Application No. _____

Application for an Authorization to Discharge or Store Waste under the *Environmental Management Act*

Part 1 – General Applicant Details

1. Date of pre-application meeting December 6, 2024

   Name(s) of applicant representative:
   - Lara Smandych, Coastal Gaslink
   - Diana De La Rosa, Coastal GasLink

   Name(s) of consultant representative:
   - April Hauk, Stantec
   - Reid Person, Stantec

   Name(s) of BC Energy Regulator representative:
   - Rachel Butler
   - Kristofer Siriunas

2. Type of authorization requested: Permit _X_ Approval ___ Amendment ___

3. Applicant legal information

   Full legal name: Coastal GasLink Pipeline Ltd.

   Registered address: 450 1st Street SW, Calgary, AB T2P 5H1

   Contact person: Name: Diana De La Rosa
   Title: Senior Regulatory Advisor
   Phone number: 403-920-5553
   Fax number: N/A
   E-mail address: diana_de_la_rosa@tcenergy.com

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4. Applicant local information (if different from section 3)

Local address: Suite/Apt No.: 760
Street: Kinsmen Place
Town/City: Prince George
Province: British Columbia
Postal Code: V2M 08A

Contact person: Name: Nick Lade
Title: Area Manager – Coastal Gaslink Central
Phone number: (403) 418-6367
Fax number:
E-mail address: Nick_lade@tcenergy.com

5. Facility location

Registered owner of facility site: Coastal GasLink Pipeline Ltd.

Legal description of site: D-099-G/093-J-16 001

Lat./Long.: 54.9162°N / -122.2266°E
PID/PIN/Crown Land File #:N/A
OGC Facility Number -100115709

6. Discharge location (if different from section 5)

Registered owner of discharge site:

Legal description of discharge site:

Lat./Long.:
PID/PIN/Crown Land File #:

7. Dated this __18____ day of _June_____, 2025.

_____ *Diana De La Rosa* _____ _____Diana De La Rosa_____

(signature) (print name)

Part 3 – Discharge Details

Application No. _____

Discharge Source # 1

1. Source of waste: Compressors

Type: Turbine

Quantity: 3 (2 continuous, 1 standby)
Make: BHGE PGT25+
Duty: 30.9 MW (each)
Power Fuel: natural gas

2. Proposed treatment of waste:
Dry Low Emission system

3. Quantity of waste discharged:

Maximum rate of waste discharge: 66.93 m^3/s each (@101.325 kPa, 20°C, dry)

Average rate of waste discharge: N/A

4. Operating period:
Continuous - (2 continuous, 1 standby): 24 hours / 7 days

5. Discharge works:

Type: Point
Elevation at base (ASL): 842 and 844 masl
Stack Height: 14.5 m
Stack Inside Diameter: 2.6 m
Stack Gas Exit Velocity: 38.2 m/s
Stack Gas Discharge Temp: 494.4 °C/768 K

6. Characteristics of waste (for each unit):
SO_2: 0.130 g/s
NO_X: 2.614 g/s
CO: 2.291 g/s
$PM_{2.5}$: 0.032 g/s
VOCs: 0.0767 g/s

Discharge Source # 2

1. Source of waste: Power Generators

Type: Reciprocating

Quantity: 4 (3 continuous, 1 standby)
Make: Waukesha L5794GSI
Duty: 850 kW (each)
Power Fuel: natural gas

2. Proposed treatment of waste:
Exhaust NO_X catalyst

3. Quantity of waste discharged:

Maximum rate of waste discharge: 0.76 m^3/s each (@101.325 kPa, 20°C, dry)

Average rate of waste discharge: N/A

4. Operating period:
Continuous - (3 continuous, 1 standby): 24 hours / 7 days

5. Discharge works:

Type: Point
Elevation at base (ASL): 841, 844, and 847 masl
Stack Height: 8.5 m
Stack Inside Diameter: 0.305 m
Stack Gas Exit Velocity: 37.2 m/s
Stack Gas Discharge Temp: 580.6 °C / 854 K

6. Characteristics of waste (for each unit):
SO_2: 0.0043 g/s
NO_X: 0.2361 g/s
CO: 0.0538 g/s
$PM_{2.5}$: 0.0031 g/s
VOCs: 0.0032 g/s

Discharge Source # 3

1. Source of waste: Utility Glycol Heaters

Type: Glycol Heater

Quantity: 6
Make: Allied Superhot AAA1920
Duty: 431 kW (each)
Power Fuel: natural gas

2. Proposed treatment of waste:
N/A

3. Quantity of waste discharged:

Maximum rate of waste discharge: 0.15 m^3/s each (@101.325 kPa, 20°C, dry)

Average rate of waste discharge: N/A

4. Operating period:
Continuous: 24 hours / 7 days

5. Discharge works:

Type: Point
Elevation at base (ASL): 841, 842, 843, 846 and 847 masl
Stack Height: 6.8 m
Stack Inside Diameter: 0.559 m
Stack Gas Exit Velocity: 1.45 m/s
Stack Gas Discharge Temp: 258 °C / 531 K

6. Characteristics of waste (for each unit):
SO_2: 0.0009 g/s
NO_X: 0.0237 g/s

CO: 0.0199 g/s
$PM_{2.5}$: 0.0004 g/s
VOCs: 0.0013 g/s

Discharge Source # 4

1. Source of waste: Seal Gas Combustors

Type: Seal Gas Combustor

Quantity: 3
Make: Rush Cube 1000
Duty: N/A (each)
Power Fuel: natural gas

2. Proposed treatment of waste:
The seal gas combustors will continuously operate to capture and combust compressor seal gas to convert methane to carbon dioxide, eliminating vented methane emissions from compressor seals.

