REPORT

SQUAMISH COMPRESSOR STATION

TECHNICAL ASSESSMENT REPORT – REV. 2
SQUAMISH, BC

RWDI # 2301269
August 14, 2026

SUBMITTED TO

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EXECUTIVE SUMMARY

Purpose of the Application

FortisBC is seeking a Waste Discharge Authorization for air emissions from the operation of the proposed Squamish Compressor Station (V2- the Project) under the Environmental Management Act (EMA), Waste Discharge Regulation from the BC Energy Regulator (BCER). The Project will provide additional compression capacity to support the controlled delivery of sweet natural gas to downstream facilities including the proposed neighbouring Woodfibre Liquified Natural Gas facility and will operate as an integrated component of FortisBC's existing natural gas transmission system.

This Technical Assessment Report (TAR) has been prepared in response to the BCER's Information Request Table to support regulatory review of the Project by documenting the Project description, key systems, and information necessary to assess regulatory compliance and appropriate controls.

Emission Sources and Pollution Control Technology

The Project includes two gas turbine driven compressor units, two gas-fired boilers, one emergency gas-fired generator, and three (3) atmospheric vents, for emergency blowdowns. The following emission scenarios were considered:

- Normal Operations (at least 80% of the time): one compressor and one boiler running.
- Peak Operations (up to 20% of the time): both compressor and one boiler running
- Abnormal emissions (up to 10% of the time): both compressors, one boiler and the emergency generator running at the same time.
- Annual emissions: all sources running at their expected annual average run-time and load.
- Emergency shutdown (once in project lifetime): venting of equipment and piping in the unlikely event of an emergency shutdown, and release of natural gas to the atmosphere through three designated vent stacks.

The proposed gas turbine system is equipped with Dry SoLoNOx technology. The emissions will be limited to the following 15 ppmv of NO_X at 15% O_2. The facility is equipped with seal gas compression (SGC) systems to capture and recycle seal gas, thereby minimizing the potential for fugitive emissions. Fugitive emissions from equipment components such as valves, flanges, connectors, and other fittings are expected to be negligible. The emergency generator is equipped with a non-selective catalyst with NO_X removal efficiency of 97%.

Environmental and Operational Issues

Emissions of Criteria Air Contaminants particularly nitrogen oxides (NO_X), are the main environmental issue with the Project. Effect of these emissions on the environment was assessed using air dispersion modelling and, comparing the predicted concentrations with applicable BC Ambient Air Quality Objectives (AAQO) and Canadian Air Quality Standards (CAAQS 2025). The results indicated that:

For normal and peak operations (90% of the time), where one or two turbines along with a boiler are running, predicted concentrations were below their applicable BC AAQO and CAAQS 2025.

For the Abnormal Emissions Scenario, in which both compressor units, the boiler and the emergency generator operate simultaneously (up to 10% of time), localized exceedances of the 1-hour nitrogen dioxide (NO_2) BC AAQO may occur under unfavorable dispersion conditions on and within 25 m of the facility fenceline, mainly attributed to the emergency generator. For all other contaminants, predicted concentrations remain well below the applicable BC AAQO and CAAQS 2025 across the model domain. For the Annual Emissions Scenario, all predicted concentrations remain below their applicable annual BC AAQO and CAAQS 2025.

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1 INTRODUCTION

Fortis BC Holdings Inc. with its regulated natural gas subsidiary Fortis BC Energy Inc. (collectively referred to as FortisBC) has proposed to construct and operate the Eagle Mountain – Woodfibre Gas Pipeline (EGP) Project (ECA #E16-01) which involves the construction of an approximately 47 km long natural gas pipeline and the associated infrastructure, including the Squamish Compressor Station (the Project) which is the subject of this assessment (Environmental Project Information Center, 2026).

FortisBC is seeking a Waste Discharge Authorization for the air emissions from the operation of the Project under the Environmental Management Act (EMA), Waste Discharge Regulation from the BC Energy Regulator (BCER).

This Technical Assessment Report (TAR) has been prepared in response to the BCER's Information Request Table (IRT) to support regulatory review of the Project by documenting the Project description, key systems, and information necessary to assess regulatory compliance and appropriate controls.

1.1 Context

The proposed Eagle Mountain – Woodfibre gas pipeline will generally be parallel to the existing Vancouver Island pipeline which extends from the existing Eagle Mountain Compressor Station in Coquitlam, BC to the Woodfibre Liquefied Natural Gas Ltd. (WLNG) site in Squamish, BC, on the northwestern shore of Howe Sound. The proposed pipeline will provide sweet natural gas for the proposed WLNG export facility, which will be covered in a separate assessment.

The Eagle Mountain – Woodfibre Gas Pipeline (EGP) Project includes the following primary components:

- New natural gas pipeline segments between Coquitlam and Squamish, including a tunnelled section near Squamish and associated pipeline laterals;
- Selective relocation and twinning of existing FortisBC transmission pipelines to accommodate the new alignment;
- Custody transfer station near the tunnel portal;
- **The Squamish Compressor Station (V2 – the Project)** adjacent to the Woodfibre LNG site.
- Modifications and additions to the existing Eagle Mountain Compressor Station;
- Construction of electrical infrastructure to supply power to new and modified compression facilities; and
- Installation of associated infrastructure, including mainline valves, scraper trap sites, access roads, and temporary construction facilities.

Figure 1 shows the geographical context and the components of the Eagle Mountain – Woodfibre Gas Pipeline Project, and the proposed Squamish Compressor Station.

1.2 Project Description

The Project consists of the construction and operation of the Squamish Compressor Station (V2), a natural gas compression facility located adjacent to the Woodfibre LNG site near Squamish, British Columbia. The Project will provide additional compression capacity to support the controlled delivery of sweet natural gas to downstream facilities including WLNG and will operate as an integrated component of FortisBC's existing natural gas transmission system. The Project has been designed to operate continuously and reliably while meeting applicable regulatory requirements, FortisBC design standards, and industry best practices related to safety, environmental protection, and operational performance.

The Project will include gas compression equipment and associated utilities, controls, and safety systems necessary to support reliable operation. The facility will be supplied with natural gas and electrical utility power and will be connected to the existing transmission system through new and relocated pipeline segments and a custody transfer station.

The Squamish Compressor Station will make use of existing industrial infrastructure and access routes where practicable, including shared use of marine and road access associated with the Woodfibre LNG site. Construction and operation of the facility will be carried out in a manner intended to minimize environmental effects while maintaining compliance with applicable provincial regulatory requirements.

The property boundary, neighbouring WLNG site and the study area considered in the assessment are shown in **Figure 2**.

TWO TUNNEL PIPE TIE-IN POINTS
E: 488,470 N: 5,507,380
E: 488,472 N: 5,507,379

PIG LAUNCHER AND VALVE SITE
PIG LAUNCHER: TRP-501
VALVE TAG: SMS-001

KP 38.47

RKP 3.093

KP 35

RKP 0

VAN MAN 273 TP PIPELINE (RELOCATION)
(CENTRELINE VERSION 2006)

SQUAMISH UPSTREAM VALVE STATION
VALVE TAG: SUS-011
KP 33.5

TUNNEL/COASTAL PORTION
(THIRD PARTY SCOPE OF WORK,
CENTRELINE VERSION 6005)

FUTURE
WOODFIBRE
LNG SITE

DISTRICT OF
SQUAMISH

KP 30

KP 25

EXISTING VAN MAN 273 LINE

EGP NORTH 610 TP PIPELINE
(CENTRELINE VERSION 1027)

KP 20

KP 15

SQUAMISH-LILLOOET REGIONAL DISTRICT

METRO VANCOUVER REGIONAL DISTRICT

KP 10

KP 5

PIG LAUNCHER SITE
NPS 24 (TRP-301)

KP 0

EXISTING VAN MAN 323 LINE

PIG RECEIVER SITE
NPS 24 (TRP-201)

VKP 2.9

VKP 0

EGP SOUTH 610 TP PIPELINE
(CENTRELINE VERSION 4003)

PIG LAUNCHER SITE
NPS 24 (TRP-101)

COQUITLAM
COMPRESSOR
STATION

CITY OF COQUITLAM

BC Hydro transmission lines in the Squamish-Lillooet Regional District. Acquired for the FortisBC Energy Inc. Eagle Mountain - Woodfibre Gas Pipeline Project. Data was acquired by FEI from ICIS on 2019/05/29.

LEGEND

- PROPOSED 24 KP (5 km)
- VALVE STATION
- PIG LAUNCHER SITE
- PIG RECEIVER SITE
- EGP 610 TP PIPELINE
- VAN MAN 273 TP PIPELINE (RELOCATION)
- TUNNEL / COASTAL PORTION (THIRD PARTY SCOPE OF WORK)
- EXISTING VAN MAN 273 / 323 PIPELINE
- BCHYDRO TRANMISSION LINES

COORDINATE SYSTEM: NAD 1983 UTM ZONE 10N
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

0 1 2 3 4 KILOMETRES

REV	DESCRIPTION	DATE	DRN	CKD	ENG	APP
2	ISSUED FOR USE	2023/10/10	ZSN	DCL	NN	DCL
1	ISSUED FOR USE	2023/02/24	DMM	HC	NN	RS
0	ISSUED FOR CONSTRUCTION	2021/12/07	DMM	ZSN	NN	RS

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UPI REFERENCE NUMBER: 24576-507-MAP-00021

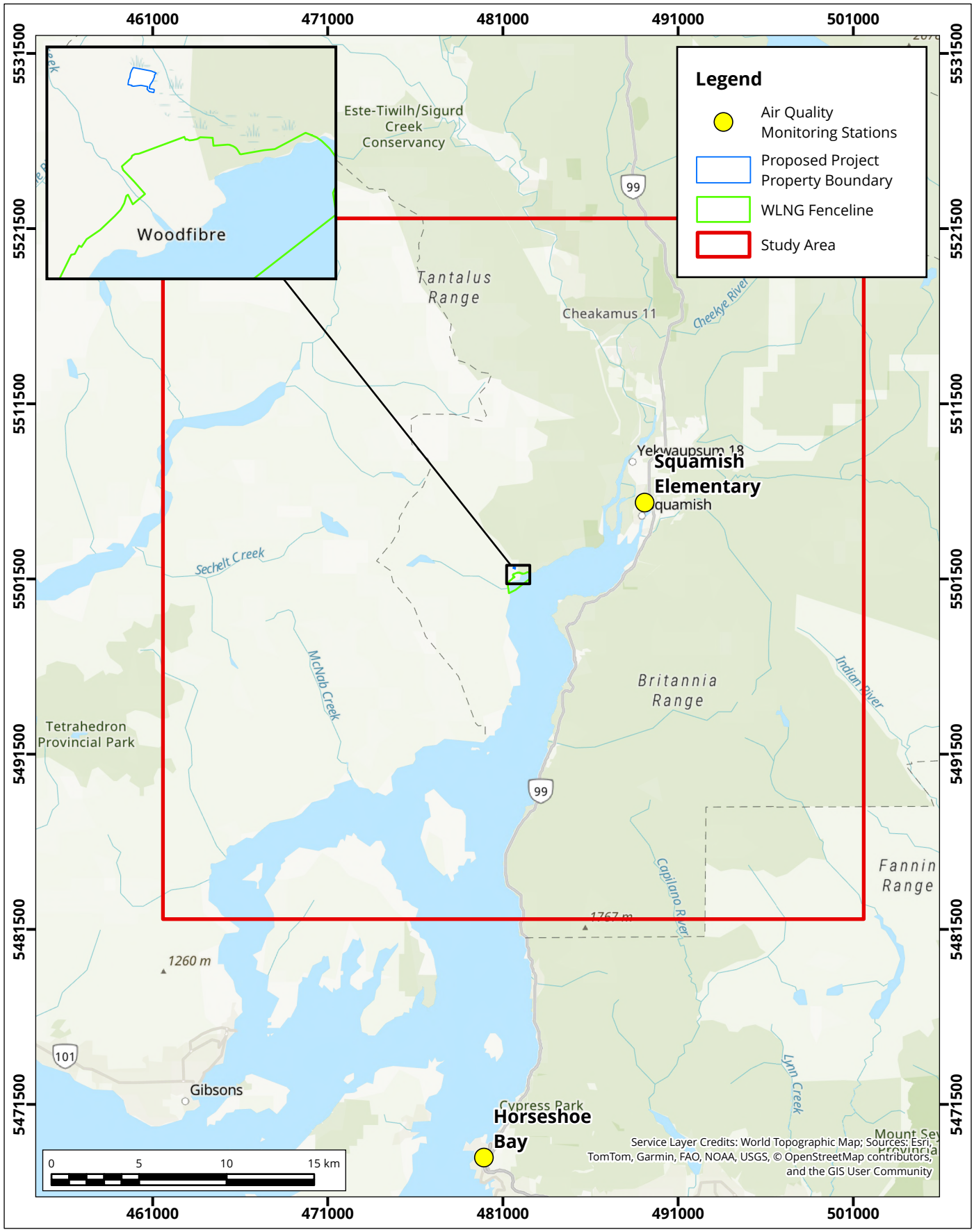
FORTISBC ENERGY INC.

EAGLE MOUNTAIN-WOODFIBRE GAS PIPELINE PROJECT

Figure 1 - OVERVIEW MAP

SCALE	ROUTE	DRAWING NUMBER	SHEET NO.
1:80,000	1027, 2006, 4003, 6005	62034-P-200-1089-R2	1

SIZE: ISO A1 - VERSION: E



Proposed Project Property Boundary, Neighbouring WLNG Site, Air Quality Monitoring Station, and the Study Area

Map Projection: NAD 1983 UTM Zone 10N

Squamish Compressor Station - Squamish, B.C.

Project #: 2301269

True North

Drawn by:	PIP	Figure:	2
Approx. Scale:	1:300,000		
Date Revised:	Mar 23, 2026		

Map Document: C:\Working\Folder\Jobs_AMER\P2301269\SQUAMISH\CAL\PUFF\P2301269_FortisBC_EPG_Figures.aprx

2 OPERATIONAL SYSTEM DESCRIPTION

2.1 Detailed Process of the Project

The Project includes two 4498 kW (ISO Rated) compressors, which are powered by natural gas. The two identical compressors, each with a capacity of 2,025 x 10^3 Sm^3/d (i.e. 71.5 MMscf/d), can compress up to a total of 4,049 x 10^3 Sm^3/d (i.e. 143 MMscf/d) of natural gas at rated conditions. The proposed Squamish Compressor Station also has utilities, controls and safety systems and a 4.16 kV power feed for utility power will be provided by the WLNG substation.

The proposed Squamish Compressor Station consists of the following major components:

- Two (2) Gas Turbine Driven (GTD) Compressors – Solar Centaur 50-6202LS: Unit #1 C-0411 and Unit #2 C-0421 with their Lube Oil System, Lube Oil Coolers, Seal Gas System, Seal Gas Recompression Units, and other associated equipment;
- Gas Aftercoolers ACX-0411/0421;
- Fuel Gas Building BU-0500 including Fuel Gas Heater and Fuel Gas Filter Separator;
- Auxiliary Building BU-1400 including Generator Room, MCC Room, Instrument Air, UHM, Kitchen and Bathroom, Control Room, and Water Treatment and Storage Room;
- 100% Cyclonic Separator PV-0401;
- Vent Silencers, Liquid Condensate Storage Tank, Air receiver, all electric power supply system etc.;
- Odorant Injection Building BU-1402;
- Field Erected Buildings including the Compressor Building BU-0400 and Warehouse Building BU-2000;
- Nitrogen Fire Suppression Storage Building BU-1410;
- USDVs, ESDVs, and piping;
- Civil / Structural scope including site preparation, grading, concrete, and structural steel support and platforms; and
- Associated Electrical, Instrumentation and Controls scope, and equipment.

2.2 Emissions Pollution Control Technology

The Solar's gas turbine system used in the proposed Squamish Compressor station is equipped with SoLoNOx technology, which is designed to reduce nitrous oxides (NOx), carbon monoxide (CO), and unburned hydrocarbons (UHC) emissions while maintaining compressor efficiency. This technology utilizes lean pre-mixed combustion to ensure an extremely uniform air/fuel mixture and stringently controls the combustion process to prevent undesirable emissions from forming.

The V2 Compressor Station also utilizes a Dry Seal and Process Gas Recompression System (SGR) to mitigate fugitive methane emissions, which consists of a gas accumulator, gas conditioning, and gas recompression modules. This system captures leakage from the dry gas seal primary vents, conditions process gas that is normally vented during maintenance blowdowns between the compressor unit valves and, recompresses the captured/conditioned gas back into the upstream piping system. This system significantly reduces methane emissions while maintaining compressor efficiency.

The SoLoNOx system is an integral component of the gas turbine and operates whenever the turbine is in service. As a built-in combustion technology rather than an add-on pollution control device, SoLoNOx system is considered to have 100% uptime during turbine operation.

The emergency generator is equipped with a RAC4-39-10 non-selective three-way catalyst silencer. This exhaust after-treatment technology is designed to reduce emissions of nitrogen oxides (NO_X) and carbon monoxide (CO) through catalytic reactions occurring within the catalyst substrate. The system provides NO_X and CO control efficiencies of approximately 97%, VOC control efficiency of 80% and PM control efficiency of 50%, resulting in a substantial reduction in criteria air contaminant emissions from generator operation. The catalyst is installed as an integral component of the exhaust system and functions continuously whenever the generator is operating. The unit also incorporates acoustic attenuation features, providing both emissions control and noise reduction benefits.

In addition, the facility will follow their *Fugitive Emissions Management Plan* (FortisBC, 2020) to detect, quantify and mitigate leaks and other fugitive emissions. The plan is designed to meet the requirements of the BCER and Greenhouse Gas Emissions Reporting Regulations for fugitive emissions management in British Columbia including section 41 of the Drilling and Production Regulation. This document is provided in **Appendix A**. Regular venting for maintenance or other activities are not expected at this site.

2.3 Key Environmental and Operational Issues

Despite the emission pollution control technology applied, mitigating air emissions generated from the gas turbine system is still the primary environmental and operational issue. Concerned emissions include oxides of nitrogen (NO_X), sulphur dioxide (SO_2), particulate matter ($PM_{2.5}$), carbon monoxide (CO), and volatile organic compounds (VOCs).

Greenhouse gas (GHG) emissions from the Project consist primarily of carbon dioxide (CO_2) from fuel combustion, with minor contributions from fugitive methane emissions associated with process equipment and seals.

Other than emissions, noise attenuation and protection of water bodies such as creeks and streams around the site are also the key environmental and operational issues.

2.4 Process Flow Diagram

Process flow diagrams showing the pipeline flow in various components of the Project are shown in **Appendix B**.

2.5 Site Plan

The detailed Site Plan is provided in **Appendix C**.

3 AIR DISCHARGES AND TREATMENT

3.1 Point Emission Sources

The sources of concern from the proposed Project are the two gas turbine driven compressor units, two gas-fired boilers, one emergency gas-fired generator, and three (3) atmospheric vents, for emergency blowdowns. One compressor unit will operate at all times, and the second unit will only operate at peak operation conditions (20% of the time). The two boilers have identical specifications with one serving as a backup to the other and only one boiler operates at a time. The boiler will be running at average capacity of 75%. The emergency generator will be running for backup and testing purposes 10% of the time.

In the unlikely event of an emergency shutdown and system blowdown (never or once in project lifetime), equipment and piping would be de-pressurized and natural gas would be released to the atmosphere through three designated vent stacks.

3.2 Emission Scenarios

The following emission scenarios were considered to assess the maximum short- and long-term emissions from facility operations. Short-term scenarios assess the effect of maximum hourly emissions on air quality, while the long-term annual scenario considers the effects of annual average operations. Emergency shutdown scenarios are considered but not included in air dispersion modelling.

