Public Consultation Report.

Vopak Pacific Canada

September 2020

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In-Text Tables

1 Introduction

1.1 Project Overview

Vopak Development Canada Inc. (Vopak), a wholly-owned subsidiary of Royal Vopak, is investigating the opportunity to construct, own and operate a new bulk liquids tank storage facility in Prince Rupert, British Columbia (BC). The proposed project is called the Vopak Pacific Canada Project (the Project).

The Project is proposed to be located on Ridley Island within the lands and waters under the jurisdiction of the Prince Rupert Port Authority (PRPA). At full build-out the facility will have a capacity of 90,000 cubic metres (m^3) of liquefied petroleum gas (LPG), 260,000 m^3 of clean petroleum products (CPP) (diesel and/or gasoline) and 220,000 m^3 of methanol. It will consist of the following major components:

- A bulk liquids tank storage facility.
- A jetty.
- Supporting infrastructure and facilities, including power supply and a wastewater treatment system.

The Project requires environmental effects determinations by federal authorities under Section 67 of the *Canadian Environmental Assessment Act, 2012* (CEAA 2012), as well as an Environmental Assessment Certificate (EAC) under the BC *Environmental Assessment Act* (BCEAA). The Project will undergo a coordinated environmental assessment (EA) process between the BC Environmental Assessment Office (EAO) and federal authorities, coordinated by the PRPA. Vopak filed a Project Description with the provincial and federal government agencies on June 27, 2018 and the EAO issued the Terms of Reference (TOR)/Application Information Requirements (AIR) on July 26, 2019 and a revised version on August 20, 2020. A draft Environmental Effects Evaluation/Application for an EAC (EEE/Application) has been prepared for submission to the regulators in September 2020.

1.2 Vopak's Principles for Public and Stakeholder Consultation

Vopak believes that open, transparent and respectful dialogue with local communities and stakeholders is key. The public and stakeholder engagement activities for the Project are guided by the following Vopak values:

- **Care for safety, health & environment:** Care for safety, health and environment is the guiding principle in all decisions we make and all activities we carry out. Vopak will aim to understand local community values, including those that pertain to safety, health and the environment.
- **Integrity:** As a company we strive to develop and maintain long-lasting relationships with local communities and stakeholders that are based on mutual respect and understanding. We act with honesty and reliability to build the foundation for these relationships.
- **Team spirit:** Vopak will seek and consider input from local communities and stakeholders with respect to the Project, understanding that feedback we receive will improve the sustainability of our Project.

- **Commitment:** Vopak is committed to undertaking ongoing engagement with local communities and stakeholders and to provide timely and accurate information about the Project. We seek to deliver what we promise and stick to the decisions made.
- **Agility:** Vopak will work to understand and respond to input from local communities and stakeholders, including feedback on how input has been considered in the Project planning, including mitigation plans. We continuously strive to improve the quality of our work and are open to feedback and alternative ideas.

1.3 Purpose of the Public Consultation Report

Pursuant to Section 16.1 of the EAO's Section 11 Order, a Public Consultation Report (Report) that provides a summary of consultations undertaken by Vopak that includes information, comments, concerns, and questions provided by the public with relation to the environmental assessment as well as details on how the expressed concerns have been addressed. Additionally, each Report will provide:

- An overview of Vopak's approved Public Consultation Plan.
- A description of the results of the activities for the respective engagement stages outlined in the Public Consultation Plan.
- Proposed next steps and estimated timelines for future public consultation activities.

Vopak will submit a Public Consultation Report:

- 60 days following the close of a public comment period.
- In conjunction with the filing of the draft EEE/Application.
- At the additional request of the EAO.

2 Vopak's Public Consultation Plan

2.1 Public Consultation Plan Overview

The Public Consultation Plan (the Consultation Plan) was submitted in November 2018 to meet the requirements for consultation set out in the Section 11 Order, a procedural order issued by the EAO as per the *Public Consultation Policy Regulation*, and to ensure there are meaningful opportunities for the public and local communities to learn about and provide input on the Project. The EAO accepted the Public Consultation Plan in December 2018.

