## SCHEDULE A

# **CERTIFIED PROJECT DESCRIPTION**

## FOR THE VOPAK PACIFIC CANADA PROJECT

(PROJECT)

## INTERPRETATION

In this Certified Project Description, terms that are capitalized but not defined have the same meaning as those terms defined elsewhere in this Certificate, including in the Table of Conditions.

This Certified Project Description describes the Project authorized by this Certificate but does not obligate the Holder to construct or operate any aspect of the Project unless otherwise stated.

#### DEFINITIONS

Holder	The person to whom this Certificate has been issued, or, if this Certificate has been transferred in accordance with section 33 of the Act (2018), the person to whom this Certificate has been transferred.
Light Diesel	<ul> <li>Fuel having the following properties:</li> <li>Density between 820-890 kg/m<sup>3</sup></li> <li>Flash point between 40-130°C</li> </ul>

• Vapour pressure between 10-500mbar

### ACRONYMS AND ABBREVIATIONS

Certificate	Environmental Assessment Certificate
LPG	Liquified petroleum gas, including propane, ethane and butane
PRPA	Prince Rupert Port Authority

# 1. Project Description and Location

The Vopak Pacific Canada Project (Project) is a bulk liquids tank storage facility that stores LPG, Light Diesel, gasoline, and methanol.

The Project, which includes an offshore jetty, is located on Ridley Island, British Columbia, and includes marine shipping activities in the waters between the Marine Terminal and Triple Island (Figure 1). The Project is approximately 1.6 kilometres (km) west of Port Edward and 10.5 km south of Prince Rupert.

## 2. Project Components and Activities

The Project is comprised of the following components:

- Bulk Liquids Tank Storage Facility and supporting infrastructure;
- Marine Terminal and supporting infrastructure;
- Rail car unloading racks;
- Temporary construction-related infrastructure and facilities;
- Marine shipping of products to Triple Island; and
- Rail operations within PRPA boundaries.

These components are more fully described below.

All areas disturbed by construction, operation, and decommissioning activities are within the Project footprint, shown on Figure 2.

### A. BULK LIQUIDS TANK STORAGE FACILITY

The Bulk Liquids Tank Storage Facility, as shown on <u>Figure 2</u>, is comprised of permanent components and permanent supporting infrastructure.

The permanent components are:

- Tanks to store the following products;
  - One tank with the capacity to store up to 90,000 cubic metres (m<sup>3</sup>) of LPG;
  - Up to eight tanks with the capacity to store up to 260,000 m<sup>3</sup> of Light Diesel and gasoline; and
  - Up to six tanks with the capacity to store up to 220,000 m<sup>3</sup> of methanol;
- Pipe racks/systems, pumps, and compressors;
- Office buildings, including central control room, and maintenance and utilities buildings; and
- Process control and safety systems to monitor, alarm and shut down facility components in event of emergency.

The permanent supporting infrastructure and facilities are:

- Two 16.5 megawatt (MW) gas (ethane) turbines for power generation, operating at a combined maximum of 20 MW;
- Electrical substation connected to the BC Hydro power grid;
- LPG pressure vessels (e.g., bullets, spheres) with the capacity to store a total of up to 8,000 m<sup>3</sup>, to hold pressurized LPG that is unloaded from rail cars;

- LPG cooling equipment and de-ethanizer to separate ethane from the LPG;
- Methanol removal and dehydration equipment;
- Gas processing and refrigeration equipment;
- Emergency ground flare to capture and burn any LPG vapours in case of emergency;
- Water utilities;
- Two lagoons for surface water management;
- Roads;
- Natural gas connection; and
- Fencing and site security.

#### **B. MARINE TERMINAL**

The Marine Terminal, as shown on <u>Figure 2</u>, is comprised of the following permanent components:

- A jetty up to 1.2 km long extending from the shoreline to the loading platform, supported by up to 12 piers;
- Two parallel multi-buoy mooring systems to berth vessels up to 85,000 m<sup>3</sup> capacity or 80,000 dead weight tonnes; and
- One loading platform serving both mooring systems.