- A Normal Operations Scenario, where only 1 turbine and 1 boiler (100% load) are operating. This is the most common operating conditions for maximum hourly emissions.
- A Peak Operations Scenario, where both turbines and 1 boiler (100% load) are operating. This scenario represents maximum hourly emissions that occur up to 20% of the time at the facility.
- An Abnormal Operations Scenario, where the emergency generator kicks in due to power outage or for maintenance and testing. For conservatism, it was assumed that both turbines are running and boiler operates at 100% load along with the emergency generator. This scenario is expected to occur no more that 10% of the time.
- An Annual Emissions Scenario, where all sources operate at their expected annual average run-time and load factor.
- Emergency Shutdown Scenarios, where compressor units or the facility undergoes a shutdown and associated equipment and piping are depressurized through a blowdown and vented to the atmosphere. These scenarios were considered but not assessed through air dispersion modelling. In case of an emergency shutdown, other facility sources will not be operating, and therefore emissions of CACs are expected to be much lower or non-existent compared to other modelled scenarios. The vented gas under these scenarios is mainly sweet natural gas, and does not contain any contaminants of interest.

Emission scenarios are summarized in **Table 3-1**.

Table 3-1: Emission Scenarios

Case	Averaging Period	Scenario	Description	Sources
Project	Short-term (1-hr and 24-hr as applicable)	Normal Operations	A typical scenario for Project operations, with one gas compressor unit and one boiler in operation simultaneously. This scenario is expected to occur at least 80% of the time.	Unit 1 Turbine Boiler 1 (100% load)
		Peak Operations	A peak scenario in which both gas compressors and one boiler operate simultaneously. This scenario is expected to occur up to 20% of the time.	Unit 1 Turbine Unit 2 Turbine Boiler 1 (100% load)
		Abnormal Operation	A power loss scenario where both gas compressors, one boiler and the backup generator operate simultaneously. This scenario is expected to occur up to 10% of the time.	Unit 1 Turbine Unit 2 Turbine Boiler 1 (100% load) Emergency Generator
	Long-term (Annual)	Annual Emissions	An annual scenario with both gas compressors, one boiler and the emergency generator operate based on their realistic annual run time and load factor.	Unit 1 Turbine Unit 2 Turbine – 20% of time Boiler 1 (75% load) Emergency Generator – 10% of time
	Emergency Shutdown Scenarios Short-term (15 minutes) These scenarios are not included in air dispersion modelling.	Third order shutdown	Compressor unit shuts down, isolation and venting the unit through the unit blowdown silencer.	Unit 1 Vent, OR Unit 2 Vent
		Second order shutdown	Compressor Building Shutdown, isolation and venting all main gas piping, fuel gas, and utility gas piping through the unit blowdown silencer and fuel gas vent.	Unit 1 Vent, OR Unit 2 Vent
		First order shutdown	Complete station shutdown, isolation and venting of station piping. Station piping blowdown through the station blowdown silencer.	Unit 1 Vent, Unit 2 Vent and, Station Vent,

Emission source characteristics were provided by FortisBC and the vendors and are summarized in **Table 3-2**. A simplified site plan showing the locations of the point sources and buildings is shown is **Figure 3.** Maximum hourly and annual emissions for the modelled sources are provided in **Table 3-3** and **Table 3-4**, respectively. Additional details are provided in **Appendix D** (Air Quality Assessment Report).

Table 3-2: Modelled Point Source Characteristics

Source ID	Equipment	Stack Diameter (m)	Stack Exhaust Temperature (K)	Stack Exit Velocity (m/s)	Stack Height (m)
comp1	Compressor Unit 1	1.2	784	39.6	16.7
comp2	Compressor Unit 2	1.2	784	39.6	16.7
boiler1	Boiler 1	0.2	341	11.7	5.8
boiler2 [1]	Boiler 2	--	--	--	--
gen	Generator	0.3	875	33.6	6
not included in modelling -emitting only during emergency shutdown-	Unit 1 Vent	0.2	316	29.8	10.5
	Unit 2 Vent	0.2	316	29.8	10.5
	Station Vent	0.2	316	26.7	11.3

Note:
[1] Co-located with boiler 1 stack. Boiler 2 is Stand-by and not included in the modelling.

Table 3-3: Maximum Hourly Emission Rates for the Modelled Point Sources [1]

Model ID	Equipment	Included in Scenario	Max. Hourly Emission Rate (g/s)					
			NOx	SO_2	$PM_{2.5}$	PM_{10} [3]	CO	VOC
comp1	Compressor Unit 1	Normal, Peak, Abnormal	0.379	0.010	0.071	0.071	0.386	0.220
comp2	Compressor Unit 2	Peak, Abnormal	0.379	0.010	0.071	0.071	0.386	0.220
boiler1	Boiler 1	Normal, Peak, Abnormal	0.0066	0.0001	0.0014	0.0014	0.0093	0.0010
boiler2 [2]	Boiler 2	--	--	--	--	--	--	--
gen	Generator	Abnormal	0.107	0.001	0.014	0.014	0.053	0.011

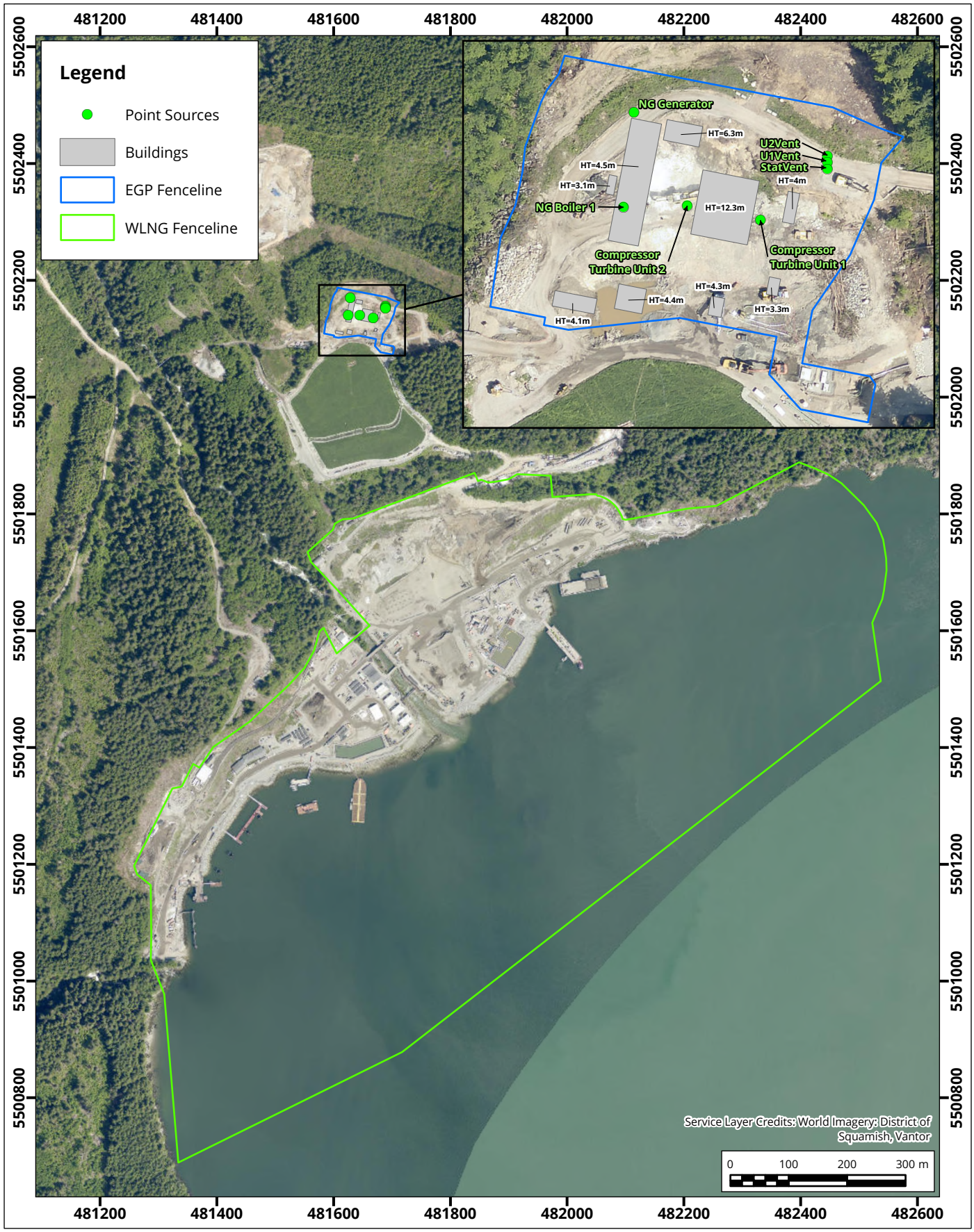
Notes:
[1] Atmospheric vents were not included in air dispersion modelling.
[2] Stand-by and not included in the modelling.
[3] All PM were assumed as $PM_{2.5}$.

Table 3-4: Annual Emission Rates for the Modelled Point Sources [1]

Model ID	Equipment	Operating Hours per Year (Hours)	Load Factor	Annual Emissions [6]					
				NOx	SO_2	$PM_{2.5}$	PM_{10}	CO	VOC
Modelled Annual Emission Rate (g/s)									
comp1	Compressor Unit 1	8,760	N/A	0.379	0.010	0.071	0.071	0.386	0.220
comp2	Compressor Unit 2	1,752 [2]	N/A	0.076	0.002	0.014	0.014	0.077	0.044
boiler1	Boiler 1	8,760 [3]	75%	0.0050	0.0001	0.0011	0.0011	0.0070	0.0008
boiler2 [4]	Boiler 2	--	--	--	--	--	--	--	--
gen	Generator	876 [5]	N/A	0.0107	0.0001	0.0014	0.0014	0.0053	0.0011
Annual Emissions (t/y)									
comp1	Compressor Unit 1	8,760	N/A	12.00	0.306	2.23	2.23	12.2	6.94
comp2	Compressor Unit 2	1,752 [2]	N/A	2.39	0.061	0.446	0.446	2.43	1.39
boiler1	Boiler 1	8,760 [3]	75%	0.156	0.002	0.033	0.033	0.220	0.024
boiler2 [4]	Boiler 2	--	--	--	--	--	--	--	--
gen	Generator	876 [5]	N/A	0.336	0.003	0.045	0.045	0.168	0.034
Facility Annual Emission (t/yr)				**14.8**	**0.4**	**2.8**	**2.8**	**15.0**	**8.4**

Notes:

[1] No routine emissions are associated with the atmospheric vents, as they will only be deployed during emergency depressurization events.
[2] Up to 20% of time throughout the year.
[3] At 75% load on average.
[4] Stand-by and not included in the modelling.
[5] Up to 10% of time throughout the year.
[6] Calculated using maximum hourly emission rate multiplied by the operating hours per year and load factor (if applicable) and divided by the total number of hours of a year (i.e. 8760).



Simplified Site Plan Showing the Locations of the Point Sources and Buildings

True North

Map Projection: NAD 1983 UTM Zone 10N

Squamish Compressor Station - Squamish, British Columbia

Project #: 2301269

Drawn by:	PIP	Figure:	3
Approx. Scale:			1:9,000
Date Revised:			Mar 24, 2026

Map Document: C:\Working\Folder\Jobs_AMER\P2301269\SQUAMISH\CALPUFF\P2301269_FortisBC_EPG.aprx

3.3 Fugitive Emission Sources and Management

The facility is equipped with seal gas compression (SGC) systems to capture and recycle seal gas, thereby minimizing the potential for fugitive emissions. The system captures and recompresses seal gas leakage and maintenance vent streams back into the process, thereby reducing methane emissions while maintaining compressor efficiency.

Fugitive emissions from equipment components such as valves, flanges, connectors, and other fittings are expected to be negligible and were not quantified at this stage of the assessment. In addition, the facility will follow their *Fugitive Emissions Management Plan* (**Appendix A**) to detect, quantify and mitigate leaks and other fugitive emissions. The plan is designed to meet the requirements of the *BCER and Greenhouse Gas Emissions Reporting Regulations* for fugitive emissions management in British Columbia including section 41 of the Drilling and Production Regulation.

Regular venting for maintenance or other activities is not expected at this site.

3.4 Pollution Control Works and Treatment Efficiencies

As discussed in **Section 2.2**, the proposed gas turbine system is equipped with Dry SoLoNOx technology. The emissions will be limited to the following levels:

- NOx: 15 ppmv at 15% O_2
- CO: 25 ppmv
- UHC: 25 ppmv

The SGR system captures, recompresses and reintegrates the seal gas into the process stream. The SGR has an overall control efficiency of 99%. For this assessment total VOC emissions were conservatively assumed to equal to UHC emissions.

The emergency generator is equipped with a RAC4-39-10 non-selective three-way catalyst silencer. This exhaust after-treatment technology is designed to reduce emissions of nitrogen oxides (NO_X) and carbon monoxide (CO) through catalytic reactions occurring within the catalyst substrate. The system provides NO_X and CO control efficiencies of approximately 97%, VOC control efficiency of 80% and PM control efficiency of 50%, resulting in a substantial reduction in criteria air contaminant emissions from generator operation. The catalyst is installed as an integral component of the exhaust system and functions continuously whenever the generator is operating. The unit also incorporates acoustic attenuation features, providing both emissions control and noise reduction benefits.

All liquid waste generated by Project operations will be managed within closed-drain systems equipped with secondary containment and truck-out connections for off-site disposal. Effluent will be temporarily stored in holding tanks and removed from the site for disposal together with other waste materials; no wastewater treatment will occur on site. A sewage holding tank permitted by Vancouver Coastal Health (VCH) will be used, and a waste hauling contract is in place to ensure appropriate off-site disposal.

3.5 Discharge Evaluation

Air dispersion modelling was conducted based on vendor provided emission rates for sources at the facility. Predicted ground-level concentrations were compared against the BC Ambient Air Quality Objectives (AAQO, ENV, 2025). The methodology and results of the air dispersion modelling are provided in **Appendix D** (Air Quality Assessment Report).

An air dispersion modelling using CALPUFF model (Version 7.2.1) was conducted for a 5-year modelling period from 2011 to 2015. The modelling approach and technical details are consistent with the BC Air Quality Dispersion Modelling Guideline (BC AQDMG - ENV, 2022) and the Dispersion Modelling Plan developed for the Project in consultation with and approved by British Columbia Energy Regulator (BCER). As per the Dispersion Modelling Plan the current modelling only focuses on emissions from the proposed Project sources and existing ambient background. Assessment of cumulative effects including the emissions from the proposed neighbouring Woodfibre Liquified Natural Gas (WLNG) project will be assessed at a later time when information on WLNG emission sources become available. Assessment of the critical load of nitrogen and sulphur deposition as it relates to acidification and eutrophication of aquatic and terrestrial ecosystems will also be included in the cumulative assessment.

Air dispersion modelling was conducted based vendor provided emission rates for sources at the facility. Predicted ground-level concentrations were compared against the BC AAQO. Details on assessment methodology and results are provided in **Appendix D** (Air Quality Assessment Report). Model results are summarized in **Section 5.2**.

Federal Guidance for the Reduction of Nitrogen Oxides Emissions from Natural Gas-Fired Stationary Combustion Turbines, developed by Environment and Climate Change Canada (ECCC, 2017) requires that for a combustion turbine with a power rating less than or equal to 25 MW, a NOx emission performance test should be conducted once every three calendar years.

The compressor vendor will conduct stack testing during commissioning/start-up, followed by third-party stack testing approximately three months after the commencement of operations. Follow-up testing will be conducted after a defined operating period (e.g., based on accumulated 8000 operating hours) to confirm ongoing performance, or every 3 calendar years as recommended by the guideline (whichever comes first).

The emergency generator is equipped with a non-selective three-way catalyst. The emission rates used in the assessment are based on manufacturer-specified catalyst-out emission guarantees. Catalyst-out emission levels are valid for the duration of the engine warranty. The engine and catalyst system will be operated, maintained, and tested in accordance with applicable regulatory requirements and emissions checks, as applicable, to verify continued compliance with NOx emission limits, and the guaranteed emission rates.

Future monitoring and reporting requirements are described in **Section 9**.

3.6 Comparison of Discharge Quality to Known Discharge Criteria, Guidelines or Industry Practices

Federal Guidance for the Reduction of Nitrogen Oxides Emissions from Natural Gas-Fired Stationary Combustion Turbines (ECCC, 2017) provide technology-based design guidance for this equipment category; however, they are advisory in nature and do not establish legally binding regulatory limits or enforceable performance standards. The guidance is not intended to apply during startup or shutdown periods, during certain part-load operating conditions, or when the ambient air temperature at the turbine air intake is below −18°C. Implementation and enforcement of these guidelines are subject to the jurisdiction and discretion of the applicable provincial regulatory authority. Considering the coastal location of the proposed Project and Climate Normals (ECCC, 2026) data for Squamish, ambient temperatures are expected be well above the -18°C threshold. In addition, based on the meteorological modelling conducted as part of the AQAR, minimum predicted temperatures at the site during the 5-year model period of 2011-2015 is -14°C, which is above this threshold.

The guidelines indicate that natural gas-fired combustion turbines with a rated capacity between 4 MW and 70 MW should achieve NO_X emissions of 15 ppmv or less, corrected to 15% oxygen (dry basis). The selected turbine for the Project is designed to comply with this emission guideline.

Schedule 1 of the *Oil and Gas Waste Regulation* (B.C. Reg. 254/2005, ENV, 2024), sets an emission limit of 2.7 g/kWh of NO_X for compressor drivers and electricity generator drivers. The proposed Project has turbine capacity of 4498 kW . With maximum hourly emission rate of 0.379 g/s provided by the manufacturer (see Table 3-3), turbine emission intensity is calculated to be 0.292 g/kWh, which is well below the standard. For the 550 kW emergency generator equipped with non-selective three-way catalyst, based on the emission rate of 0.1067 g/s the emission intensity is calculated to be 0.77 g/kWh, which is also well below the specified limit.

Part 1 of the *Multi-Sector Air Pollutants Regulations* (SOR/2016-151 – MSAPR, 2026), applies to boilers or heaters with rated capacity of at least 10.5 GJ/h. The boilers at the proposed Project are 440 kW or 1.6 GJ/h, therefore, MSAPR does not apply to them.

Part 2 of MSAPR sets the emission limit of 2.7 g/kWh for regular use stationary spark-ignition engines of at least 75 kW. As mentioned above, the proposed Project's emergency generator is equipped with a non-selective three-way catalyst and meets this limit. The emergency generator will be operated and maintained in accordance with manufacturer specifications and applicable regulatory requirements including MSAPR. Emission checks and manual adjustment may be necessary to achieve compliance as catalyst/engine age.

3.7 Best Available Technology

The selected equipment and control technologies are consistent with current industry practice for compressor stations in British Columbia and are considered to meet Best Available Technology Economically Achievable (BATEA) principles.

Combustion Turbine

The natural gas-fired combustion turbine is equipped with Dry Low-NOx (DLN) combustion technology designed to achieve approximately 15 ppmv NO_X (corrected to 15% O_2, dry basis) during normal operation. DLN combustion represents current industry-standard primary NO_X control for turbines in this size range.

The turbine also incorporates a Seal Gas Recovery (SGR) system to capture, recompress, and reintegrate seal gas emissions into the process stream. The system captures and recompresses seal gas leakage and maintenance vent streams back into the process, thereby reducing methane emissions while maintaining compressor efficiency.

Auxiliary Boiler (440 kW)

The 440 kW natural gas-fired boiler is a small-capacity unit (~1.5 MMBtu/hr) with minimal emission contribution. The boiler utilizes efficient combustion design and pipeline-quality natural gas. Add-on emission controls are not warranted for a unit of this size and application.

Emergency Generator (550 kW)

The 550 kW natural gas-fired emergency generator is intended for emergency use and maintenance testing only.