The Consultation Plan describes the approach, methods and activities that Vopak is undertaking to share Project-related information and seek input from the public throughout the environmental assessment of the Project. The Consultation Plan provides the framework for the public consultation activities that are summarized in this Report and is publically available on the EAO's website.

2.1.1 Public and Stakeholder Identification

Vopak has identified the following groups based on their potential interest in the Project. Vopak expects that further stakeholders will be identified as part of consultation activities with stakeholders, the public and regulatory authorities. Vopak is engaging with Indigenous Groups in a parallel consultation process.

2.1.2 Local Governments/Elected Officials

The Project is proposed to be located on Ridley Island in Prince Rupert, BC. Based on the location of the Project, the following local governments and elected officials have been identified for consultation and engagement activities:

- The City of Prince Rupert.
- The District of Port Edward.
- The North Coast Regional District.
- Member of the Legislative Assembly for the North Coast.
- Member of the Legislative Assembly for Skeena.
- Member of Parliament for the Skeena-Bulkley Valley.

2.1.3 Other Stakeholder Groups

In addition to the above-mentioned local governments and elected officials, Vopak has identified the following stakeholder groups as having an interest in or being potentially affected by the Project:

- The general public.
- Community organizations, including community service providers.
- Economic development organizations (i.e., Chambers of Commerce).
- Educational stakeholders, including colleges, skills training organizations and secondary schools.
- Environmental stakeholders, including non-governmental organizations.
- First responders, including fire, ambulance and police.
- Local businesses.
- Marine users and associated stakeholder groups.

2.2 Consultation Objectives

The objective of the Consultation Plan is to provide local communities and stakeholders with meaningful opportunities to learn about the Project and have the ability to provide feedback. Vopak's consultation and engagement with the public and stakeholders will continue to evolve based on the input we receive as the Project proceeds through the regulatory process. More specifically, Vopak would like to be a good neighbour and aims to:

- Understand the local community's values, interests, concerns and expectations.
- Provide easy access to Project-related information.
- Effectively communicate Project updates and Project-related opportunities.
- Establish communication tools to seek information and receive feedback.
- Participate and support local community events.
- Respond to inquiries, listen to concerns and address issues.
- Maximize local participation on the Project.

2.3 Staged Approach to Consultation

Vopak's Public Consultation Plan follows a staged approach to consultation and engagement that is based on Project development stages and the regulatory process. The stages of consultation are shown in the following table (**Table 2–1**).

Table 2–1: Overview of Vopak's Staged Approach to Consultation and Engagement

Stage	Overview	Timing/Status
Stage 1 - Initial Engagement	• Introductory informal meetings with local governments and community stakeholders in Prince Rupert and Port Edward.	Spring 2018 *Complete*
Stage 2 - Project Description and Terms of Reference/ Pre-Application Phase Consultation	• Establishment of communications tools: Project website, Project email address and Project fact sheets. • Broader engagement with local communities and stakeholders through meetings, open houses in Prince Rupert/Port Edward and presentations. • Attendance and participation in regulatory open houses on the Project Description and draft Terms of Reference/Application Information Requirements (TOR/AIR). • Tracking and responding to public comments on the Project Description and draft TOR/AIR. • Development of the Public Consultation Plan and Public Consultation Reports. • Ongoing information sharing.	Summer 2018 – Summer 2020 *Current*
Stage 3 - Draft EEE/Application Review Phase Consultation	• Ongoing information sharing through meetings, open houses in Prince Rupert/Port Edward and presentations. • Attendance and participation in regulatory open houses on the draft Environmental Effects Evaluation (EEE)/Application. • Tracking and responding to public comments on the draft EEE/Application. • Development and submission of Public Consultation Reports.	Summer 2020 – Spring 2021[1] *Future Stage*
Stage 4 - Ongoing Engagement	• Post-environmental review: continued community engagement on the different stages of the Project (construction, operation, decommissioning), including compliance and enforcement activities as needed.	Ongoing/Post-decision *Future Stage*

Note:
1. Anticipated timing.

