interconnect from Nederland to Port Neches as well as an approximately 3-mile of 30-inch diameter interconnect that will parallel the majority of 36-inch diameter pipe.

Outfall 001 - Latitude: 29º 58’ 44.22” N, Longitude: 93º 56’ 32.62” W

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 permit is prepared by Jim Afghani, Environmental Engineer, Permitting Section (6WQ-PE).

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

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

Issued on

Charles W. Maguire
Director
Water Division (6WD)

## DOCUMENT ABBREVIATIONS

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

| | |
|---|---|
| BAT | Best Available Technology Economically Achievable |
| BOD5 | Biochemical oxygen demand (five-day unless noted otherwise) |
| BPJ | Best professional judgment |
| CFR | Code of Federal Regulations |
| cfs | Cubic feet per second |
| COD | Chemical oxygen demand |
| COE | United States Corp of Engineers |
| CWA | Clean Water Act |
| DMR | Discharge monitoring report |
| ELG | Effluent limitation guidelines |
| EPA | United States Environmental Protection Agency |
| ESA | Endangered Species Act |
| F&WS | United States Fish and Wildlife Service |
| GPD | Gallon per day |
| IP | Procedures to Implement the Texas Surface Water Quality Standards |
| µg/l | Micrograms per liter (one part per billion) |
| mg/l | Milligrams per liter (one part per million) |
| MMCFD | Million cubic feet per day |
| MGD | Million gallons per day |
| MSGP | Multi-Sector General Permit |
| NPDES | National Pollutant Discharge Elimination System |
| MQL | Minimum quantification level |
| O&G | Oil and grease |
| RRC | Railroad Commission of Texas |
| RP | Reasonable potential |
| SIC | Standard industrial classification |
| s.u. | Standard units (for parameter pH) |
| TAC | Texas Administrative Code |
| TCEQ | Texas Commission on Environmental Quality |
| TDS | Total dissolved solids |
| TMDL | Total maximum daily load |
| TOC | Total Organic Carbon |
| TRC | Total residual chlorine |
| TSS | Total suspended solids |
| TSWQS | Texas Surface Water Quality Standards |
| WET | Whole effluent toxicity |
| WQMP | Water Quality Management Plan |
| WQS | Water Quality Standard |
| WOTUS | Waters of The United States |

PART I – REQUIREMENTS FOR NPDES PERMITS

## A. **LIMITATIONS AND MONITORING REQUIREMENTS**

1. Outfalls 001 - 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 test wastewater from new oil pipeline segments of the Beaumont Interconnects Project of varying diameters (30-inch and 4-inch) from Outfalls 001, thence to the Motiva Terminal stormwater/firewater pond. In case of overflow, pond water will flow from the floodgate into an unnamed canal also known as the Star Lake Canal at Segment No. 0601A. Once in the Star Lake Canal, pond water will discharge into the Neches River Tidal at Segment No. 0601). Such discharges shall be limited and monitored by the permittee as specified below:

| **POLLUTANT** | **STORET CODE** | **MINIMUM** | **MAXIMUM** | **FREQUENCY** | **TYPE** |
|---|---|---|---|---|---|
| pH | 00400 | 6.5 s.u. | 8.5 s.u. | Daily[*1] | Grab |

| **POLLUTANT** | **STORET CODE** | **MON AVG (lbs/day), unless noted** | **DAY MAX (lbs/day), unless noted** | **MON AVG (mg/L), unless noted** | **DAY MAX (mg/L), unless noted** | **FREQUENCY** | **TYPE** |
|---|---|---|---|---|---|---|---|
| Flow | 50050 | Report MGD | Report MGD[*2] | N/A | N/A | Daily[*1] | Estimate[*3] |
| O&G | 00556 | Report | Report | N/A | 15 | Daily[*1] | Grab |
| TSS | 00530 | Report | Report | 30 | 45 | Daily[*1] | Grab |

**Footnotes**:

*1. When discharge from the Motiva Terminal stormwater/firewater pond reaches the Neches River Tidal.

*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. Contact in particular with unvegetated or disturbed ground surfaces shall be avoided.

*3. "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.

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. In addition, 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 REQUIREMENTS

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. Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water Enforcement Branch, Texas State Coordinator (6EN-WC), (214) 665-8582. If paper reporting is granted temporarily, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and copies to Texas Railroad Commission as required (See Part III.D.IV of the permit).

   Discharge Monitoring Report Form(s) 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 more than the effluent limitation specified in Part I. A shall constitute evidence of violation of such effluent limitation and of this permit.

8. The permittee shall effectively monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the treated discharge. In addition, all reports shall be sent both to EPA and the Texas Railroad Commission 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 Texas 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 during the life of the permit 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, chlorine and compound containing chlorine 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. **MINIMUM QUANTIFICATION LEVEL (MQL)**

See list of MQL's at Appendix A of Part II below. For pollutants listed on Appendix A of Part II with MQL's, analyses must be performed to the listed MQL. If any individual analytical test result is less than the MQL listed, a value of zero (0) may be used for that pollutant result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

In addition, any additional pollutant sampling for purposes of this permit, including renewal applications or any other reporting, shall be tested to the MQL shown on the attached Appendix A of Part II. Results of analyses that are less than the listed MQL may be reported as "non detect" (ND).

## C. **24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS**

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, at (214) 665-6595, and concurrently to Railroad Commission of Texas, at (512) 463-6804, within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

None

## D. **40 CFR PART 136 ANALYTICAL REQUIREMENTS**

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.

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 can 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.

# 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.