This emergency generator is equipped with a RAC4-39-10 non-selective 3-way catalyst silencer with NO_X and CO control efficiency of 97%. The unit will be maintained and operated in accordance with manufacturer specifications to ensure efficient combustion and minimized emissions.

4 RECEIVING ENVIRONMENT

4.1 Geophysical Information

The Project is located close to the northwestern shoreline of Howe Sound near Squamish, British Columbia. The site is situated within a coastal fjord environment characterized by complex terrain, including steep forested slopes and narrow marine inlets within mountainous backdrops. Ground elevations range from approximately sea level along the Howe Sound shoreline to higher elevations immediately inland due to the surrounding mountainous terrain.

Land use in the surrounding area consists of industrial development within the neighbouring Woodfibre site footprint, with adjacent areas characterized by forested land, rugged terrain, and limited residential development. The nearest urban centre is Squamish, located northeast of the site. Vegetation in the region predominantly consists of mixed coniferous forests.

4.2 Ecosystems

The surrounding environment consists of a combination of marine, freshwater, and terrestrial ecosystems characteristic of the south coast of British Columbia. The adjacent upland areas consist primarily of coniferous forests with dense understory vegetation and associated wildlife species. Howe Sound is a deep, tidally influenced marine fjord supporting fish, marine mammals, seabirds, and diverse intertidal habitats. The marine waters remain ice-free year-round due to oceanic exchange.

4.3 Meteorology

The regional climate is characterized by mild, wet winters and relatively cool summers. Snow accumulation at sea level is generally limited and short in duration, with snow cover more persistent only at higher elevations in the surrounding mountains. Howe Sound is connected to the Strait of Georgia and, does not freeze during winter months.

The local topography significantly influences air dispersion patterns, with terrain-driven wind flows and channeling effects typical of coastal fjord systems. The combination of complex terrain, marine influence, and mild coastal climate creates highly variable and terrain-driven meteorological conditions, which increase the complexity of air dispersion patterns and require the use of refined dispersion modelling to adequately characterize potential impacts.

4.4 Airshed

The Project is located within the Howe Sound fjord system, a narrow north–south oriented marine inlet bounded by steep mountainous terrain, and part of the Sea-to-Sky Airshed.

The Squamish and Horseshoe Bay air quality monitoring stations are nearest to the Project locations, within the same airshed, and provide a conservative representation of air quality conditions within the assessment area.

For SO_2, NO_X, NO_2 and $PM_{2.5}$ background concentrations were based on the most recent three years of available data (2021-2023) from Squamish Elementary Station. Observations of PM_{10} were not available at any monitoring stations near the Project; therefore, background concentrations of PM_{10} were assumed to be equal to $PM_{2.5}$. For CO, background concentrations were calculated based on most recent ambient air quality observations from Horseshoe Bay (2017-2019). Background concentrations used in the modelling are summarized in **Table 4-1** and station locations are shown in **Figure 2**.

The background concentrations for most of the contaminants are limited when compared to their criteria in BC Ambient Air Quality Objectives (BC AAQO), with the exception of background NO_2 concentrations which accounts for approximately 37% and 30% of 1-hour and annual BC AAQO, respectively.

Table 4-1: Background Concentrations

Air Contaminant	Averaging Period	Background Concentration (µg/m³)	Metric [1] [2]	BC AAQO
NO_2	1-hour	41.6	Annual 98th percentile of D1HM values averaged over 3 years	113
	Annual	9.4	Average of hourly values over 3 years	32
SO_2	1-hour	1.1	Annual 99th percentile of D1HM values averaged over 3 years	170
	Annual	0.7	Average of hourly values over 3 years	10.5
$PM_{2.5}$	24-hour	17.7	Annual 98th perc. of 24-hour averaged over 3 years	25
	Annual	5.2	Average of hourly values over 3 years	8
PM_{10} [3]	24-hour	17.7	Annual 98th perc. of 24-hour averaged over 3 years	50
CO [4]	1-hour	389	Annual 98th percentile of hourly values averaged over 3 years	14,300 [5]
	8-hour	338	Annual 98th percentile of 8-hour averaged over 3 years	5,500 [5]

Notes:
[1] Background values were calculated based on the metrics for baseline concentrations as per BC AQDMG.
[2] D1HM = Daily 1-Hour Maximum.
[3] Data for PM_{10} were not available at any monitoring stations near the Project; therefore, background concentrations of PM_{10} were assumed to be equal to $PM_{2.5}$.
[4] As CO is not measured at Squamish Elementary, background concentrations of CO were calculated based on ambient air quality observation data (2017-2019) from the Horseshoe Bay Station.
[5] There are no objectives or standards for CO, other than Pollution Control Objectives, which were developed by the B.C. Ministry of Environment and the B.C. Department of Lands, Forest and Water Resources in the 1970s for five source sectors. These criteria, which refzs98erred to all discharges to the environment, were rescinded in 2006, but the ambient air quality objectives continue to be used for reference purposes.

4.5 Human Health Receptors

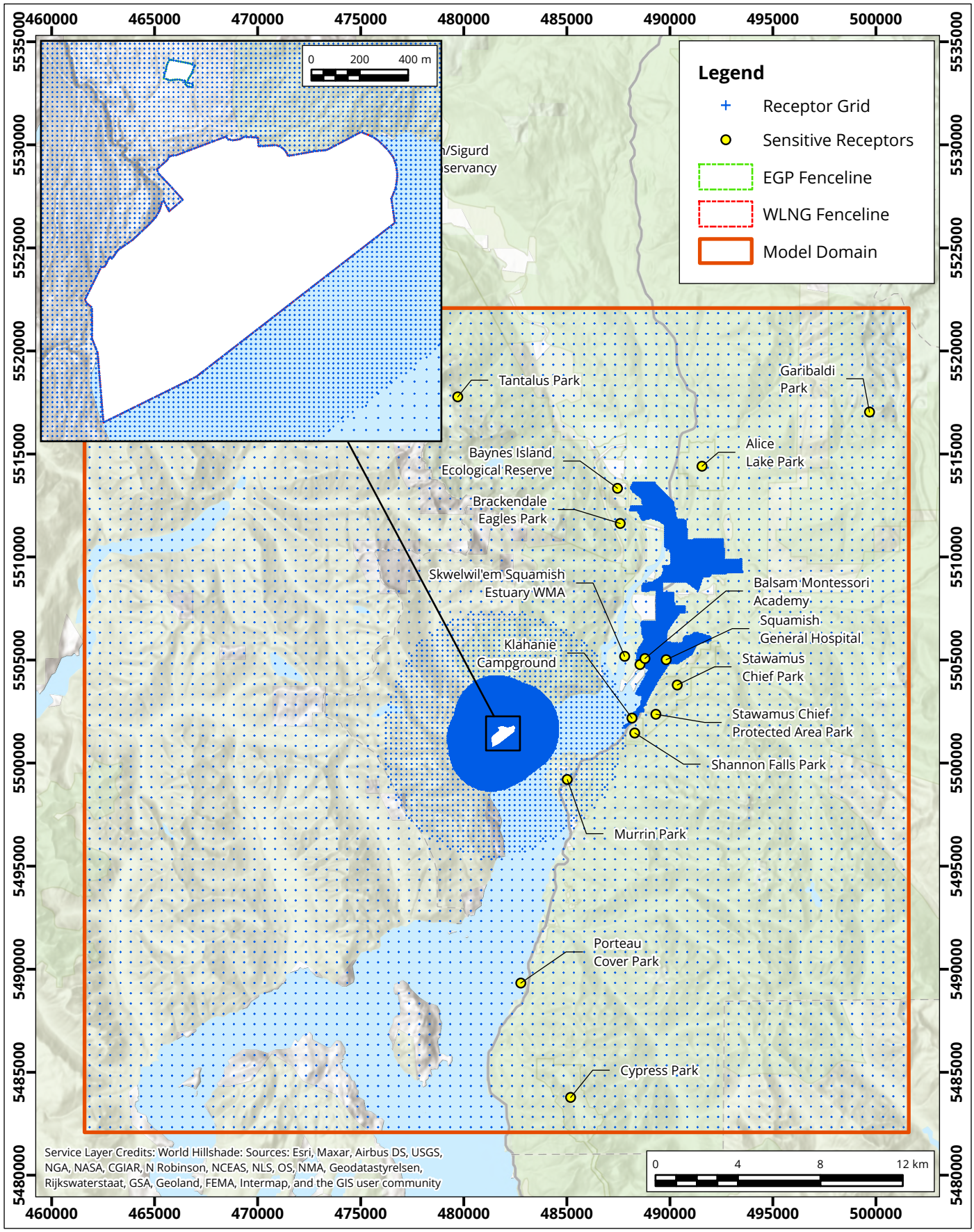
The nearest population centre is Squamish, with residential neighbourhoods situated at the head of Howe Sound and along the Squamish River valley. The Project is located within the traditional territory of the Squamish Nation with community members using lands and marine areas within Howe Sound for cultural, harvesting, or recreational purposes. Sensitive receptors include residential neighbourhoods, schools, healthcare facilities, parks and other community-use areas within Squamish area.

For the air quality assessment, a Cartesian nested grid of ground-level receptors was defined within the study area. Receptor spacing was set as per the BC AQDMG (ENV, 2022a) with increased density in areas of interest as agreed in the approved Dispersion Modelling Plan. Based on the discussions with ENV during model plan development, the same receptor grid will be used for the air quality assessment of the WLNG project and for the common cumulative assessment of both projects. Therefore, to accommodate both assessments, the horizontal receptor grids are set based on the fencelines of both projects, as follows:

- 10-m receptor spacing along both facilities' fence lines,
- 20-m receptor spacing within 0.5 km from both facilities,
- 50-m receptor spacing within 2 km from both facilities
- 250-m receptor spacing within 5 km from both facilities,
- 500-m spacing for the remainder of the study area

At the request of ENV, a denser receptor grid (50 m spacing) was placed over the growth management boundary of the district of Squamish, where populations may reside. Moreover, sensitive receptors representing parks and protected areas were identified throughout the community and set as discrete receptors in the model. Sensitive receptors were identified through a review of land use, aerial imagery, municipal mapping, and publicly available information for the study area. Receptors were selected to represent locations where members of the public may reside or spend extended periods of time, including residential neighbourhoods, schools, childcare facilities, healthcare facilities, parks, recreational areas, and other community-use areas. In total, 30,942 receptors were included in the assessment. These receptors cover the modelling domain while providing a finer resolution predictions for nearest and potentially most affected, or most populated human-use locations surrounding the Project and provide the basis to evaluate compliance with applicable air quality criteria at locations where public exposure may occur.

Receptors considered in the air dispersion modelling are shown in **Figure 4.** Additional details are provided in **Appendix D** – *Air Quality Assessment Report*.



Receptors Considered in Air Dispersion Modelling

True North

Map Projection: NAD 1983 UTM Zone 10N

Squamish Compressor Station - Squamish, British Columbia

Project #: 2301269

Drawn by: PIP	Figure: 4
Approx. Scale:	1:255,000
Date Revised:	Sep 8, 2025

Map Document: C:\Working\Folder\Jobs_America\P2301269\P2301269_FortisBC_EPG.aprx

5 AIR QUALITY ASSESSMENT

5.1 Impact Assessment in the Context of Airshed

The Project is located within the Howe Sound fjord system with complex terrain and meteorology, and within the Sea-to-Sky Airshed. To assess potential effects of Project operations on ambient air quality, air dispersion modelling was conducted using the CALMET/CALPUFF modelling system over a 20 km x 20 km modelling domain centered around the Project site, for four (4) emission scenarios as discussed in **Section 3.2**. Predicted ambient concentrations of key contaminants, including NO_2, SO_2, $PM_{2.5}$, and CO were compared with the BC AAQO and CAAQS 2025. Predicted VOC concentrations are also reported, however, no ambient air quality objectives are currently established for total VOCs.

Methodology and results of the air quality assessment are provided in detail in **Appendix D** – *Air Quality Assessment Report*.

5.2 Potential Impacts on Receiving Environment

Predicted ground-level concentrations of including background concentrations were compared to the applicable provincial and federal objectives and standards. Cumulative effects assessment including emissions from the proposed neighbouring WLNG project was not completed at this time as final design information for WLNG is not available yet. A cumulative modelling incorporating emissions from both projects will be conducted at a later time when WLNG design parameters are finalized. Assessment of the critical load of nitrogen and sulphur deposition as it relates to acidification and eutrophication of aquatic and terrestrial ecosystems will also be included in the cumulative assessment.

Maximum hourly impacts for the Normal Operations Scenario, Peak Operations Scenario, Abnormal Emission Scenarios as well as the maximum annual impacts for Annual Emission Scenario from Project operations are summarized in **Table 5-1**. The BC AAQO and CAAQS 2025 are provided for comparison.

Normal and Peak Operations Scenarios (Short-term):

These two scenarios represent facility operations at 90% of the time, with one or both compressor units running.

Based on model results, predicted concentrations for all contaminants were below the applicable short-term (1-hour and 24-hour) BC AAQO and CAAQS 2025 throughout the model domain. No exceedances were predicted, indicating the route operation of the Project would not cause adverse air quality on the surroundings. Predicted concentrations were mostly dominated by background concentrations.

Abnormal Emission Scenario (Short-term):

For this scenario, predicted concentrations for all contaminants, other than NO_2, were within BC AAQO and CAAQS 2025 over the model domain. Based on modelling results, localized exceedances of the 1-hour BC AAQO for NO_2 were predicted for this scenario. Exceedances were predicted to occur for receptors on or near the facility fenceline (within maximum of 25 meters). No exceedances were expected for any of the sensitive receptors, or the receptors located within the growth management boundary district of Squamish.

The Abnormal Emissions Scenario represents a conservative bounding assessment. Although the scenario is characterized as occurring up to 10% of the time, this value represents a conservative upper-limit estimate and actual occurrence is expected to be lower. The modelling assumes simultaneous operation of both compressor turbines, the auxiliary boiler, and the emergency generator at maximum emission rates, with emissions occurring continuously throughout the year. This approach also effectively assumes that the highest emissions occur during the most adverse meteorological conditions for dispersion. The combination of worst-case emissions and worst-case meteorological conditions is unlikely to occur in practice. As a result, the predicted exceedances are considered conservative, localized, and of low probability under actual operating conditions.

Annual Emissions Scenario (long-term):

This scenario represents the overall annual average operations of the facility and includes peak operations with both compressor units operating and abnormal conditions where both compressor units and the emergency generator are running.

Based on modelling results using ARM2, no exceedances of the annual BC AAQO or CAAQS 2025 are predicted for this scenario.

Additional model results including contour plots of predicted concentrations, frequency of exceedance analysis and predicted concentrations at sensitive receptors are provided in detail in ***Appendix D*** – *Air Quality Assessment Report*.

Emergency blowdown scenarios were not considered for modelling as they are very unlikely to occur (once in Project lifetime or never).

Table 5-1: Maximum Predicted Concentrations over the Modelling Domain

Air Contaminant	Averaging Period	Objectives (µg/m³)		Background Conc. (µg/m³)	Maximum Predicted Concentration without Background under Different Scenarios (µg/m³) [8] [9] [10]				Maximum Predicted Concentration with Background under Different Scenarios (µg/m³) [8] [9] [10]			
		BC AAQO	CAAQS 2025		Normal	Peak	Abnormal	Annual	Normal	Peak	Abnormal	Annual
NO_2 (Total Conversion)	1-hour [1]	113	79	41.6	27	41	**188**	-	68	83	**230**	-
	Annual [2]	32	23	9.4	-	-	-	2.0	-	-	-	11.4
NO_2 (ARM2)	1-hour [1]	113	79	41.6	24	37	84	-	66	79	**126**	-
	Annual [2]	32	23	9.4	-	-	-	1.8	-	-	-	11.2
SO_2	1-hour [3]	170	170	11.1	0.8	1.1	1.8	-	11.9	12.2	12.9	-
	Annual [2]	10	10	0.7	-	-	-	0.04	-	-	-	0.7
$PM_{2.5}$	24-hour [4]	25	27 [6]	17.7	1.1	1.8	5.9	-	18.8	19.4	23.6	-
	Annual [2]	8	8.8 [6]	5.2	-	-	-	0.3	-	-	-	5.5
PM_{10}	24-hour [5]	50	-	17.7	1.5	2.3	7.7	-	19.2	20.0	25.4	-
CO	1-hour [6]	14,300	-	389	44	59	110	-	433	449	499	-
VOC	1-hour [6]	-	-	N/A [7]	25	33	37	-	25	33	37	-

Notes:

[1] Based on 5-year avg. of the annual 98th percentile of D1HM values.

[2] Based on 5-year avg. of the annual avg. of hourly values over one year.

[3] Based on 5-year avg. of the annual 99th percentile of D1HM values.

[4] Based on 5-year avg. of the annual 100th percentile of 24-hour averages.

[5] Unchanged from CAAQS 2020 value.

[6] Based on 5-year avg. of the annual 100th percentile of hourly values.

[7] For VOC, background concentrations were assumed to be zero.

[8] Only short-term impact (i.e. 1-hour and 24-hour) was assessed for Normal Operations, Peak Operations and Abnormal Emission scenarios, while only long-term impact (i.e. annual) was assessed for Annual Emission Scenario.

[9] Values shown in **bold** font indicate exceedance of BC AAQO.

[10] Underlined values indicate exceedance of CAQQS 2025.

5.3 Emission Reduction Plans

No further emission reduction plans are anticipated for the Project at this time.

5.4 Limitations of the Modelling Results

Air dispersion modelling provides an estimate of potential ground-level concentrations based on defined input parameters, assumptions, and available data. As with all predictive models, results are subject to inherent uncertainties associated with emission estimates, meteorological inputs, background concentrations, and model algorithms.

Emission rates used in the assessment were based on vendor specifications, and conservative operating assumptions intended to conservatively representant facility operations. Actual emissions may vary depending on equipment performance, maintenance practices, and operating conditions.

Meteorological data used in the model are intended to be representative of regional conditions; however, localized terrain effects, short-term variability in wind fields, and microscale meteorological phenomena characteristic of complex terrains and coastal environments may not be fully resolved.

Background concentrations were derived from regional monitoring stations within the Howe Sound corridor and are considered representative of the broader airshed. However, localized variations in ambient concentrations may occur due to nearby sources or short-term atmospheric conditions.

The modelling assessment was conducted using established regulatory dispersion modelling tools and conservative assumptions. Results are intended to inform regulatory evaluation and are not a prediction of exact concentrations at any specific time or location.

6 IDENTIFICATION OF RECEIVING ENVIRONMENT INFORMATION GAPS

The receiving environment characterization was based on available regional monitoring data, published information, and site-specific inputs appropriate for regulatory dispersion modelling. No significant information gaps were identified that would materially affect the conclusions of the air quality assessment. Background concentrations derived from monitoring stations within the Howe Sound corridor are considered conservatively representative of the Project airshed. Final design and emission data for the neighbouring Woodfibre LNG (WLNG) Project were not available at the time of this assessment; therefore, a combined cumulative modelling scenario will be completed once that information becomes available. No additional ambient monitoring is proposed at this time.

7 OTHER DISCHARGES

No effluent is generated from Project operations, as the turbine units utilize dry low-NO_X combustion technology.

Site grading and drainage design is in accordance with the geotechnical site investigation and hydrology reports. No further surface water discharges from Project operations are anticipated. No non-hazardous refuse, or hazardous waste is anticipated. Surface precipitation is considered typical storm water runoff and is managed through the civil drainage plan and design. All liquid systems are closed drain systems with secondary containment and truck-out connections for off-site disposal. Sewage holding tank is permitted with VCH and waste haul contract is in place.

The Compressor and Auxiliary buildings are also equipped with sumps for secondary containment in case of any fluid spills, Lube Oil and Heat Medium Glycol-Water, within the site.