3 Public Consultation Activities to Date

3.1 Stage 2 – Pre-Application Phase Consultation

The first Public Consultation Report was filed with the EAO in February 2019 for the period of Spring 2018 – Winter 2019 that covered Stage 1 (Initial Engagement) and the start of Stage 2 (Pre-EEE/Application Engagement) of the Project's engagement activities. The first Report included a summary of Vopak's engagement on the Project Description as well as engagements up to and including the public comment period on the draft TOR/AIR.

This second Report summarizes a continued record of the Project's Stage 2 (Pre-EEE/Application Engagement) activities for the period of Winter 2019 – Summer 2020 that will be submitted to the EAO at the same time as the Project's draft EEE/Application submission. This section outlines current and planned consultation and engagement activities for Stage 2 that includes:

- Establishing communication tools.
- Engagement with local communities and stakeholders.
- The development of the first Public Consultation Report.
- Ongoing information sharing.

The following table provides a summary of Vopak's engagement with the public and local community stakeholder during Stage 2, as well as a description of the outcome of the engagement activities.

Table 3–1: Key Stage 2 Consultation Activities Post Draft TOR/AIR Consultations

Stage 2 Engagement Activities (Winter 2019 – Current)	Outcome
Establishment of communication tools	• Vopak created an email address specifically for contracting and procurement inquiries (procurement.vpc@vopak.com). • Vopak hired a local Community Engagement Specialist in January 2020 who will engage with the local communities on all aspects of the Project. • Vopak acquired a business rental space in downtown Prince Rupert in August 2020. The space will be updated and turned into a local Vopak office that will be available for the public to visit to access information and engage with the Vopak team.

Engagement with local communities and stakeholders	• Regular Project updates provided to the City of Prince Rupert and the District of Port Edward to actively engage in two-way communications that allows for information sharing. Vopak shares relevant Project updates and seeks continued feedback, especially on COVID-19 safety concerns:
	  ○ The City of Prince Rupert:
	  ▪ May 30, 2019 (emailed copy of Vopak's draft Socio-economic Impact Assessment Workplan).
	  ▪ February 14, 2020 (in-person introductions).
	  ▪ March 25, 2020 (email detailing the first orders issued under the Local State of Emergency).

Stage 2 Engagement Activities (Winter 2019 – Current)	Outcome
	▪ March 27, 2020 (email notification; Project update re: geotechnical work). ▪ April 21, 2020 (virtual meeting to discuss updates). ▪ June 5, 2020 (virtual meeting to discuss updates). ▪ June 22, 2020 (email update re: archaeological survey). ▪ September 1, 2020 (email update re: draft EEE/Application). o The District of Port Edward: ▪ March 12, 2019 (in-person; Vopak presented at the District of Port Edward Council meeting). ▪ June 10, 2019 (emailed copy of Vopak's draft Socio-economic Impact Assessment Workplan). ▪ February 20, 2020 (in-person introductions). ▪ May 1, 2020 (phone call re: COVID-19). ▪ May 25, 2020 (email notification; Project update re: geotechnical work). ▪ June 22, 2020 (email update re: archaeological survey). ▪ September 1, 2020 (email update re: draft EEE/Application). • Vopak met with the City of Terrace to provide an overview of the Project and questions that the city had around rail traffic and the regulatory process. Vopak was able to gather feedback on the city's concerns and interests. Vopak and the City of Terrace continued to connect in April and May 2019. • On May 30, 2019, Vopak provided the North Coast Regional District a copy of the Project's draft Socio-economic Impact Assessment Workplan for their review and feedback. • In March 2020, Vopak Development Canada became a member of the Prince Rupert and District Chamber of Commerce to provide another channel through which the Project could engage with local business members and business groups. • Vopak attended the following Prince Rupert and District Chamber of Commerce Virtual Roundtable (VR) and Small Business Conference Calls (SBCC) to connect with the local business communities throughout the pandemic and hear more about their interests, values and challenges: o April 27, 2020 (SBCC) o May 4, 2020 (SBCC) o May 11, 2020 (SBCC) o May 25, 2020 (SBCC) o June 23, 2020 (SBCC) o August 5, 2020 - Local Procurement (VR) • Community outreach to local non-profit organizations and community groups to learn more about their initiatives, understand their concerns, values, interests, and challenges. Vopak also used the opportunities to identify opportunities to provide community support. Vopak connected with: o Port Edward Recreation Cultural Society (April/May 2019) o Prince Rupert Rotary Interact Club (April 2020) o Eco-Trust Canada (April 2020) o Bags of Goodness (May/June 2020)