The permanent supporting infrastructure and facilities are:

- Jetty piping, extending from storage facilities to the loading platform, to deliver LPG, Light Diesel, gasoline and methanol to the loading platform;
- All equipment and systems required for mooring ships at the loading platforms;
- One platform for firewater pumps located along the jetty;
- Protection barriers around the jetty and loading platform; and
- Process control and safety systems to monitor, alarm and shutdown facility components in event of emergency.

#### C. RAIL CAR UNLOADING RACKS

The rail car off-loading area, as shown in Figure 2, is comprised of the following components:

• A total of up to 50 double-sided rail car unloading racks.

The rail car unloading racks transfer a maximum yearly volume of 11,000,000 m<sup>3</sup> of LPG, Light Diesel, gasoline and methanol.

#### D. CONSTRUCTION INFRASTRUCTURE, FACILITIES AND ACTIVITIES

In addition to the components set out above, within the Bulk Liquids Tank Storage Facility (Figure 2) the Project is comprised of the following temporary construction-related infrastructure and facilities:

- Construction-related power, gas and water utilities;
- Laydown areas;
- Soil and rock storage areas;
- Temporary parking area;
- Equipment yard;
- Office and staff trailers;
- Construction and domestic waste storage;
- Construction barges and vessels; and
- Construction fencing and site security.

Construction-related activities include:

- Site excavation, clearing and grading;
- Construction of Project facilities on land;
- Construction of the marine jetty and berths (including piers);
- Disposal of surplus organic soil and waste rock;
- Construction and domestic waste management;
- Post-construction clean-up and on-site ground reclamation; and
- Construction-related accommodation and transportation to and from the site.

#### E. MARINE OPERATIONS

The Project marine shipping activities are pilotage and tug escort, and product shipping, between the Marine Terminal and the pilot boarding station at or near Triple Island, as partially shown on <u>Figure 1</u>.

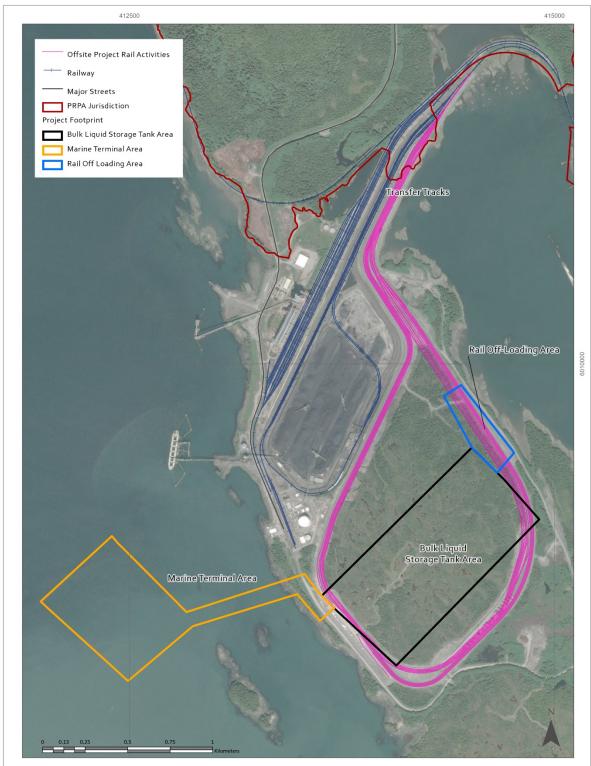
#### F. RAIL OPERATIONS ACTIVITIES

The Project includes operation of nine rail tracks during Operations as shown on Figure 2.



Scale: 1:250,000 BCGS Grid: 103J.110 Data Sources: DataBC, ESRI Base Data, SNC-Lavalin, Vopak Canada

Figure 1: Vopak Pacific Canada Project



Scale: 1:17,000 BCGS Grid: 103J.110 Data Sources: DataBC, ESRI Base Data, SNC-Lavalin, Vopak Canada

Figure 2: Project Layout