8 ENVIRONMENTAL MANAGEMENT SYSTEM

8.1 Corporate Environmental Policy

See ***Appendix E*** – *Corporate Environmental Policy*.

8.2 Statutory Requirements

From air quality's perspective, emissions arising from the operation of the proposed Project should be controlled within the criteria stipulated in BC AAQO and CAAQS 2025. Based on the air quality assessment, the predicted concentrations are all compliant of the respective criteria with the consideration of the pollution controls proposed in **Section 2.2**. Few exceedances of the 1-hour BC AAQO for NO_2 were predicted under the Abnormal Emissions scenario, however, these exceedances are low-probability and limited to few receptors on or within 25 m of the facility fenceline.

It is FortisBC's responsibility to maintain the pollution control system and ensure the performance guarantees discussed in **Section 3.4** and **Section** 3.5 are met for compliance of relevant air quality criteria.

8.3 Industry Sector-specific Standards, Guidelines, and Codes of Practice

As mentioned in **Section 3.6**, the selected turbine for the Project is designed to comply with the requirements of Environment & Climate Change Canada Guidelines for the Reduction of Nitrogen Oxide Emissions from Natural Gas-Fuelled Stationary Combustion Turbines.

8.4 Proposed Emission Reduction and Management Plans

No further emission reduction and management plans are anticipated for the Project at this time.

9 MONITORING PROGRAMS AND REPORTING

FortisBC will implement air emissions monitoring and reporting in accordance with applicable regulatory requirements and permit conditions as determined by the BCER.

Stack testing will be conducted by qualified third-party personnel in accordance with the Field Sampling Manual Air and Air Emissions Testing (ENV, 2020) and applicable ENV guidance.

Initial stack testing is proposed during commissioning and start-up to verify emissions performance. Follow-up testing may be conducted after a defined operating period (e.g., based on accumulated 8000 operating hours) to confirm ongoing performance, with the frequency and scope of testing to be finalized in consultation with the BCER.

Operational reporting is proposed to be completed on an annual basis, or as otherwise required by BCER.

10 STATEMENT OF LIMITATIONS

This report entitled "Technical Assessment Report, Squamish Compressor Station" was prepared by RWDI AIR Inc. ("RWDI") for FortisBC, ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared. Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by the Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by the Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

11 REFERENCES

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APPENDIX A

Eagle Mountain - Woodfibre Gas Pipeline Project

Fugitive Emissions Management Plan for The Squamish (V2) Compressor Station

Rev. 1

Aug 2026

FortisBC Energy Inc.
16705 Fraser Highway
Surrey, British Columbia
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EXECUTIVE SUMMARY

Fugitive emissions are the unintended emissions from facilities that could not reasonably pass through a stack, chimney, vent or other functionally equivalent

- When conducting audio/visual/olfactory leak monitoring, there is physical evidence that a leak is occurring.
- Where components are screened for leaks using organic vapor analyzers in accordance with U.S. EPA's Method 21, the leak definition, detection threshold, and reporting requirements shall follow the current DPR and applicable BCER guidance in effect at the time of the survey.
- Where components are screened using optical gas imaging, there is visual indication of a leak.

This Fugitive Emissions Management Plan for the Squamish (V2) Compressor Station is designed to meet the requirements of the BC energy regulator and Greenhouse Gas Emissions Reporting Regulations for fugitive emissions management in British Columbia including section 41 of the Drilling and Production Regulation. This document details how FortisBC Energy Inc. will detect, manage and report fugitive emissions at facilities that fall within the scope of the regulations.

CONTENTS

Appendix(es)

Table(s)

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INTRODUCTION

This Fugitive Emissions Management Plan (FEMP) applies to FortisBC Energy Inc. Squamish (V2) Compressor Station.

The FortisBC Energy Inc. FEMP consists of the following key elements.

- A clear purpose outlining scope of the program.
- The responsibilities of management, operations and maintenance personnel (including contractors).
- Fugitive emission leak detection, quantification and repair procedures.
- Fugitive emissions surveyors' safety procedures and training requirements.
- Preventative maintenance and continuous improvement strategies.
- A data management system for recordkeeping.

EMISSION SOURCES AND FACILITIES IN SCOPE

Sources of fugitive emissions within scope are limited to the following:

- Pressurized equipment components with hydrocarbon throughput;
- Natural gas driven pneumatic devices;
- Tank-top equipment, including thief hatches and gauge-board assemblies;
- Pressure relief valves;
- Equipment used to combust vent gas, including burners, flare ignitors, pilots;
- Combustors; and
- Equipment used to conserve vent gas, including vapor recovery units and vent gas capture systems.

ACCOUNTABILITIES

Table 1. summarizes the responsibilities of each resource allocated to develop, implement, maintain, and update the FEMP.

Table 1. Allocation of Resources

Resource	Responsibilities
Corporate management	• Maintain corporate commitment to FEMP. • Approve annual FEMP budget.
FEMP management team	• Develop and maintain FEMP review schedule. • Create comprehensive survey and screening survey schedules. • Oversee data management system. • Submit annual methane emission reports to the BCER. • Assess FEMP's effectiveness and opportunities for continuous improvement. • Provide program updates, develop annual reports, and make program recommendations.
Fugitive emissions surveyors	• Maintain and calibrate test equipment. • Perform comprehensive and screening surveys. • Generate individual facility/wellsite reports for operations. • Identify components that need to be repaired, replaced or retrofitted. • Determine leak severity and measure or estimate emissions rate. • Maintain electronic system to capture and retain data. • Maintain monitoring schedules.
Field operators	• Provide guidance on survey schedules. • Supervise surveyors and provide them with information about facility performance and operation during surveys. • Review facility/ wellsite reports and develop work plans (Work orders) to address recommendations. • Repair sources of leaks or modify facilities/ wellsites (e.g., replace connectors, re-pipe vent lines). • Confirm the integrity of repairs, close out work orders and record repair details.

CONTINUOUS IMPROVEMENT

Each year, data from comprehensive surveys will be analyzed to evaluate program performance and determine areas of improvement by identifying recurring issues and trends based on the following performance indicators:

- Quantified emissions reductions over time (e.g., by corporate or operating area, or by facility type or equipment).
- Cost of detection (e.g., $/kg methane detected).
- Volume of gas conserved by managing fugitive emissions.
- Number of leaking components over time (e.g., by corporate or operating area, or by facility type or equipment).
- Specific components within facilities that are more prone to leaks.
- Time between leak detection and repair.

FUGITIVE EMISSION DETECTION AND QUANTIFICATION

The following sections describe the leak detection and qualification as per the requirements of the British Columbia Drilling Production Regulation (DPR).

LEAK DETECTION

Comprehensive fugitive emissions surveys shall be conducted using methods permitted under DPR Section 41.1 and applicable BCER guidance, including Optical Gas Imaging (OGI) or other approved technologies.

LEAK QUANTIFICATION

Leaks detected during comprehensive surveys are quantified using a quantitative optical gas imaging device (QOGI) or HiFlow Sampler (DPR Section 41.1 (7)).

An engineering estimate or emission factor can be used where quantification by measurement is not possible for safety reasons, because the leak is inaccessible, difficult to survey or too small or large to measure, (DPR Section 41.1 (7)) and the reason must be documented.

To meet the requirements of the BC Greenhouse Gas Emission Reporting Regulation, leak rates determined by engineering estimates or emission factors will be quantified using the Western Climate Initiative (WCI) 350 methodologies as it applies to natural gas transmission, distribution and storage.

SURVEY FREQUENCY

The fugitive emissions management team, site manager and contractor develop facility specific inspection schedules annually; based on the minimum survey spacing requirements outlined in the British Columbia Energy Regulator (BCER) Fugitive Emissions Management Guideline.

The total number of comprehensive surveys performed annually at each facility is based on the number of days active (pressurized) as outlined in section 3.1.1 of the BCER Fugitive Emissions Management Guideline. This is summarized in Table 2 below.

Table 2. Comprehensive Fugitive Emissions Survey Requirements

Number of Days Pressurized (Days)	Comprehensive Fugitive Survey Required
0-30	0
31-121	1
122-243	2
244-365	3

SURVEY TRACKING PROCEDURES

Survey tracking procedures to be conducted by Fugitive Emissions Surveyors are described in the following sections.

REQUIRED SURVEYS

Fugitive Emissions Surveyors will be responsible for submitting survey completion updates to fugitive emissions verifiers 15 working days after the scheduled survey date. The FEMP Management Team is responsible for maintaining the schedule to meet survey requirements.

COMPLETED SURVEYS

Fugitive Emissions Verifiers are responsible for generating post survey verification reports within 30 days of receiving survey completion updates from facilities/ Fugitive Emissions Surveyors.

EQUIPMENT CALIBRATION AND MAINTENANCE

Fugitive Emissions Surveyors are responsible for carrying out equipment calibration and maintenance, calibration records must be available to FortisBC Energy Inc. upon request.

SAFETY, TRAINING AND COMPETENCY

Fugitive Emissions Surveyors must wear at least the minimum appropriate Personal Protective Equipment (PPE) required at the survey site as listed below.

- Steel toe boots
- High-visibility vest
- Safety glasses
- Hard hat
- Flame resistant coveralls

Surveyors must take all and any necessary precautions to ensure survey equipment can be safely operated in the area before using it.

Components that are exempt from survey due to reasons involving safety or restricted access must be included in the survey report.

Fugitive Emissions Surveyors must possess Optical Gas Imaging Certification Training from an accredited institution such as the Infrared Training Centre (ITC), consistent with DPR requirements.

Individuals responsible for conducting fugitive emissions comprehensive surveys should be able to produce proof of competency/ certification upon request.

Fugitive Emissions Surveyors must be familiar with the following concepts:

- Principles of detecting emissions with the equipment or method.
- Operation and calibration of equipment.
- Sources of fugitive emissions.
- Factors that affect estimates of fugitive emissions (e.g., weather, temperature).
- Interpretation of results.

Surveyors must have appropriate training and experience with design and operation of pneumatic devices so that any natural gas driven malfunctioning (leaking) pneumatic devices and pumps are during surveys.

Trainees must work under the direct supervision of a trained and experienced individual (DPR Section 41.1(1)) to develop experience detecting, measuring, recording and reporting fugitive emissions.

Facility Operators must conduct site safety training to Fugitive Emissions Surveyors prior to emission surveys at facilities.

REPAIRS

Any unintentional natural gas emission detected by a gas-imaging camera is considered a repairable leak.

LEAK REPAIR DECISION-MAKING PROCESS

Once a leak is detected, a decision must be made on whether the emitting component can be repaired and when to carry out the repair.

The following repair decision-making process is used:

1. Leaks that pose an immediate environment, health or safety (EHS) concern are referred immediately to Operations personnel who will determine an appropriate course of action.

2. Leaks posing no immediate EHS risk are tagged as a fugitive emission, details recorded in a leak survey report and an attempt is made to assess the emission leak rate if practicable.

3. All fugitive emission sources that can be easily repaired (those without significant impacts to the environment, health, safety, or the business) are either repaired immediately (on the same shift) or entered into the work management system to be prioritized.

    i. The first attempt to repair a leak should be made no later than thirty (30) days after discovery, unless parts are unavailable, the equipment requires shutdown to complete repair, or other good cause exists.

    ii. If parts are unavailable, they will be ordered promptly and the repairs should be made within thirty (30) working days of receipt of the parts.

    iii. For repairs that cannot be completed within thirty days due to the need to order parts, an exemption request to DPR section 41.4(5)(a) will be made to the BCER through eSubmission. For leaks not repaired within prescribed DPR timelines, the reason for delay, repair plan, anticipated repair date, and any regulatory exemption or turnaround justification shall be documented and retained.

    iv. Operations personnel is responsible for generating work orders to plan and schedule repairs.

POST-REPAIR INSPECTION

Follow-up inspections of all repair verification shall be completed using a method acceptable under the DPR and applicable BCER guidance.

PREVENTATIVE MAINTENANCE PRACTICES

Inspections during surveys incorporate the following practices to reduce fugitive emissions;

- Tighten loose connections (especially in a vibrating service).
- Plug or eliminate open-ended lines.
- Inspect and confirm positive isolation capability of separator and scrubber dump valves.
- Inspect and maintain pressurized pneumatic devices and pumps (e.g., controller case seals).
- Fix or replace pressurized pneumatic devices and pumps that are not operating within manufacturer written specifications.
- Inspect and maintain thief hatches.
- Close thief hatches if found open on tanks with vent gas control.
- Ensure combustion systems remain lit when facility is pressurized and active.
- Ensure control equipment (such as vapor recovery unit) is operational (except when it is down for maintenance) and is operating and maintained as designed.
- Look for and correct abnormal process events.

DATA MANAGEMENT

Data management procedures to comply with record keeping and reporting requirements are described in the sections below.

RECORD KEEPING AND REPORTING REQUIREMENTS

As per requirements of the BCER, results of comprehensive fugitive surveys will be submitted via the eSubmission portal to the BCER. Survey results and associated data will be submitted by May 31 for the surveys conducted in the previous calendar year.

RECORDING FUGITIVE EMISSIONS AND REPAIR INFORMATION

FortisBC Energy Inc.'s Data Management Systems (DMS) is designed to track, manage and analyze fugitive emissions data including:

- Completed comprehensive surveys and repairs (including work orders).
- Scheduled comprehensive surveys and upcoming repairs (including tagging).
- Facility and component performance data over time.

It is also used to identify trends and generate data summaries for use in regulatory reports.

LEAK SURVEY DATA

Leak survey data is recorded on a template provided by the BCER.

See Appendix A for leak survey data collection information.

RETENTION OF RECORDS

Records of all fugitive emission sources detected, assessments and repairs are retained for a period of not less than 7 years after the date the leak detection, quantification, or repair was complete in accordance with Section 43 of the BC Greenhouse Gas Emission Reporting Regulation.

REFERENCES

Alberta Energy Regulator (AER). 2018. *Manual 016: How to Develop a Fugitive Emissions Management Program*. December 2018.

British Columbia Energy Regulator (BCER). *Fugitive Emissions Management Program Guideline*. June 2025.

British Columbia Energy Regulator (BCER). *Energy Resource Activities Act* Aug 4, 2026.

Canadian Association of Petroleum Producers (CAPP). 2007. *Best Management Practice: Management of Fugitive Emissions at Upstream Oil and Gas Facilities*. January 2007.

Canadian Energy Pipeline Association (CEPA). 2016. *Best Management Practice: Fugitive Emissions at Natural Gas Transmission and Storage Facilities*. September 2016.

Drilling and Production Regulation, BC Reg 282/2010, <https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/282_2010> Current B.C. Laws DPR citation.

Enbridge. 2017. *Fugitive Emissions Management Plan: Canadian Gas Transmission and Midstream*. December 2017.

FortisBC Energy Inc. 2016. *Records Retention Policy*. November 2016.

Appendix A
Data Collection

Appendix A. *DATA COLLECTION*

Data required for annual eSubmission to the British Columbia Energy Regulator: Facility Data

- BCER facility identifier.
- Information on whether natural gas emitting pressurized pneumatic devices are present.
- Information on whether storage tanks are present and whether or not they are controlled.
- Reporting year.
- Number of days facility or well was pressurized or partially pressurized.

Measurement Device Data:

- Make.
- Model.
- Software version.
- Calibration date.
- Maximum margin of error.
- Calibration report.

Technician Data:

- Name.
- Company.

Leak Survey Data:

- Date.
- Ambient temperature.
- Barometric Pressure.
- Wind Speed.
- Precipitation.
- Info on whether survey was conducted internally or by 3rd party.
- Survey method.
- Detection instrument make.
- Detection instrument model.
- Leak(s) detected – direct measure data sheet.

Leak Data:

- Presence of H2S in leak.
- Whether the leak is in a building or not.
- Process block in which the leak is located.
- Leaking component type.
- Leaking component service type.
- Distance detection camera is located from leak.
- Distance quantification camera is located from leak.
- Leak rate.
- Leak methane content.
- Leak rate quantification method.
- Reason for non-measurement of leak (if applicable.

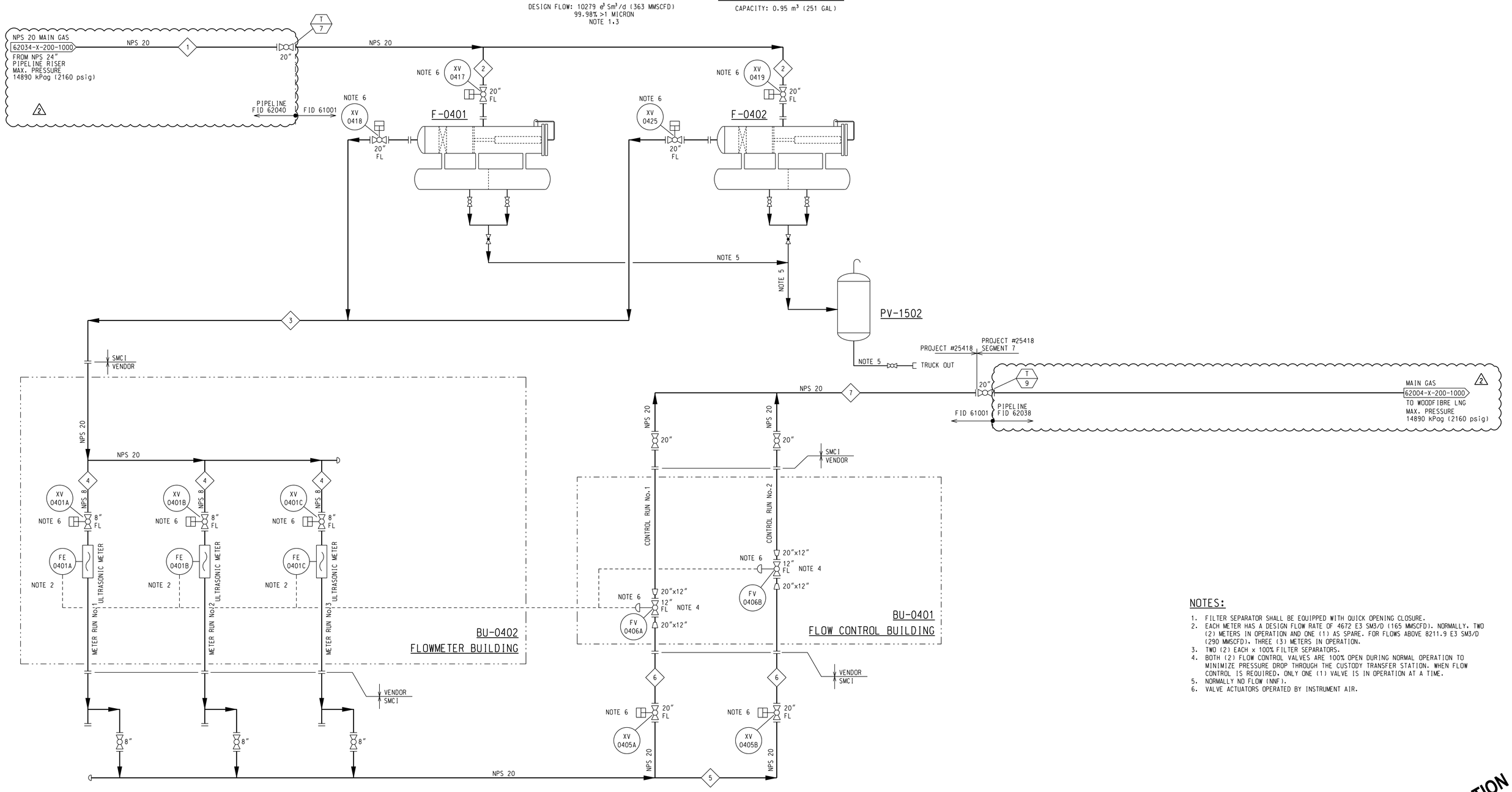
Repair data:

- Date of repair.
- Info on whether leak was repaired on same day as it was detected.
- Leak repair confirmation method.
- Leak repair method applied.
- Basis of delay of repair (if repaired after 30 days of detection).
- Info on whether the leak is scheduled to be repaired at the next turnaround.
- Anticipated date of next turnaround.