Stage 2 Engagement Activities (Winter 2019 – Current)	Outcome
	○ Charles Hays Secondary School (May/June 2020) ○ Northern Development Trust (August/September 2020) • Vopak met with the Skeena Bulkley Valley MP on July 31, 2020 to discuss the Project and the local communities. Vopak was able to gather insight into the opportunities and issues that the local communities face. • On August 31, 2020, Vopak provided a Project update regarding the draft EEE/Application regulatory process to the following stakeholders with an open invitation to meet: ○ Coast Mountain College ○ Community Futures ○ North Coast Regional District ○ The Prince Rupert & District Chamber of Commerce ○ The North Coast MLA ○ City of Terrace
Working Group meetings	• The Working Group met by video conference on July 24, 2019, to review and discuss the Project's planned Disposal at Sea activities. Vopak provided an overview of the activities, responded to questions and collected feedback. • The Working Group met by video conference on April 1, 2020, to review and discuss the revised jetty design. Vopak provided an overview of the design change, responded to questions and collected feedback.
The development of the first Public Consultation Report	• Vopak submitted the first Public Consultation Report to the EAO in February 2019.
Ongoing engagement	Vopak continues to: • maintain and update the Project website (https://www.vopak.com/vopak-pacific-canada) to share relevant Project information such as the Project Description and updated Project timelines. • actively manages and responds to public inquiry emails that are sent to the Project email address (vopakpacificcanada@vopak.com) • reach out to local community members and stakeholder groups to seek input on the Project, understand the public's concerns, interests and values as well as share timely updates. • plan the development new and updated Project materials such as information pamphlets and display boards.

The coronavirus (COVID-19) pandemic limited and delayed planned engagements with many of the stakeholders. While the Project has been able to schedule and arrange a number of virtual meetings and calls, the Project is also very aware that many of the stakeholders have had an increased focus on community health, safety and well-being. Vopak understands and respects the constraints that the coronavirus imposed on many of the stakeholders' time and availability. Vopak will continue to reach out to stakeholders to provide updates and is open to meeting with anyone interested to learn more about the Project. In addition, Vopak has a Project website and general email address that can be used to gather details or inquire about the Project.

4 Summary of Public Feedback

The following section provides a summary of public feedback received, based on comments, concerns and questions received from the public within the scope of the environmental assessment and how these concerns were addressed.