3. Quantity of waste discharged:

Maximum rate of waste discharge: 0.45 m^3/s each (@101.325 kPa, 20°C, dry)
Average rate of waste discharge: N/A

4. Operating period:
Continuous: 24 hours / 7 days

5. Discharge works:

Type: Point
Elevation at base (ASL): 841, 842 and 844 masl
Stack Height: 4.2 m
Stack Inside Diameter: 1.58 m
Stack Gas Exit Velocity: 0.36 m/s
Stack Gas Discharge Temp: 63 °C/ 336 K

6. Characteristics of waste:
SO_2: 0.001 g/s
NO_X: 0.019 g/s
CO: 0.016 g/s
$PM_{2.5}$: 0.0003 g/s
VOCs: 0.001 g/s

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Part 4 - Receiving Environment

1. Characteristics of receiving environment:

a) The elevation and topography in the vicinity of the site
The Mount Bracey Compressor Station (CS) occupies a parcel of land in the Regional District of Fraser - Fort George. The facility elevation is approximately 854 m above sea level. Terrain in the region is complex ranging from approximately 700 m to over 2,600 m asl.

b) A description of the vegetation and the general height of trees in the vicinity of the site.
The dominant land cover in this rural remote region is evergreen forest, with some deciduous forest. Evergreen forest dominates in the immediate vicinity of the Mount Bracey CS.

c) Identification of any other air discharges within the vicinity of the site.
There are no industrial emission sources within 5 km of the Mount Bracey CS.

2. **Distances to specified features:**

Feature	Distance to Nearest Feature (km)	Direction to Nearest Feature	Description
Water well	15.4	SW	Commercial/Industrial water well
Reservoir	54.2	SW	Polar Dam
Dwelling	42.2	SW	Residence
Serviced Lot	42.2	SW	Residence
Recreational area	26.9	SW	Tacheeda lakes NE Recreational Site
Residential or health care facility	72.9	NW	Mackenzie and district hospital and health centre (Mackenzie)
Park or protected area	30.9	SW	Tacheeda lakes ecological reserve
School or daycare	72.5	NW	Mackenzie Secondary School
Surface water (lake, stream, marine)	0.6	NW	Anzac River

3. Land use/ambient guidelines:

For the application of discharge of air emissions, there are no applicable landuse guidelines. The applicable ambient air quality guidelines are the BC Air Quality Objectives[1] as presented here.

Substance	Averaging Interval	British Columbia Air Quality Objective ($\mu g/m^3$)[1]
NO_2	1-hour	113[a]
	Annual	32[b]
SO_2	1-hour	183[c]
	Annual	13[d]
$PM_{2.5}$	24-hour	25[e]
	Annual	8[f]
CO	1-hour	14,300
	8-hour	5,500

Notes:

[a] Achievement for 1-hour NO_2 is based on 3-year average of the annual 98th percentile of daily 1-hour maximum. This requires the extraction of the highest predicted 1-hour value at each location for each day, followed by the calculation of the 98th percentile (the eighth highest) of those 365 values for each year, then average the three annual values.

[b] Achievement for annual NO_2 is based on the average of all 1-hour average concentrations over a single calendar year

[c] Achievement for 1-hour SO_2 is based on 3-year average of the annual 99th percentile of daily 1-hour maximum. This requires the extraction of the highest predicted 1-hour value at each location for each day, followed by the calculation of the 99th percentile (the fourth highest) of those 365 values for each year, then average the three annual values.

[d] Achievement for SO_2 is based on the average of 1-hour concentrations averaged over one year

[e] Achievement for $PM_{2.5}$ is based on annual 98th percentile of daily average, averaged over one year

[f] Achievement for $PM_{2.5}$ is based on annual average, averaged over one year

4. Other discharges:

There are no industrial emission sources within 5 km of the Mount Bracey CS.

5. Ambient monitoring:

There are no monitoring stations in the vicinity of the Mount Bracey CS. The closest station is the Pine River Hasler monitoring station located 76 km north of Mount Bracey CS. Sulphur dioxide is continuously monitored at this station. This station is operated by industry.

The Peace Valley Attachie Flat Upper Terrace monitoring station is located 156 km northeast of the Mount Bracey CS and it continuously monitors particulate matter less than 2.5 microns. This station is operated by BC Hydro.

The Blueberry First Nation School monitoring station is located 212 km northeast of the Mount Bracey CS, and it continuously monitors nitrogen dioxide. This station is operated by BC Ministry of Environment and Parks.

[1] https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/prov_air_qual_objectives_fact_sheet.pdf

The Kamloops Brocklehurst monitoring station is located 491 km south-southeast of the Mount Bracey CS, and it continuously monitors carbon monoxide. This station is operated by BC Ministry of Environment and Parks.

6. **Potentially affected persons:**

The Mount Bracey CS is located in the Regional District of Fraser - Fort George. There are no permanent residents in the vicinity of the Mount Bracey CS. Three temporary trapping and hunting camps have been identified within 1.5 km of the Mount Bracey CS. There are no industrial emission sources within 5 km of the facility.