APPENDIX B

F-0401/0402
FILTER SEPARATORS #1/#2
DESIGN FLOW: 10279 e³Sm³/d (363 MMSCFD)
99.98% >1 MICRON
NOTE 1,3

PV-1502
LIQUID STORAGE VESSEL
CAPACITY: 0.95 m³ (251 GAL)



STREAM NO.	SYMBOL	UNITS	1	2	3	4	5	6	7
FLUID			N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS
FLOW	Q	E3 SM3/D (MMSCFD)	2463.6-9344.6 (87-330)	1231.8-9344.6 (43.5-330)	2463.6-9344.6 (87-330)	1231.8-4105.9 (43.5-145)	2463.6-9344.6 (87-330)	2463.6-9344.6 (87-330)	2463.6-9344.6 (87-330)
PRESSURE	P	kPag (PSIG)	5171-10101 (750-1465)	5171-10101 (750-1465)	5150-10080 (747-1462)	5150-10080 (747-1462)	5150-10080 (747-1462)	5150-10080 (747-1462)	5116-10045 (742-1457)
TEMPERATURE	T	℃ (℉)	4-11 (39-52)	4-11 (39-52)	4-11 (39-52)	4-11 (39-52)	4-11 (39-52)	4-11 (39-52)	4-11 (39-52)

NOTES:

1. FILTER SEPARATOR SHALL BE EQUIPPED WITH QUICK OPENING CLOSURE.
2. EACH METER HAS A DESIGN FLOW RATE OF 4672 E3 SM3/D (165 MMSCFD). NORMALLY, TWO (2) METERS IN OPERATION AND ONE (1) AS SPARE. FOR FLOWS ABOVE 8211.9 E3 SM3/D (290 MMSCFD), THREE (3) METERS IN OPERATION.
3. TWO (2) EACH x 100% FILTER SEPARATORS.
4. BOTH (2) FLOW CONTROL VALVES ARE 100% OPEN DURING NORMAL OPERATION TO MINIMIZE PRESSURE DROP THROUGH THE CUSTODY TRANSFER STATION. WHEN FLOW CONTROL IS REQUIRED, ONLY ONE (1) VALVE IS IN OPERATION AT A TIME.
5. NORMALLY NO FLOW (NNF).
6. VALVE ACTUATORS OPERATED BY INSTRUMENT AIR.

ISSUED FOR CONSTRUCTION
2025-08-18

BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
SOLARIS (FT19-03780)	R0	ISSUED FOR CONSTRUCTION	MIO	DEC	WTT	2022-12-14
SOLARIS (FT19-03780)	R1	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-11-15
SOLARIS (FT19-03780)	R2	ISSUED FOR CONSTRUCTION	APS	WTT	NEP	2025-08-18
			PREVIOUS DR. NO.-			SCALE- N.T.S.

Solaris

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

2025-10-08
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
W. T. T. TANG
33653
1000215
ENGINEER SEAL

WOODFIBRE LNG CUSTOMER STATION

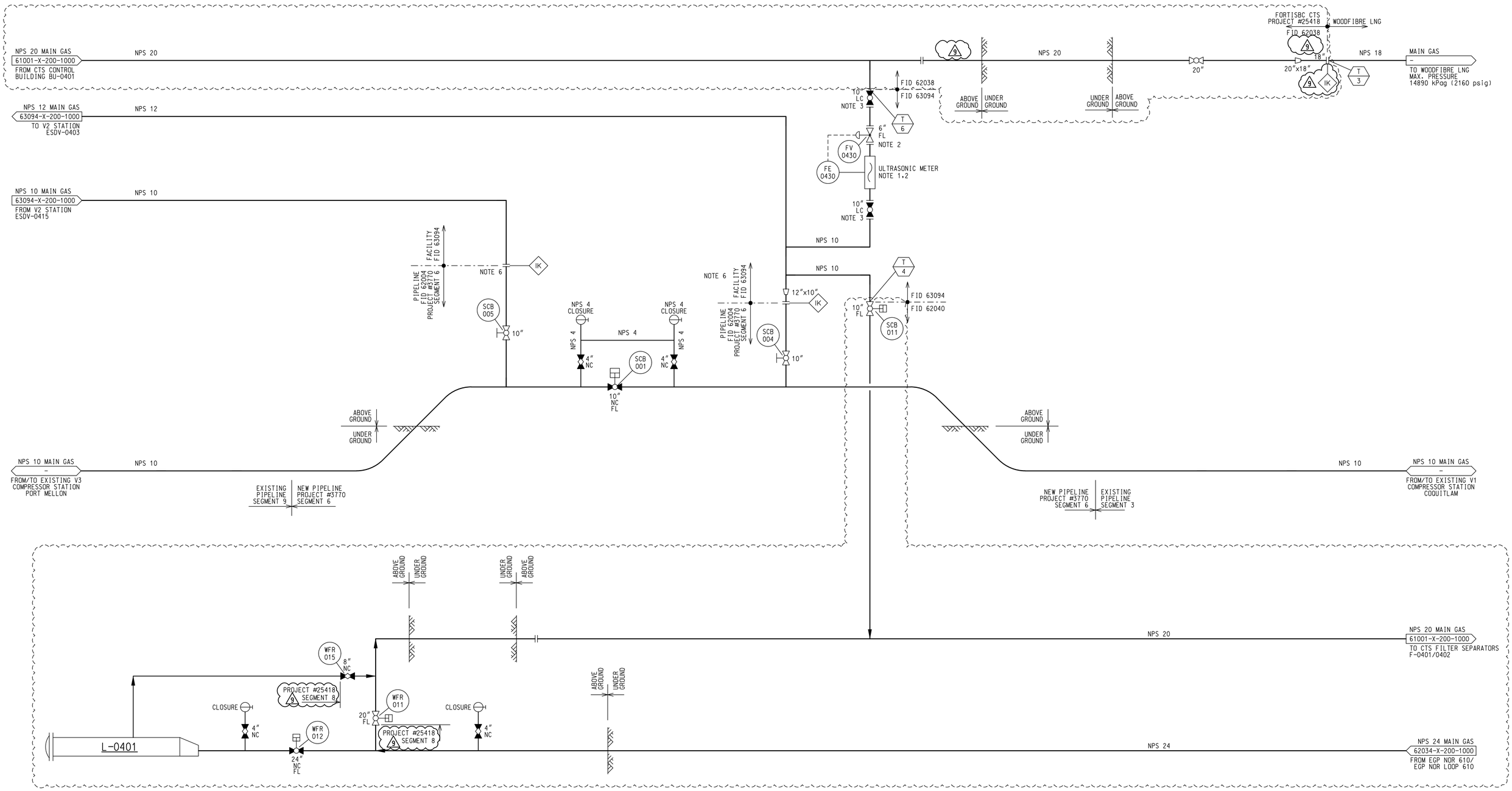
LNG CUSTOMER STATION

PROCESS FLOW DIAGRAM

DRAWING NUMBER 61001-X-200-1000-R2

LAST SAVED: 9/26/2025 12:33:38 PM BY: JUNPOOL.SUN
PLOTTED: 9/26/2025 12:33:40 PM. BY: JUNPOOL SUN

FILENAME: C:\USERS\JUNPOOL.SUN\APPDATA\LOCAL\SOLARIS-MCI\SMCI.BI.2020\TEMPDWGS\61001-X-200-1000-R2.DWG



NOTES:

1. NORMALLY NO FLOW (NFF).
2. FE-0430 AND FV-0430 LOCATED ON ILI/COMMISSIONING LINE IS SIZED FOR RANGE OF 40 MMSCFD TO 65 MMSCFD.
3. MANUAL VALVE ONLY OPEN DURING COMMISSIONING OR ILI PIGGING OPERATION.
4. CATHODIC PROTECTION (CP) OF THE EGP NOR 610/LOOP 610, THE WFX LTL 508, AND THE EXISTING VAN MAN 273 PIPELINE IS ACHIEVED THROUGH EXISTING CP SYSTEMS ON THE VAN MAN 273 PIPELINE SYSTEM AUGMENTED WITH INSTALLATION OF A NEW CP SYSTEM NEAR V2 COMPRESSOR STATION. ELECTRICAL ISOLATION OF VARIOUS PIPELINES FROM THE PIPING AND INFRASTRUCTURE WITHIN V2 IS ACHIEVED THROUGH THE INSTALLATION OF INSULATING KITS (IKs) AT VARIOUS LOCATIONS. ELECTRICAL ISOLATION OF THE WFX LTL 508 PIPELINE FROM THE WOODFIBRE SITE IS ACHIEVED VIA INSTALLATION OF AN IK AT THE DELIVERY POINT. (9)
5. DELETED.
6. VAN MAN 273 RISER PIPING TO BE TERMINATED ABOVE GRADE WITH BLIND FLANGE WITH NPS 1 TAP FOR NITROGEN BLANKET IN ACCORDANCE WITH EGP PIPELINE PRESERVATION PLAN, M0012-PIP-PLN-1001.
7. DELETED.
8. DELETED.

LEGEND:

SCOPE CLOUD

REVISION CLOUD

ISSUED FOR CONSTRUCTION
2025-08-18

BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
SOLARIS (FT19-03780)	R6	ISSUED FOR CONSTRUCTION	WHM	AEL	WTT	2024-02-16
SOLARIS (FT19-03707)	R7	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
SOLARIS (FT19-03780)	R8	RECORD DRAWING	AQC	RBC	WTT	2024-09-30
SOLARIS (FT19-03780)	R9	ISSUED FOR CONSTRUCTION	APS	WTT	NEP	2025-08-18
			PREVIOUS DR. NO.-			SCALE- N.T.S.

Solaris

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

2025-10-02 PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA W. T. T. TANG # 33653 1000215

ENGINEER SEAL

VANCOUVER MAINLAND 273 TP PIPELINE

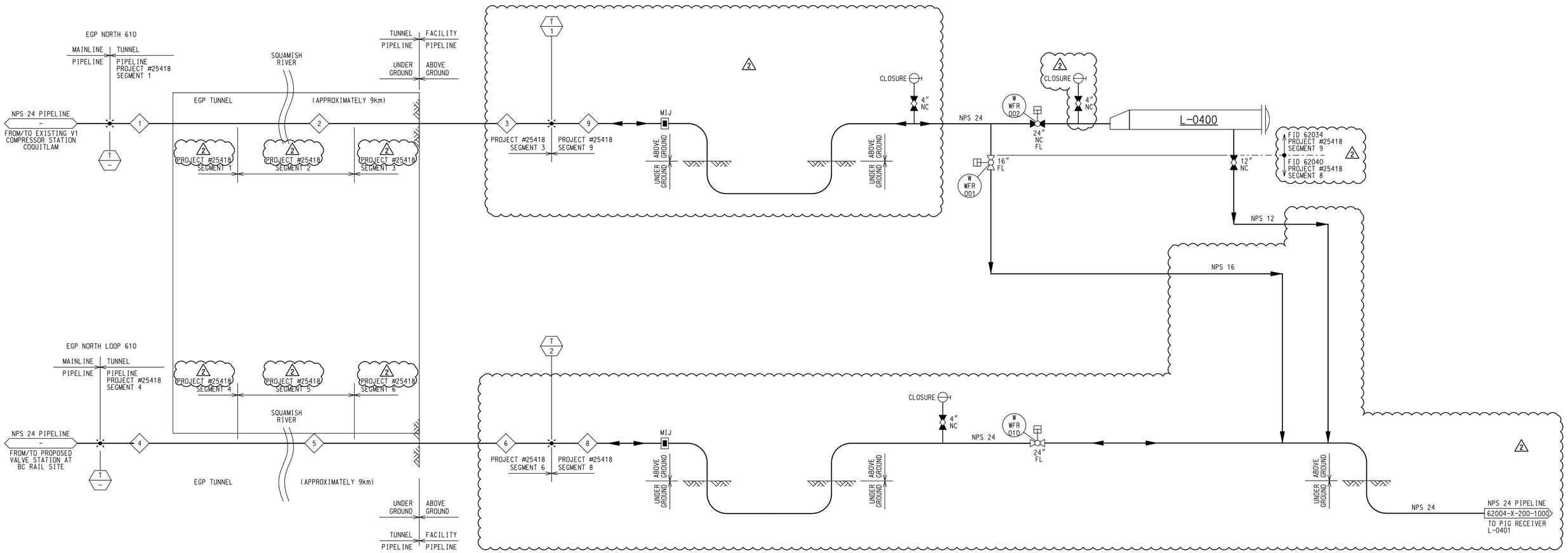
VAN MAN 273 RELOCATION WOODFIBRE LATERAL 508 EGP NOR LOOP 610 PIPELINE FLOW DIAGRAM

DRAWING NUMBER 62004-X-200-1000-R9

LAST SAVED: 9/29/2025 5:12:31 PM BY: MICHAEL.OI
PLOTTED: 9/29/2025 5:12:38 PM BY: MICHAEL OI

FILENAME: C:\USERS\MICHAEL.OI\APPDATA\LOCAL\SOLARIS-WCI\SWCI_BI_2020\TEMPDWGS\62004-X-200-1000-R9.DWG

L-0400 2
PIG RECEIVER
SIZE NPS 24 x NPS 30



SEGMENT / PARAMETER	DESCRIPTION	1	2	3	4	5	6	8	9
FLUID	DESIGN	SWEET NATURAL GAS	SWEET NATURAL GAS	SWEET NATURAL GAS	SWEET NATURAL GAS	SWEET NATURAL GAS	SWEET NATURAL GAS	SWEET NATURAL GAS	SWEET NATURAL GAS
PRESSURE kPag (PSIG)	MOP	14890 (2160)	14890 (2160)	14890 (2160)	14890 (2160)	14890 (2160)	14890 (2160)	14890 (2160)	14890 (2160)
FLOW RATE E3 SM3/D (MMSCFD)	DESIGN	9344.6 (330)	9344.6 (330)	9344.6 (330)	9344.6 (330)	9344.6 (330)	9344.6 (330)	9344.6 (330)	9344.6 (330)
H2S (% MOL)	DESIGN	4.16E-4	4.16E-4	4.16E-4	4.16E-4	4.16E-4	4.16E-4	4.16E-4	4.16E-4
CLASS LOCATION	DESIGN	2	1	2	2	1	2	2	2

2

ISSUED FOR CONSTRUCTION
2025-08-18

NOTES:

1. CATHODIC PROTECTION (CP) SEPARATION OF EGP NOR 610/LOOP 610 @ WLNG FROM THE EGP NOR 610/LOOP 610 IN THE TUNNEL IS ACHIEVED THROUGH INSTALLATION OF MONOLITHIC ISOLATION JOINTS (MIJs) ON THE TWO PIPELINES EXITING THE TUNNEL. INSTALLATION OF MIJs ENSURES THE CP SYSTEMS DESIGNED FOR THE TUNNELS REMAIN SEPARATE FROM CP SYSTEMS DESIGNED FOR PIPELINE SEGMENTS OUTSIDE THE TUNNEL. SUCH SEPARATION ALLOWS CP SYSTEM CONTROL BOTH INSIDE AND OUTSIDE THE TUNNEL. 2
2. DELETED.
3. PIPELINE SYSTEM OVERPRESSURE PROTECTION PROVIDED BY V1 COQUITLAM COMPRESSOR STATION.
4. REFERENCE DRAWING - PIPELINE SCHEMATIC 62034-X-OGC-1000-R0.

Solaris

SOLARIS (FT19-03780)	R0	ISSUED FOR CONSTRUCTION	MIQ	WTT	DEC	2022-12-06
SOLARIS (FT19-03780)	R1	ISSUED FOR CONSTRUCTION	MIQ	DEC	WTT	2022-12-14
SOLARIS (FT19-03780)	R2	ISSUED FOR CONSTRUCTION	APS	WTT	NEP	2025-08-18
BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
			PREVIOUS DR. NO.-			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

2025-10-02
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
W. T. T. TANG
33653
1000215
ENGINEER SEAL

EGP NORTH 610 TP PIPELINE

EGP NORTH 610
EGP NORTH LOOP 610
PIPELINE FLOW DIAGRAM

DRAWING NUMBER 62034-X-200-1000-R2

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PLOTTED: 10/2/2025 10:07:19 AM. BY: MICHAEL OI

FILENAME: C:\USERS\MICHAEL.OI\APPDATA\LOCAL\SOLARIS-MCI\SMCI.BI.2020\TEMPDWGS\62034-X-200-1000-R2.DWG

PV-0401
STATION CYCLONIC SEPARATOR

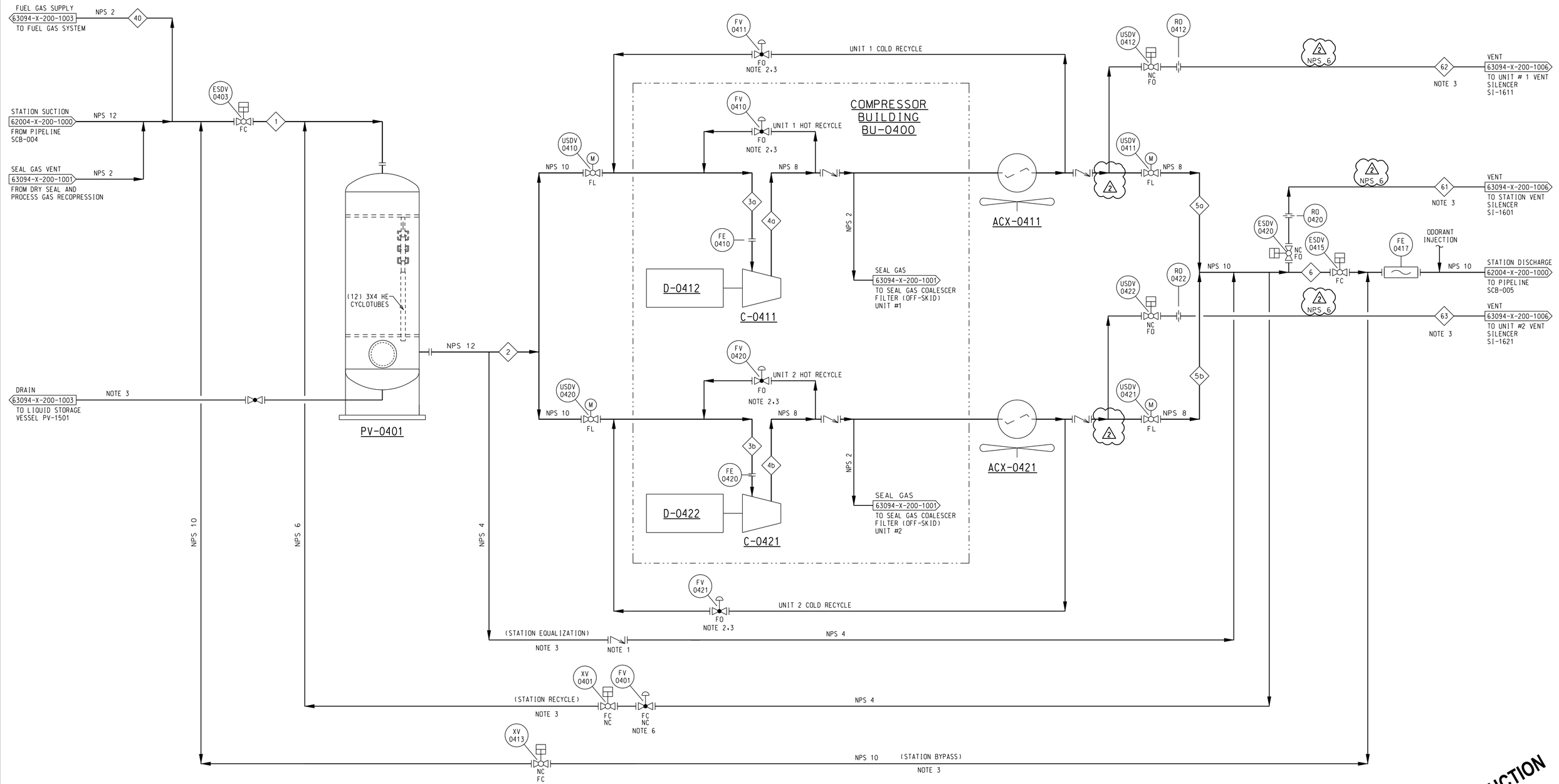
RATED CAPACITY: 4049.3 e^3Sm^3/D (143 MMSCFD)
3 MICRON