Table 4–1: Summary of Public Feedback and Vopak Response

Topic	Concerns and Interests Identified	Vopak Response/Proposed Action
Rail Traffic	Concerns on how the Project will impact rail traffic.	The EAO and PRPA will not be including increases in rail traffic as an off-site project component for this Project. Rail traffic would be more appropriately and effectively considered and mitigated, if necessary, by the principal regulator, Transport Canada (TC). Although it will not form a part of the EEE/Application, Vopak will submit a rail traffic memo to the Project Working Group which will assess the effect on increased rail traffic on wildlife strikes, traffic at rail crossings, potential accidents and malfunctions, and human health (i.e., noise and air quality).
Air Quality	Concerns regarding GHG emissions in relation to provincial and federal climate change targets.	GHGs will be assessed as part of the effects assessment. The individual GHG (gases) will be included, as well as the equivalent effect of these gases to climate change (global warming potentials). The methodology for evaluating global warming potential is provided by Environment and Climate Change Canada (ECCC) and updated annually. It is expected that the published ECCC methods and data will be used. Project GHG emission sources will be determined for Vopak's operations within the Local Study Area (LSA), including transportation-related sources (e.g., on-site vehicles, worker vehicle trips) as well as terminal-operated sources within Vopak's care and control. This will include carbon emissions associated with electricity use, whether the electricity is generated on site or sourced from the grid. For all fossil fuel use, CH_4, N_2O and CO_2 estimates will be made (as well as CO_2e) based on expected fuels consumption and the current ECCC fuel-based GHG rates identified in the National Inventory Report. Transportation-related fuel consumption estimates will be made by identifying the expected fleet details and associated fuel consumption rates from best available sources, including rates available in the Transport Canada Port Emissions Inventory Tool. The estimated annual GHG emissions will be compared to provincial and national emissions estimates, identifying the provincial and national emission targets as well.
	Concerns around air emissions related to transport and storage of refined liquids.	The effects assessment includes analysis of fugitive emissions, which in this case are escaping vapours from the storage, transfer and loading of fuels. These emissions include both criteria air contaminants as well as GHGs. The transportation sources (rail, ship) within the study area are included.

Topic	Concerns and Interests Identified	Vopak Response/Proposed Action
Marine Traffic and Navigational Safety	Concerns regarding increased vessel traffic and impacts on existing marine users and the cumulative impacts of marine shipping.	The assessment of Project-related shipping within the scope of the Marine Resources assessment will look at potential impacts on the marine environment. Cumulative effect of shipping traffic will be assessed for any residual effects identified in the assessment. The incremental increase of traffic from the Project on existing and expected traffic in the area will be quantified by Vopak and included in the Marine Use and Navigation VC assessment and will also be used to inform the assessment of potential accidents and malfunctions.
Accidents and Malfunctions	Concerned with marine accidents resulting in a spill of diesel to the marine environment.	Vopak will assess all potential accidents and malfunctions related to the Project, including a loss of containment of Project bulk liquids. Vopak will assess all Project-related risks and the effectiveness of safety measures. The consequence of these risks will be assessed for all Project Valued Components (VCs) in Section 6, Assessment of Potential Accidents and Malfunctions.
	Interested to see a complete a detailed Marine Quantitative Risk Assessment for the Project.	Vopak will be conducting an assessment of potential accidents and malfunctions. Specific accident and malfunction scenarios will be assessed, including, but not limited to: • Navigation incident frequency for all vessel transits and loss of cargo risk for laden transits. This will be reported as average number of events per year for the entire route and sections of the route. • Risk of loss of cargo. This will be reported as fatality risk, and frequency per quantity of products spilled. The portion of the navigation route within the scope is from the terminal to Triple Island. The study will estimate risk from the following types of marine incidents: • Collision • Drift grounding • Powered grounding • Structural failure • Fire & explosion The effects of these risks as described in Section 6 (Potential Accidents and Malfunctions) will be assessed for all Project VCs.
	Concerns related to public safety with respect to the proximity of Project stored goods to communities.	Care for safety is a core value at Vopak and is an integral part of how we operate. Ownership of safety lies with each and every Vopak employee at all levels in the organization. The bulk liquids terminal will be designed with integrated safety systems and processes. Emergency detection and shut down systems will be an integral component of the operational design. In addition, the Port maintains up-to-date practices and procedures based on international standards that emphasize maximum safety with minimum disruption for neighbouring communities. The bulk liquids terminal will be designed with integrated safety systems and processes. Emergency detection and shut down systems will be an integral component of the operational design.