C-0411/0421
COMPRESSOR UNITS # 1/2

HP GAS TURBINE 4623 KW (6200 HP)
CENTRIFUGAL COMPRESSOR
RATED CAPACITY: 2024.65 e^3Sm^3/D (71.5 MMSCFD) (EACH)

ACX-0411/0421
UNIT #1/2 AFTERCOOLERS

DUTY: 4223 KW (14.410 MMBTU/H)



			(NOTE 4)		COMPRESSION UNIT # 1 (NOTE 5)			COMPRESSION UNIT # 2 (NOTE 5)			
STREAM NO.	SYMBOL	UNITS	1	2	3a	4a	5a	3b	4b	5b	6
FLUID			N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS
FLOW	Q	e3 Sm3/d (MMSCFD)	4049.3 (143)	4049.3 (143)	2024.65 (71.5)	2024.65 (71.5)	2024.65 (71.5)	2024.65 (71.5)	2024.65 (71.5)	2024.65 (71.5)	4049.3 (143)
PRESSURE	P	kPag (psig)	5171 (750)	5150 (747)	5068 (735)	14962 (2170)	14893 (2160)	5068 (735)	14962 (2170)	14893 (2160)	14893 (2160)
TEMPERATURE	T	℃ (℉)	10 (50)	10 (50)	10 (50)	120 (247.7)	43 (110)	10 (50)	120 (247.7)	43 (110)	43 (110)

*AT STANDARD CONDITIONS OF 15 ℃ AND ABSOLUTE PRESSURE 101.325 kPA

ISSUED FOR CONSTRUCTION
2024-04-30

NOTES:

1. STATION EQUALIZATION CHECKED IS USED TO ALLOW BLOWDOWN OF SUCTION PIPING THROUGH ESDV-0420.
2. RECYCLE/ANTI SURGE CONTROL VALVES CONFIGURATION BY SOLAR TURBINES.
3. NORMALLY NO FLOW
4. INLET FACILITY EDGE CONDITIONS BASED ON PROCESS DESIGN BASIS 03707-32-2100-DBM-0001.
5. NUMBER OF COMPRESSOR UNITS IN OPERATION DEPENDS ON GAS TRANSPORTED BY THE SYSTEM. FLOW RATES ARE FOR MAXIMUM INLET TO THE STATIONS OF 4049.3 e3 Sm3/d (143 MMSCFD).
6. FV-0401 IS USED FOR STATION RECYCLE AND SIZED FOR 2123.7 E3SM3/D (75 MMSCFD).

Solaris

BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-12-13
SOLARIS (FT19-03707)	R2	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
			PREVIOUS DR. NO.-			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
Y. F. A. L. H. ELSAKHAWY
35884
ENGINEER
Permit to Practice No. 1000215
Apr. 30 2024

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

MAIN GAS COMPRESSION
UNIT 1 & 2
PROCESS FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1000-R2

LAST SAVED: 4/29/2024 8:55:43 AM BY: ARDEN.SPARVIER
PLOTTED: 4/29/2024 8:56:19 AM BY: ARDEN SPARVIER

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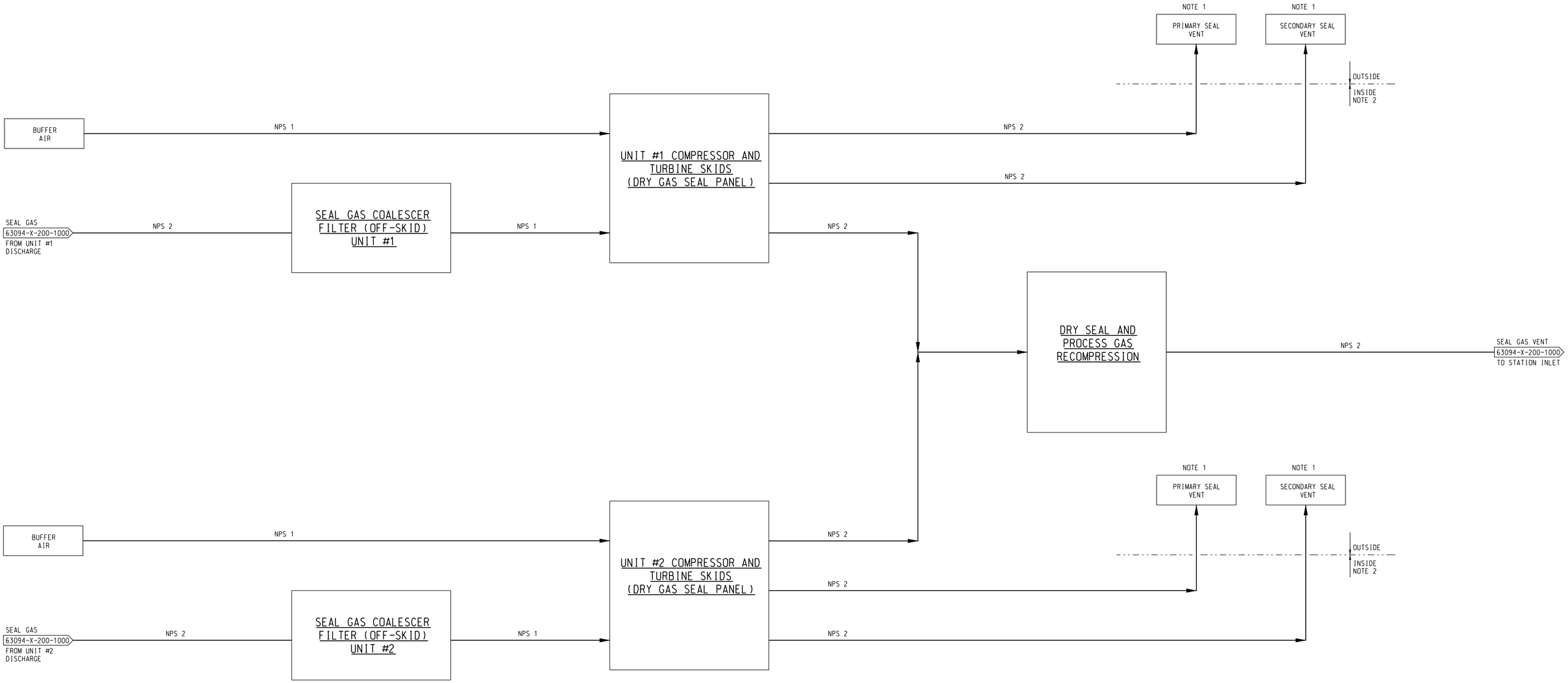


ISSUED FOR CONSTRUCTION
2023-12-13

NOTES:

1. VENT TO SAFE LOCATION.
2. DRY GAS SEAL SYSTEM AND DRY SEAL AND PROCESS GAS RECOMPRESSION IS LOCATED INSIDE COMPRESSOR BUILDING BU-0400.

SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-12-13
BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
			PREVIOUS DR. NO.-			SCALE- N.T.S.

Solaris

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

D. JUNE MANECHA # 45768 PROFESSIONAL ENGINEER BRITISH COLUMBIA

Permit to Practice No. 1000215 Dec. 15 2023

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

DRY GAS SEAL SYSTEM
UNIT 1 & 2
PROCESS FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1001-R1

LAST SAVED: 12/14/2023 3:54:58 PM BY: MICHAEL.OI
PLOTTED: 12/14/2023 3:55:01 PM. BY: MICHAEL.OI

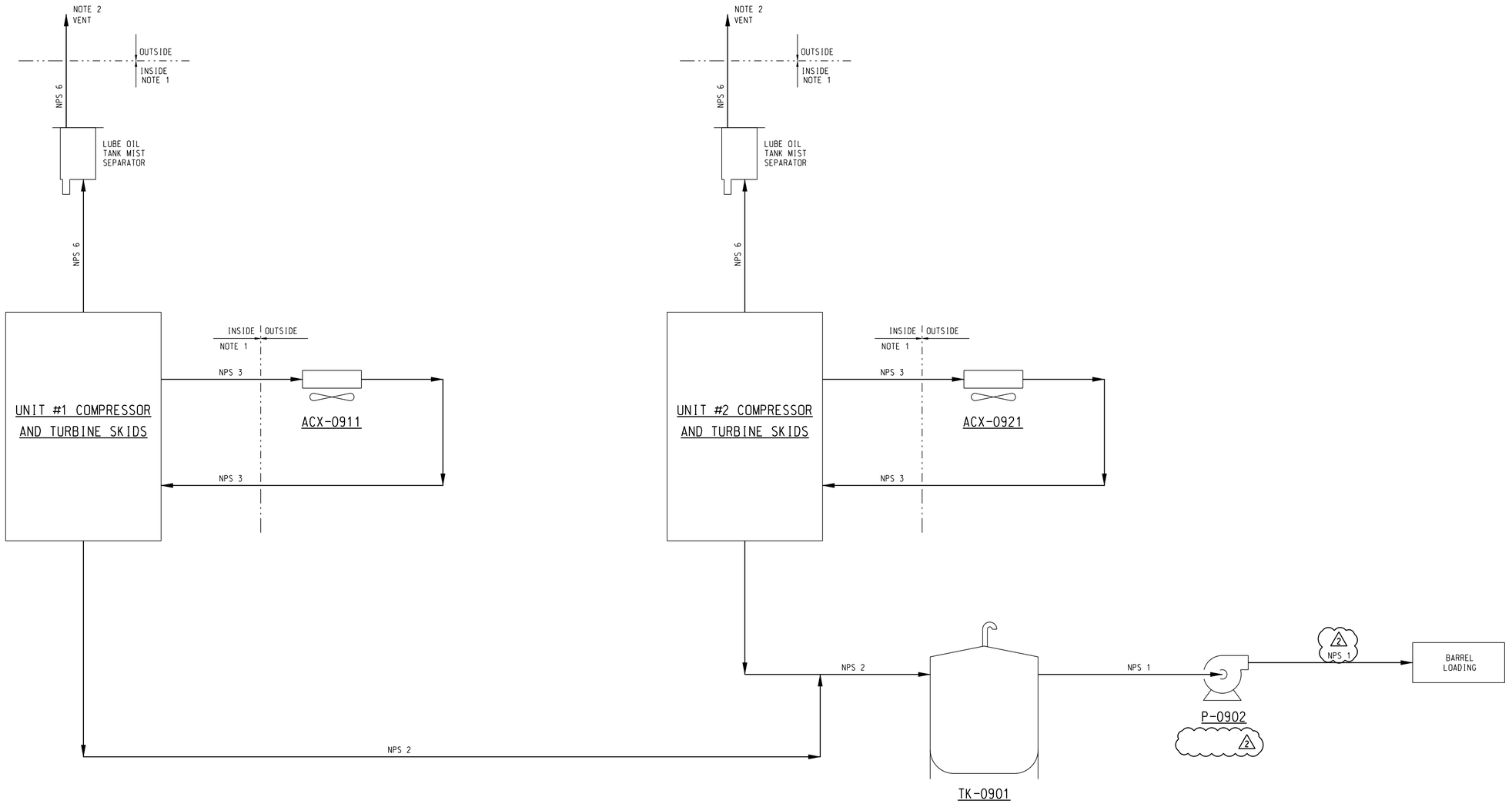
FILENAME: C:\USERS\MICHAEL.OI\APPDATA\LOCAL\SOLARIS-WC1\SWC1.B1.2020\TEMPDWGS\63094-X-200-1001-R1.DWG

ACX-0911
(SOLAR TAG: HE-3220)
UNIT #1 LUBE OIL COOLER
DUTY: 202.2 KW (689,834 BTU/HR)

ACX-0921
(SOLAR TAG: HE-3220)
UNIT #2 LUBE OIL COOLER
DUTY: 202.2 KW (689,834 BTU/HR)

TK-0901
WASTE LUBE OIL
TANK
CAPACITY: 0.76 m^3 (200 GAL)

P-0902
WASTE OIL
PUMP
RATED: 300 GPM @ 150 FT HEAD kPag (2)



2

ISSUED FOR CONSTRUCTION
2024-04-30

NOTES:
1. LUBE OIL SYSTEM IS LOCATED INSIDE THE COMPRESSOR BUILDING BU-0400.
2. VENT TO SAFE LOCATION.

SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-12-13
SOLARIS (FT19-03707)	R2	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
			PREVIOUS DR. NO.-			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

Permit to Practice No. 1000215 Apr. 30 2024

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

LUBE OIL SYSTEM
UNIT 1 & 2
UTILITY FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1002-R2

LAST SAVED: 4/30/2024 8:32:14 AM BY: ARDEN.SPARVIER
PLOTTED: 4/30/2024 8:32:19 AM. BY: ARDEN SPARVIER

FILENAME: C:\USERS\ARDEN.SPARVIER\APPDATA\LOCAL\SOLARIS-MCI\SMCI_BI.2020\TEMPDWGS\63094-X-200-1002-R2.DWG

PV-1501
LIQUID STORAGE VESSEL
CAPACITY: 0.95 m^3 (251 GAL)
NOTE 2

F-0501
FUEL GAS FILTER SEPARATOR
CAPACITY: 115.25 e^3Sm^3/D (4.07 MMSCFD)
99.5% > 1 MICRON
99.9% >10 MICRON

HT-0502
FUEL GAS HEATER
DUTY: 152 kW (0.519 MMBTU/hr)

F-0514
(SOLAR TAG: F-2106)
UNIT #1 FUEL GAS FILTER
10 MICRON

F-0524
(SOLAR TAG: F-2106)
UNIT #2 FUEL GAS FILTER
10 MICRON

BU-0500
FUEL GAS BUILDING

HEATING MEDIUM SUPPLY
63094-X-200-1005
FROM BOILERS
B-1003/1004

FUEL GAS SUPPLY
63094-X-200-1000
FROM SUCTION HEADER

TO FG BUILDING HEATER

FROM FG BUILDING HEATER

HEATING MEDIUM RETURN
63094-X-200-1005
TO PUMPS P-1005/1006

DRAIN
63094-X-200-1000
FROM CYCLONIC SEPARATOR
PV-0401

PV-1501

TRUCK OUT

VENT
63094-X-200-1006
TO STATION VENT
SILENCER SI-1601

COMPRESSOR AND TURBINE SKIDS UNIT #1

COMPRESSOR AND TURBINE SKIDS UNIT #2

AUXILIARY BUILDING
BU-1400

HEATING BOILER #1
B-1003

HEATING BOILER #2
B-1004

STANDBY GENERATOR
G-0803

STREAM NO.	SYMBOL	UNITS	40	41	42	43	44	45	46 (NOTE 3)	47 (NOTE 4)
FLUID			N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS	N. GAS
FLOW	Q	sm3/hr (MMSCFD)	4365 (3.7)	4365 (3.7)	4365 (3.7)	4365 (3.7)	4011 (3.4)	354 (0.3)	4011 (3.4)	354 (0.3)
PRESSURE	P	kPag (psig)	6550 (950)	6529 (947)	6494 (942)	3999 (580)	3999 (580)	3999 (580)	1930 (280)	344 (50)
TEMPERATURE	T	℃ (℉)	0 (32)	0 (32)	58.27 (136.9)	46.1 (115)	46.1 (115)	46.1 (115)	37.77 (100)	30 (86)

*AT STANDARD CONDITIONS OF 15 ℃ AND ABSOLUTE PRESSURE 101.325 kPA

ISSUED FOR CONSTRUCTION
2024-04-30

NOTES:
1. NORMALLY NO FLOW.
2. VENT TO SAFE LOCATION.
3. TURBINE FUEL GAS PRESSURE AND TEMPERATURE DELIVERY AS PER SOLAR REQUIREMENTS.
4. POWER GENERATOR AND HEATING BOILERS FUEL GAS CONSUMPTION AND DELIVERY PRESSURE BASED ON 0.5 MW POWER GENERATOR AND CAPACITY OF HEATING BOILERS OF 1.3 MM BTU/hr (FOR FG HEATER DESIGN CAPACITY).
5. FEI TO HAVE A BLACK START-UP PROCEDURE IN PLACE TO PREVENT DAMAGING PIPE AND EQUIPMENT BY LOW TEMPERATURE AS A RESULT OF JT EFFECT WHEN GLYCOL IS NOT AVAILABLE.

BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIQ	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
			PREVIOUS DR. NO.-			SCALE- N.T.S.

Solaris

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — V. F. A. L. H. ELSAKHAWY — 33094 — Permit to Practice No. 1000215 — May. 1 2024

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

FUEL GAS SYSTEM

PROCESS FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1003-R1

LAST SAVED: 5/1/2024 1:21:03 PM BY: ARDEN.SPARVIER
PLOTTED: 5/1/2024 1:22:38 PM. BY: ARDEN SPARVIER

FILENAME: C:\USERS\ARDEN.SPARVIER\APPDATA\LOCAL\SOLARIS-MCI\SMCI_BI_2020\TEMPDWGS\63094-X-200-1003-R1.DWG

CA-0601/0602/0603
PACKAGED AIR COMPRESSOR

CAPACITY (FAD): 2.29 m^3/min (81 CFM)

NOTE 1

PV-0607
WET AIR RECEIVER

CAPACITY: 0.91 m^3 (240 GAL)

AD-0604/0608
AIR DRYERS

CAPACITY: 4.53 Sm^3/min (160 SCFM)

NOTE 2

SE-0605
INSTRUMENT AIR COMPRESSOR PACKAGE

PV-0605
STATION DRY AIR RECEIVER

CAPACITY: 11.21 m^3 (2961 GAL)

BU-1400
AUXILIARY BUILDING

NOTE 5

INSIDE | OUTSIDE

SE-0605
INSTRUMENT AIR
COMPRESSOR PACKAGE

NOTE 5

AIR INTAKE

M

CA-0601

NOTE 1

AIR INTAKE

M

CA-0602

NOTE 1

AIR INTAKE

M

CA-0603

NOTE 1

PV-0607

NOTE 4 AT DP

AD-0604

NOTE 2

NOTE 4 AT DP

AD-0608

NOTE 2

PCV 0613

NOTE 3

PCV 0614

INSTRUMENT AIR TO AUXILIARY AREA

PV-0605

50

NOTE 6

FID 63094 | FID 61001

INSTRUMENT AIR TO CTS

INSTRUMENT AIR TO AFTER COOLERS AREA

INSTRUMENT AIR TO STATION CYCLONIC SEPARATOR AREA

INSTRUMENT AIR TO INLET/OUTLET ESDV'S

UTILITY AIR TO AUXILIARY AREA

1

BU-0400
INSTRUMENT AIR TO COMPRESSOR BUILDING (UNIT #1 & #2)

BU-0500
INSTRUMENT AIR TO FUEL GAS BUILDING

BU-1402
INSTRUMENT AIR TO ODORANT INJECTION BUILDING

BU-0400
UTILITY AIR TO COMPRESSOR BUILDING

UTILITY AIR TO AFTER COOLERS AREA

UTILITY AIR TO SILENCER AREA

BU-0500
UTILITY AIR TO FUEL GAS BUILDING

UTILITY AIR TO STATION CYCLONIC SEPARATOR AREA

UTILITY AIR TO INLET/OUTLET ESDV'S

1

STREAM NO.	SYMBOL	UNITS	50 (NOTE 6)
FLUID			AIR
FLOW	Q	m3/min (CFM)	1.61 (57)-3.93 (138)
PRESSURE	P	kPag (psig)	827 (120)
TEMPERATURE	T	℃ (℉)	AMB

*AT STANDARD CONDITIONS OF 15 ℃ AND ABSOLUTE PRESSURE 101.325 kPA

ISSUED FOR CONSTRUCTION
2024-04-30

NOTES:

1. INSTRUMENT AIR COMPRESSOR QUANTITY AND CAPACITY HAVE BEEN PROVIDED BY FEI.
2. EACH DRYER IS DESIGNED FOR TWO (2) INSTRUMENT AIR COMPRESSOR CAPACITY.
3. UTILITY AIR FLOW UNDER NORMAL OPERATION IS ZERO.
4. DEW POINT ANALYZER. INSTRUMENT AIR DEW POINT IS AT -40 ℃(-40 ℉).
5. INSTRUMENT AIR COMPRESSOR PACKAGE IS LOCATED INSIDE THE AUXILIARY BUILDING BU-1400.
6. FLOW RATE RANGE BASED ON CAPACITY ONE (1) OR TWO (2) COMPRESSORS IN OPERATION MINUS 0.68 Sm3/min (24 SCFM) PURGING FLOW FOR AIR DRYERS.

Solaris

BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
			PREVIOUS DR. NO.-			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — Y. F. A. L. H. ELSAKHAWY — 35084 — Permit to Practice No. 1000215 — May. 1 2024

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

COMPRESSED AIR SYSTEM

PROCESS FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1004-R1

LAST SAVED: 5/1/2024 1:21:00 PM BY: ARDEN.SPARVIER
PLOTTED: 5/1/2024 1:22:33 PM. BY: ARDEN SPARVIER

FILENAME: C:\USERS\ARDEN.SPARVIER\APPDATA\LOCAL\SOLARIS-MCI\SMCI.BI.2020\TEMPDWGS\63094-X-200-1004-R1.DWG

P-1002
HEAT MEDIUM FILL PUMP
CAPACITY: 2.724 m³/h (12 GPM)
NOTE 2

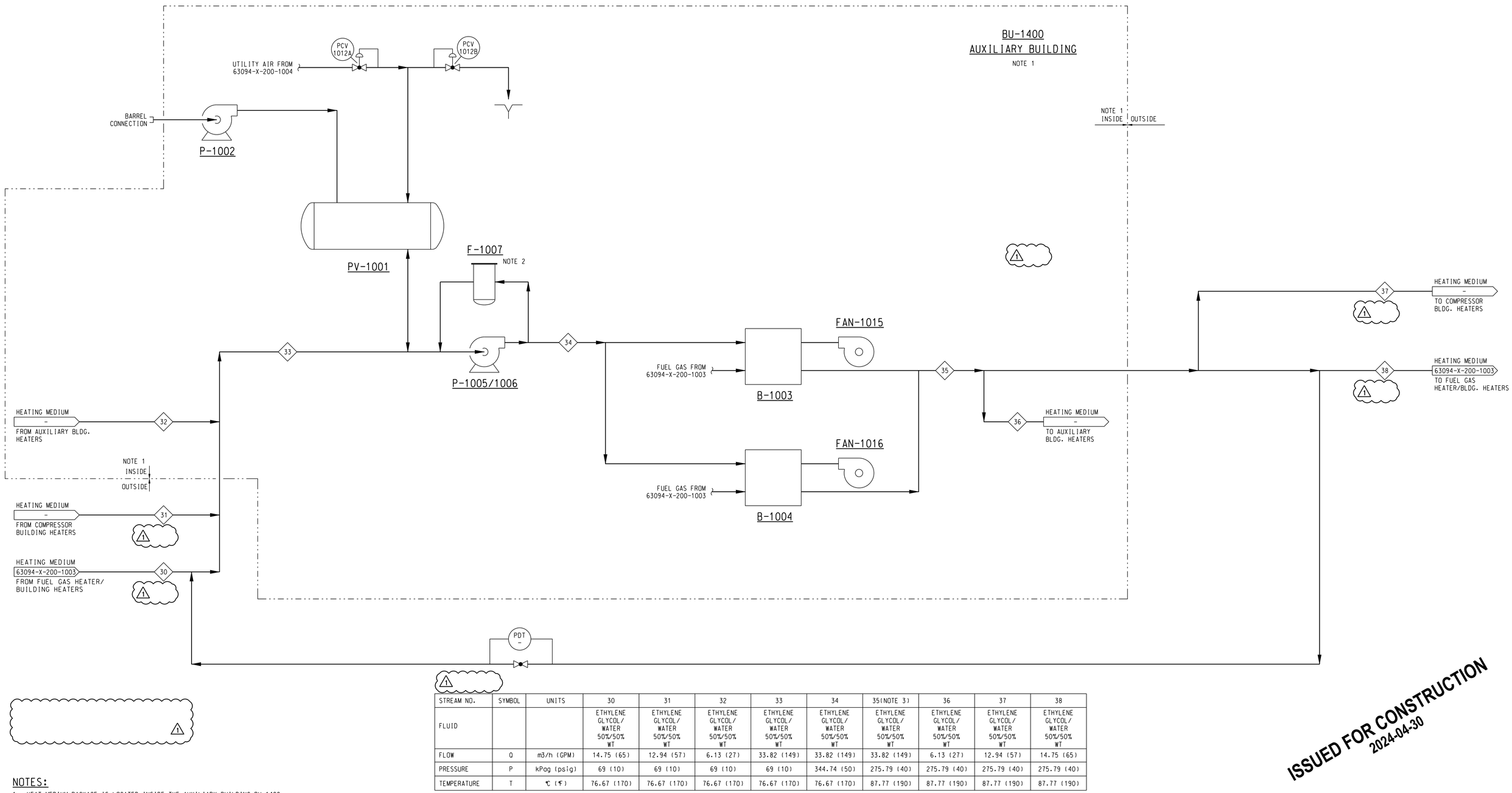
PV-1001
EXPANSION TANK
CAPACITY: 1.9 m³ (500 GAL)
NOTE 2

F-1007
HEATING MEDIUM FILTER
CAPACITY: 8 m³/h (35.2 GAL)
10 MICRON

P-1005/1006
HEATING MEDIUM PUMPS #1 & 2
CAPACITY: 50 m³/hr @ 30.8 m
(220 GPM @ 101 ft)

B-1003/1004
HEATING BOILERS #1 & 2
OUTPUT DUTY: 381 kW (1.3 MMBTU/h)

FAN-1015/1016
HEATER BLOWERS



STREAM NO.	SYMBOL	UNITS	30	31	32	33	34	35(NOTE 3)	36	37	38
FLUID			ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT	ETHYLENE GLYCOL/ WATER 50%/50% WT
FLOW	Q	m3/h (GPM)	14.75 (65)	12.94 (57)	6.13 (27)	33.82 (149)	33.82 (149)	33.82 (149)	6.13 (27)	12.94 (57)	14.75 (65)
PRESSURE	P	kPag (psig)	69 (10)	69 (10)	69 (10)	69 (10)	344.74 (50)	275.79 (40)	275.79 (40)	275.79 (40)	275.79 (40)
TEMPERATURE	T	℃ (℉)	76.67 (170)	76.67 (170)	76.67 (170)	76.67 (170)	76.67 (170)	87.77 (190)	87.77 (190)	87.77 (190)	87.77 (190)

ISSUED FOR CONSTRUCTION
2024-04-30

NOTES:

1. HEAT MEDIUM PACKAGE IS LOCATED INSIDE THE AUXILIARY BUILDING BU-1400.
2. SLIP-STREAM FILTER CIRCULATION OF 8 m3/h (35 GPM) INCLUDED IN HEAT MEDIUM CIRCULATION CAPACITY.
3. ASSUMED 69 kPa (10 psi) PRESSURE DROP FOR HEATER AND PIPING. DELIVERY PRESSURE OF 276 kPag (40 psig) FROM HYDRAULIC CALCULATIONS.

SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
			PREVIOUS DR. NO.-			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

Permit to Practice No. 1000215 May. 1 2024

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

HEAT MEDIUM SYSTEM

PROCESS FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1005-R1

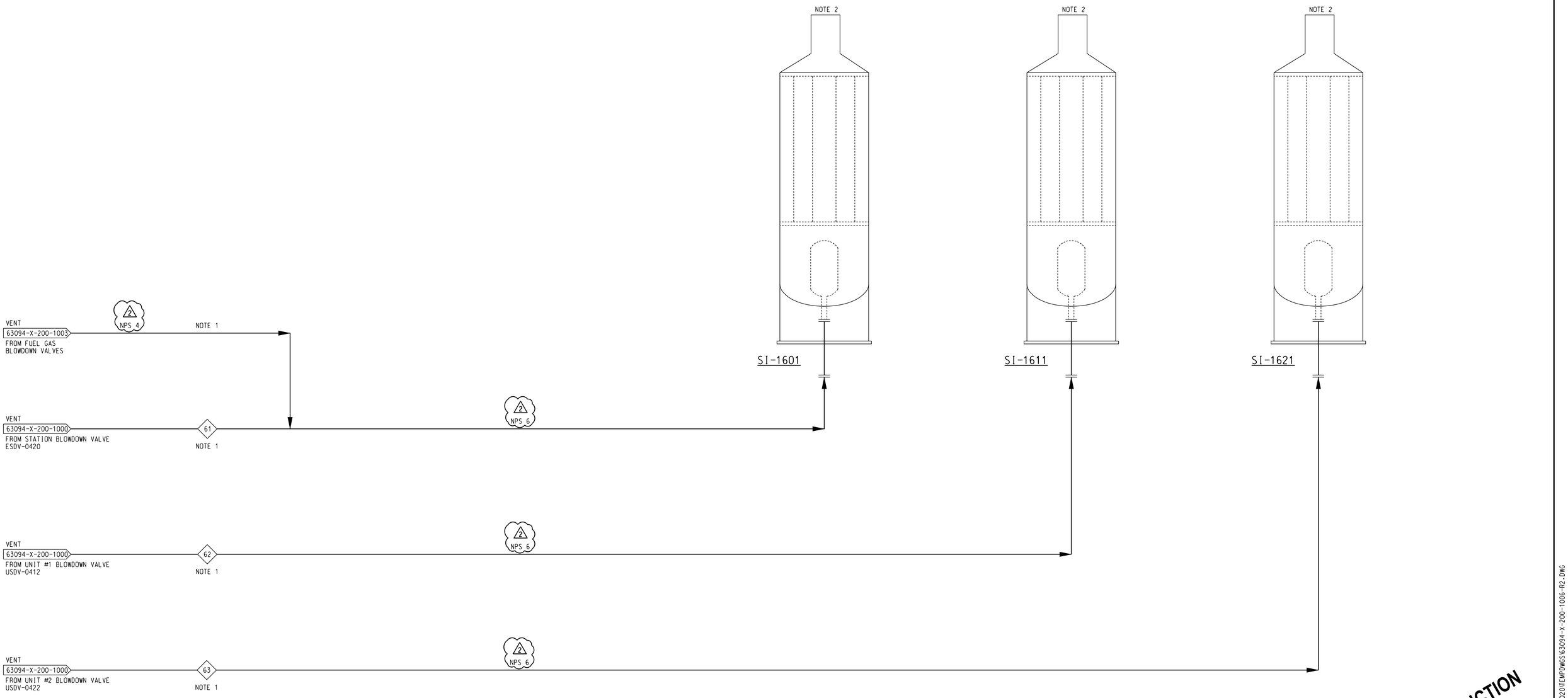
LAST SAVED: 5/1/2024 1:20:57 PM BY: ARDEN.SPARVIER
PLOTTED: 5/1/2024 1:22:28 PM. BY: ARDEN SPARVIER

FILENAME: C:\USERS\ARDEN.SPARVIER\APPDATA\LOCAL\SOLARIS-WC1\SWC1.B1.2020\TEMPDWGS\63094-X-200-1005-R1.DWG

SI-1601
STATION VENT SILENCER
CAPACITY: 729.86 e^3SM^3/D (25.78 MMSCFD)

SI-1611
UNIT #1 VENT SILENCER
CAPACITY: 443.23 e^3SM^3/D (15.65 MMSCFD)

SI-1621
UNIT #2 VENT SILENCER
CAPACITY: 443.23 e^3SM^3/D (15.65 MMSCFD)



STREAM NO.	SYMBOL	UNITS	61	62	63
FLUID			N. GAS	N. GAS	N. GAS
FLOW	Q	e3m3/d (MMSCFD)	0-729.86 (0-25.78)	0-443.23 (0-15.65)	0-443.23 (0-15.65)
PRESSURE	P	kPag (psig)	0-161 (0-23)	0-62 (0-9)	0-62 (0-9)
TEMPERATURE	T	℃ (℉)	-53 TO 43 (-64 TO 110)	-45 TO 43 (-49 TO 110)	-45 TO 43 (-49 TO 110)

ISSUED FOR CONSTRUCTION
2024-04-30

NOTES:
1. NORMALLY NO FLOW.
2. VENT TO SAFE LOCATION.

Solaris

SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-12-13
SOLARIS (FT19-03707)	R2	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
			PREVIOUS DR. NO.- .			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA Y. F. A. L. H. ELSAKHAWY # 35084 ENGINEER
Permit to Practice No. 1000215 Apr. 30 2024

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

VENT SYSTEM
STATION, UNIT #1 AND UNIT #2 VENT SILENCERS
UTILITY FLOW DIAGRAM

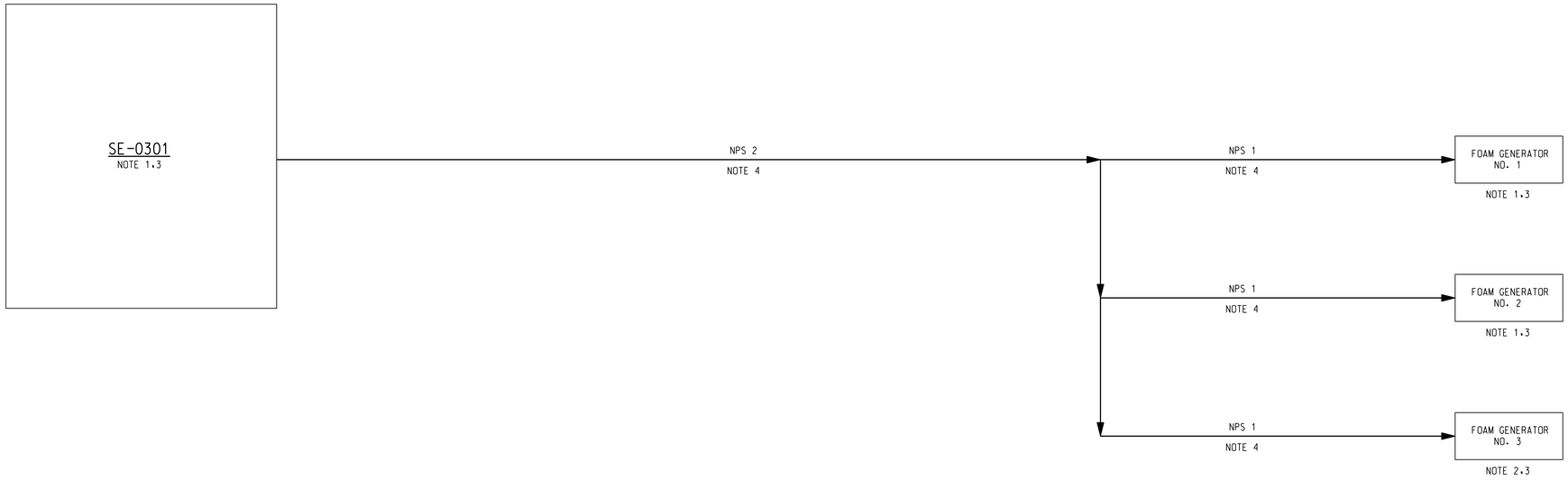
DRAWING NUMBER 63094-X-200-1006-R2

LAST SAVED: 4/29/2024 8:55:39 AM BY: ARDEN.SPARVIER
PLOTTED: 4/29/2024 8:56:14 AM BY: ARDEN SPARVIER

FILENAME: C:\USERS\ARDEN.SPARVIER\APPDATA\LOCAL\SOLARIS-MCI\SMCI_BI_2020\TEMPDWGS\63094-X-200-1006-R2.DWG

SE-0301
FOAM FIRE
SUPPRESSION PACKAGE

WATER CAPACITY: 1.8 m^3/ (475 GAL)
FOAM CAPACITY: 0.095 m^3/ (25 GAL)
PUMP CAPACITY: 20.5 m^3/h (90 GPM)
NOTE 2



NOTES:

1. HIGH EXPANSION FOAM SYSTEM PACKAGE SE-0301 AND FOAM GENERATOR NO.1 AND NO.2 WILL BE DISMANTLED FROM V1 COMPRESSOR STATION AND INSTALLED/RETAGGED AS SE-0301 INSIDE COMPRESSOR BUILDING BU-0400 OF V2 COMPRESSOR STATION.
2. FOAM GENERATOR NO.3 IS SUPPLIED BY FEI.
3. FEI CONFIRMED THAT CAPACITY OF V1 EXISTING FOAM SYSTEM IS SUFFICIENT FOR THE NEW V2 COMPRESSOR BUILDING BU-0400.
4. INTERCONNECTING LINES WILL BE REPLACED IN KIND FOR SIZE AS PER ORIGINAL V1 COMPRESSOR BUILDING #2 INSTALLATION.

ISSUED FOR CONSTRUCTION
2023-12-13

Solaris

SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIQ	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	MIQ	AEL	DEC	2023-12-13
BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
			PREVIOUS DR. NO.-			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
ALISON MANECHA
45760
Permit to Practice No. 1000215 Dec. 15 2023
ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

HIGH EXPANSION FOAM SYSTEM

UTILITY FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1007-R1

LAST SAVED: 12/14/2023 3:44:44 PM BY: MICHAEL.OI
PLOTTED: 12/14/2023 3:45:11 PM. BY: MICHAEL OI

FILENAME: C:\USERS\MICHAEL.OI\APPDATA\LOCAL\SOLARIS-MCI\SMCI.BI.2020\TEMPDWGS\63094-X-200-1007-R1.DWG

TK-1801
RAW WATER TANK
CAPACITY: 22.7 m^3 (6000 GAL)

P-1802
RAW WATER PUMP
CAPACITY: 2.5 m^3/h (11 GPM)

SE-1807
BLADDER TANK
CAPACITY: 0.1 m^3 (26 GAL)

F-1803
CARTRIDGE FILTER
CAPACITY: 4.54 m^3/h (20 GPM)

F-1804
FILTER
CAPACITY: 2.72 m^3/h (12 GPM)

SE-1806
U.V. SYSTEM
CAPACITY: 2.27 m^3/h (10 GPM)

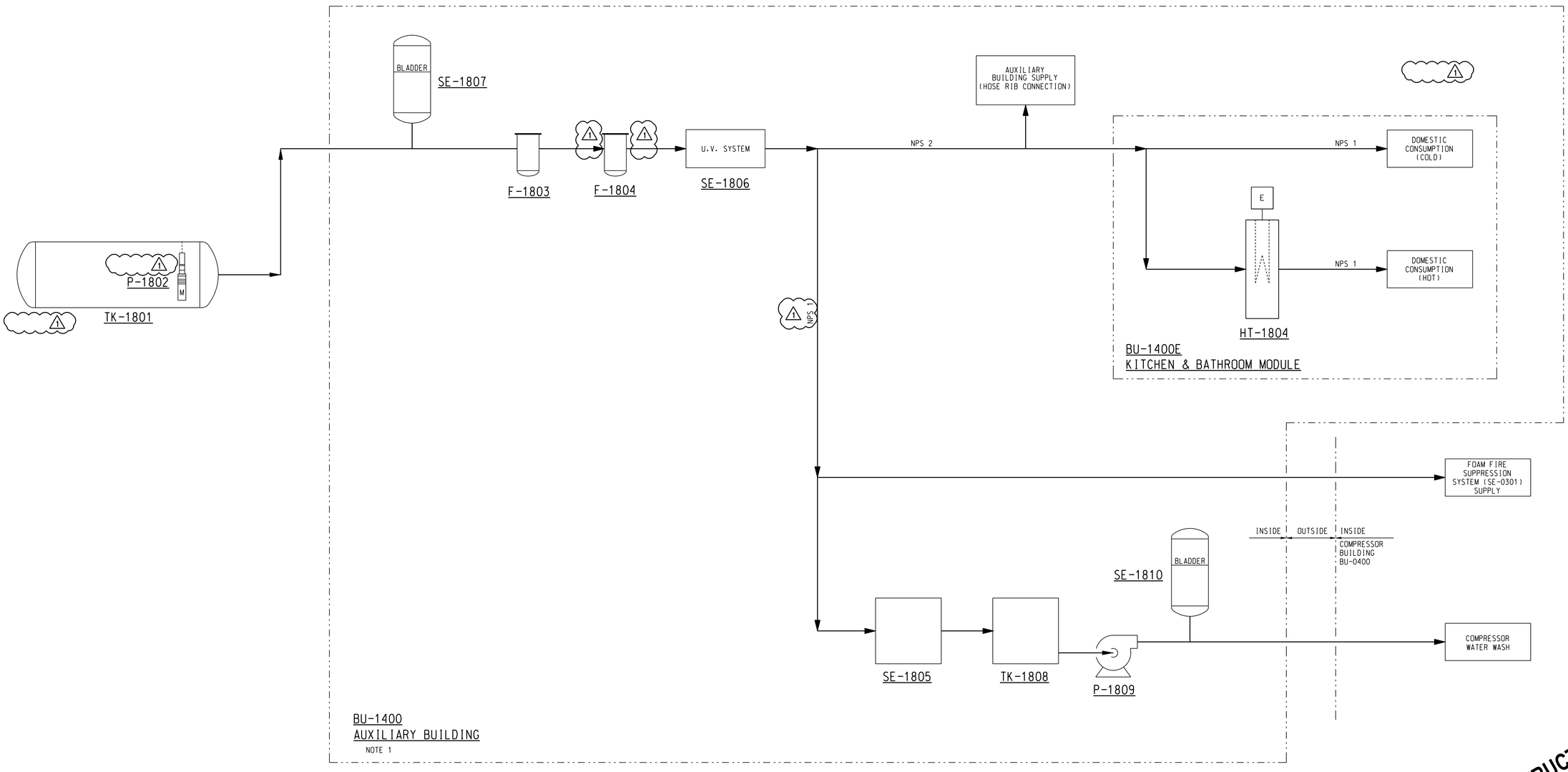
SE-1805
PACKAGED WATER TREATER c/w STORAGE TANK
RO SYSTEM CAPACITY: 0.05 m^3/h (0.21 GPM)

HT-1804
HOT WATER ELECTRIC HEATER
CAPACITY: 50 GAL

TK-1808
TURBINE WASH HOLDING TANK
CAPACITY: 0.295 m^3 (78 GAL)

P-1809
TREATED WATER FEED PUMP
CAPACITY: 0.9 m^3/h (4 GPM)

SE-1810
TREATED WATER BLADDER TANK
CAPACITY: 0.1 m^3 (28 GAL)



ISSUED FOR CONSTRUCTION
2024-04-30

NOTES:
1. POTABLE WATER SYSTEM IS LOCATED INSIDE THE AUXILIARY BUILDING BU-1400.

SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	MIO	AEL	DEC	2023-07-06
SOLARIS (FT19-03707)	R1	ISSUED FOR CONSTRUCTION	APS	DAC	AEL	2024-04-30
BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
			PREVIOUS DR. NO.- .			SCALE- N.T.S.

FORTIS BC™

PERMIT TO PRACTICE No. 1000215

Permit to Practice No. 1000215 May. 1 2024

ENGINEER SEAL

SQUAMISH COMPRESSOR STATION

POTABLE WATER SYSTEM

UTILITY FLOW DIAGRAM

DRAWING NUMBER 63094-X-200-1008-R1

LAST SAVED: 5/1/2024 1:20:53 PM BY: ARDEN.SPARVIER
PLOTTED: 5/1/2024 1:22:23 PM. BY: ARDEN SPARVIER

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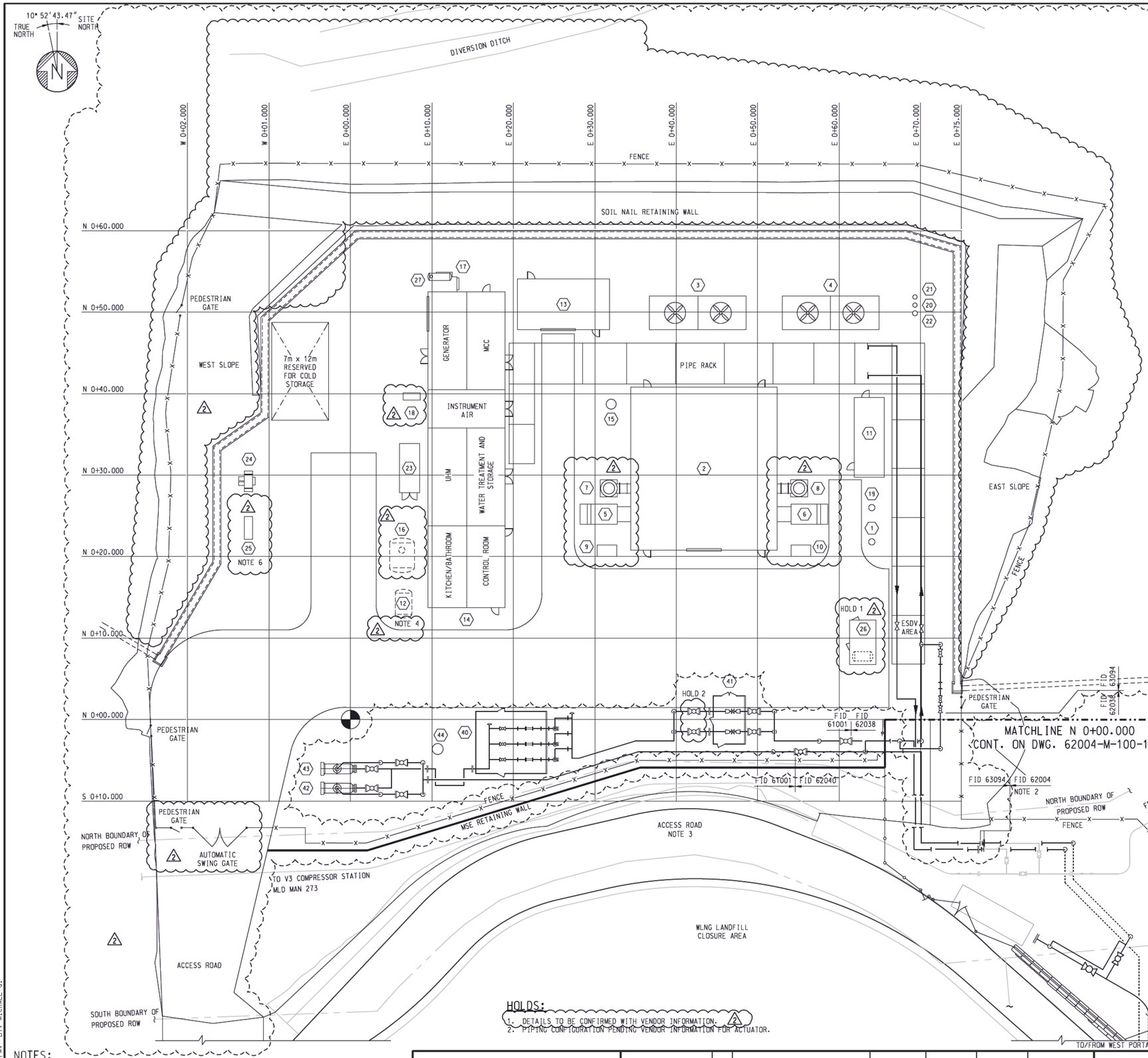
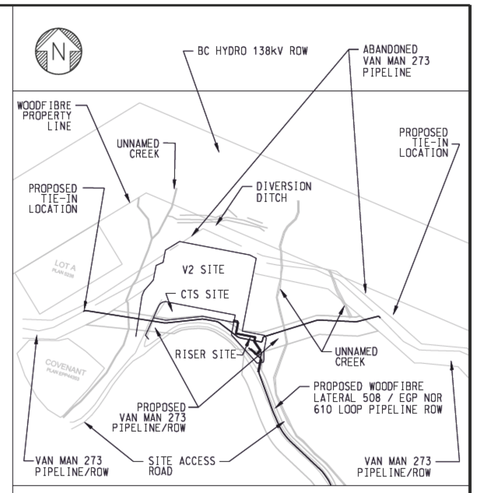
APPENDIX C





KEY PLAN
1:2500

SQUAMISH COMPRESSOR STATION EQUIPMENT LIST		
REF NO.	EQUIPMENT NO.	DESCRIPTION
1	PV-0401	STATION CYCLONIC SEPARATOR
2	BU-0400	COMPRESSOR BUILDING
3	ACX-0411	UNIT #1 COMPRESSOR AFTERCOOLER
4	ACX-0421	UNIT #2 COMPRESSOR AFTERCOOLER
5	–	UNIT #1 AIR INLET FILTER
6	–	UNIT #2 AIR INLET FILTER
7	–	UNIT #1 GAS TURBINE EXHAUST STACK
8	–	UNIT #2 GAS TURBINE EXHAUST STACK
9	ACX-0911	UNIT #1 LUBE OIL COOLER
10	ACX-0921	UNIT #2 LUBE OIL COOLER
11	BU-0500	FUEL GAS BUILDING
12	TK-1401	SEWAGE HOLDING TANK
13	BU-2000	WAREHOUSE BUILDING
14	BU-1400	AUXILIARY BUILDING
15	PV-0605	DRY AIR RECEIVER
16	TK-1801	RAW WATER TANK
17	ACX-0821	GENERATOR RADIATOR
18	LB-0801	LOAD BANK
19	PV-1501	LIQUIDS STORAGE VESSEL
20	SI-1611	UNIT #1 VENT SILENCER
21	SI-1621	UNIT #2 VENT SILENCER
22	SI-1601	STATION VENT SILENCER
23	BU-1410	NITROGEN FIRE SUPPRESSION STORAGE
24	T-0801	1000 KVA TRANSFORMER
25	–	LOAD BREAK SWITCH (2)
26	BU-1402	ODORANT INJECTION BUILDING
27	SI-7100	GENERATOR EXHAUST

WOODFIBRE LNG CUSTOMER STATION EQUIPMENT LIST		
REF NO.	EQUIPMENT NO.	DESCRIPTION
40	BU-0402	FLOWMETER BUILDING
41	BU-0401	FLOW CONTROL BUILDING
42	F-0401	STATION FILTER SEPARATOR
43	F-0402	STATION FILTER SEPARATOR
44	PV-1502	LIQUIDS STORAGE VESSEL

LEGEND:
- SCOPE CLOUD
- REVISION CLOUD (2)

HOLDS:
1. DETAILS TO BE CONFIRMED WITH VENDOR INFORMATION. (2)
2. PIPING CONFIGURATION PENDING VENDOR INFORMATION FOR ACTUATOR.

ISSUED FOR CONSTRUCTION
2023-12-11

0 5 10 15 20m
SCALE 1:250

NOTES:
1. PIPELINE DEPTH OF COVER SHALL BE 1.2M MINIMUM.
2. FOR DETAILS SEE VAN MAN 273 RELOCATION RISER SITE AT KP 49.3 PLOT PLAN – DWG# – 62004-M-100-1001. (2)
3. ACCESS ROAD AROUND PERIMETER OF WLNG LANDFILL BY OTHERS.
4. SEWAGE HOLDING TANK SUPPLIED BY CONSTRUCTION CONTRACTOR. TANK DIMENSIONS TO BE CONFIRMED.
5. THE AREA CLASSIFICATION FOR THIS SITE EXTENDS BEYOND THE FENCE LINE. SIGNAGE FACING OUTWARD SHALL BE FIXED TO THE FENCE OR GUARDRAIL ON SOUTH AND EAST SIDE. THE SIGNAGE SHALL BE MADE VISIBLE TO NOTIFY OPERATORS AND OTHER PERSONNEL ENTERING THE CLASSIFIED AREA.
6. LOAD BREAK SWITCH IS SUPPLIED AND INSTALLED BY OTHERS. THIS ITEM IS SHOWN FOR INFORMATION ONLY

BY	No.	REVISION	DRAWN	DESIGNED	CHECKED	DATE(YYYY-MM-DD)
SOLARIS (FT19-03707)	R0	ISSUED FOR CONSTRUCTION	WHM	FSM	SCJ	2023-07-06
SOLARIS (FT19-03708)	R1	ISSUED FOR CONSTRUCTION	WHM	FSM	SCJ	2023-11-20
SOLARIS (FT19-03707)	R2	ISSUED FOR CONSTRUCTION	WHM	FSM	SCJ	2023-12-11
			PREVIOUS DR. NO.- .			SCALE- 1:250

Solaris

FORTIS BC™

PERMIT TO PRACTICE No.

ENGINEER SEAL

SQUAMISH COMPRESSOR STATON

GAS TURBINE COMPRESSOR STATION PLOT PLAN

DRAWING NUMBER 63094-M-100-1000-R2

LAST SAVED: 12/11/2023 2:53:47 PM BY: WING.MUNG
PLOTTED: 12/11/2023 2:53:50 PM. BY: MICHAEL OI

FILENAME: C:\USERS\MICHAEL.OI\APPDATA\LOCAL\SOLARIS-MC1\SMC1_BI_2020\TEMPDWGS\63094-M-100-1000-R2.DWG

APPENDIX D

Appendix D includes the Air Quality Assessment Report, which is provided separately.

APPENDIX E

Environmental Management

DOCUMENT NUMBER: 1016
DOCUMENT TYPE: POLICY
Owner: Kristoff, Leslie
SML: Hayes, Catherine

Utility: Gas
Effective Date: February 24, 2026

Summary of Changes

This document was reviewed, and no changes were made.

Overview

This document identifies the roles and responsibilities of managing environmental risks in accordance with the FortisBC (FBC) Safety and Environmental Policy (see CRL #1032).

Audience

This document is intended for all FortisBC (Electric and Gas) employees and contractors.

Contents

References

- CRL #1032 *Safety and Environmental Policy*
- Environmental Management System, available on the Connector
- Environmental Compliance Directory, available on the Connector

General

FBC employees and contractors are required to comply with all environmental regulatory requirements and follow industry codes of practice. In addition, FBC employees are required to follow corporate standards and are encouraged to suggest performance improvements to Environment.

FBC is committed to adhering to our Environmental Management System (EMS), which provides resources, training programs, policies, and standards to assist employees in meeting their environmental responsibilities. This system provides the framework for creating due diligence for the FBC organization. For more information, please refer to the Environmental Management System Manual Environmental Risk Areas.

There are eight areas of risk inherent in FBC operations that the EMS system is designed to manage:

- Environmental incidents
- Aquatic resource management
- Terrestrial resource management
- Waste and materials management
- Vegetation management
- Emissions management
- Contaminated sites
- Heritage resource management

Legislation

There are a number of acts and regulations relating to environmental management at the federal, provincial, and municipal levels that provide direction and governance for FBC activities.

Changes to environmental legislation can occur at any time. FBC Environment and Legal Services track these regulatory changes on a continuous basis. For more information regarding environmental legislation and its applicability to FBC please refer to the Environmental Compliance Directory.

Responsibilities

All Employees and Contractors

All employees will:

- Comply with all applicable environmental legislation.
- Comply with all conditions on regulatory agencies notification, permits, approvals, licenses, authorizations.
- Follow corporate standards and industry codes of practice.
- Conduct activities in an environmentally responsible manner.
- Report any environmental concerns or incidents to manager.

Operations

Operations will:

- Ensure ongoing compliance with permits, approvals, licenses, and authorizations.
- Identify and seek to prevent and/or minimize environmental risks associated with the activities of their business unit.
- Contact Environment as necessary to identify and manage environmental risks.
- Develop and implement specific standards to manage the environmental risks and reduce the environmental impact associated with the activities of their business unit.
- Ensure that personnel are aware of applicable environmental legislation, and follow environmentally responsible practices, corporate standards, and industry codes of practice.
- Ensure that personnel are trained as per their FortisBC Learning Plan.
- Ensure that equipment and resources are available to respond to environmental incidents.
- Ensure that all environmental incidents are documented and reported according to regulatory requirements and FBC standards.

Environment

Environment will:

- Provide environmental support and advisory services to all departments as necessary to assist in the management of environmental risk.
- Provide support to operating groups in developing systems and processes that ensure FBC operations comply with applicable laws, and follow corporate standards and industry codes of practice.
- Liaise with environmental regulatory bodies to review and provide feedback on new and amending legislation and regulations.
- Liaise with industry associations and member companies to stay current with industry standards and codes of practice.
- Assist in the coordination of external consulting services provided to operating groups with respect to technical advice on environmental matters.
- Develop and update the FBC Environmental Management System Manual and Environmental Compliance Directory.
- Provide input to the Training Department with respect to the environmental training program.
- Monitor and report on operational performance while delivering on the expectations of continuous improvement.

Training

Training will:

- Implement the corporate environmental training program.
- Maintain records of specific environmental training received by personnel.

Legal Services

Legal Services will:

- Update Environment on regulatory changes, judicial developments, and regulatory initiatives.
- Provide legal advice as requested.
- Participate in regulatory negotiations as requested.

Energy at work

FORTIS BC™

Safety and Environmental Policy

FortisBC is committed to delivering safe, reliable energy in an environmentally responsible manner to all of the communities that we serve. FortisBC's goal is to ensure a safe and healthy workplace where our employees return home safe and healthy every day.

FortisBC recognizes that every employee has the right to safe and healthy workplace in a learning environment with sound safety and environmental practices. This means that employees need to work safely and to protect their physical and mental health—along with the health and safety of others—and the natural environment during the course of their work, by following established policies, practices, and procedures. FortisBC will not compromise employee and public safety, and strives for excellence in safety and environmental performance.

All leaders are responsible and accountable for implementing and maintaining safety and environmental management system elements, ensuring the necessary resources are provided and following policies, practices and procedures. All employees are responsible and accountable for following our company and regulatory requirements. It is a collaborative and ongoing effort, requiring consultation, participation and cooperation among all leaders and employees.

FortisBC shall:

- comply with safety and environmental legislation and company requirements, and operate in accordance with accepted industry practices and standards, and require the same of our contractors
- commit to injury and incident prevention, the conservation of resources, and the prevention of pollution
- implement environmental protection measures and climate change mitigation and adaptation initiatives
- identify hazards, assess risks and implement controls to eliminate hazards or reduce risks as low as reasonably practicable
- train employees to meet their responsibilities in the areas of safety and environmental stewardship
- communicate with employees, the general public, and stakeholders about our activities and the potential impacts on our safety and environment
- provide consultation, participation and engagement processes for our safety and environmental activities, risks and opportunities consistent with stakeholder engagement requirements
- support community-oriented safety and environmental initiatives and programs
- review the safety and environmental policy on a regular basis, regularly monitor our safety and environmental performance by setting objectives and commit to continual improvement to enhance performance

Roger Dall'Antonia
President and CEO
FortisBC

(21-024.20 04/2021)