Topic	Concerns and Interests Identified	Vopak Response/Proposed Action
	Public safety concerns and potential effects on the environment from derailments of cargo from CN trains headed to Ridley Island.	Rail operations outside of PRPA jurisdiction are the responsibility of CN, with regulatory oversight from the federal government (TC) and are not part of the Project scope. CN has existing safety protocols and emergency response measures that apply to all arriving rail to the PRPA. CN's Safety Management System is a proactive, comprehensive program designed to minimize risk and continually reduce injuries and accidents. The federal government also has regulatory requirements under the *Transportation of Dangerous Good Act*, and the requirement for Emergency Response Action Plans for tank cars that handle dangerous goods, including informing communities of dangerous goods being transported. CN is required to notify TC of any dangerous goods incident. CN provides dangerous goods and rail safety training to first responders in communities throughout Northern BC, and has highly-trained dangerous goods responders and contractors on call to address any rail incident. Local first responders also have access to real time information on dangerous goods transported through their community with the Ask Rail mobile application.
	Concerns regarding the risk of anchor drag incidents.	Vopak has had discussions with the PRPA with respect to risks related to anchorage. Based on these discussions the assessment of anchorage risk is considered outside the scope of the Project. Ships calling at the Vopak terminal will not be required to anchor while waiting for cargo loading, as there are two berths, the anticipated throughput rate, and the loading rate of the terminal will limit ships needing to anchor. In the event that ships calling at the Vopak terminal may require anchorage, they must request anchorage through the PRPA. Anchorage procedures are well defined and managed by the PRPA, who monitors anchorages 24/7 through the Port Security Operations Centre. This Centre is the information hub for port safety and security matters and ensures an effective and efficient response to any incident.
	Concerns regarding potential impacts of the Project on the quality of life in Port Edward due to noise, lighting, pollution and increased railway traffic.	The Human Health VC assessment will consider potential human health effects related to exposure to altered environmental media (including soil, sediment, water, air and country foods), and changes in noise and light levels and whether or not this exposure (if identified) would result in risks to human receptors. Other indicators for 'quality of life' or social determinants of health will be assessed in the Social and Economic VCs. The assessment of the Community and Infrastructure VC includes indicators of community health and wellbeing such as demand for and supply of community infrastructure and services (e.g., education and municipal services, emergency response services capacity, health and social care services), local government expenditures on community infrastructure and services, traffic volume (daily), availability (vacancy rates, inventory levels) and cost of accommodation ($). The assessment will include the effects of railway operations associated with inbound train unloading and outbound train staging within Vopak's proposed lease area.

Topic	Concerns and Interests Identified	Vopak Response/Proposed Action
Marine Birds	Concerns regarding Project-related effects on marine bird habitat and breeding territory.	Vopak is assessing all potential Project-related effects on Marine Birds. In response to comments received, the LSA for the Terrestrial Resources VC (including Marine Birds) has been expanded. The LSA for the Terrestrial Resources VC will be changed to include the lands and waters within the Vopak land and water lot areas, 500 m on all sides of the land and water lot areas, and 1 km on both sides of the proposed shipping route between the marine terminal and Triple Island. This expansion in the LSA to include the marine shipping route will ensure potential effects of ship traffic on marine birds are captured in the EEE/Application document. The terrestrial component of the Regional Study Area (RSA) will be expanded to the extent of the Kaien Landscape Unit. The landscape unit is a spatially identified area for resource management, can be related back to landscape-level objectives and information on wildlife and ecosystems, and follows ecologically-relevant boundaries such as watersheds.
Marine Resources	Concerns that the scope of the assessment is not large enough to capture potential effects on marine fish and fish habitat, marine mammals.	In response to comments received on the draft TOR/AIR, Vopak has increased the boundaries of the Marine Resources VC assessment. The Marine Resources study boundaries has been updated to reflect: • an expanded marine mammals LSA and RSA, which includes a 6.5 km diameter buffer extending outwards from the berths to the Kinahan Islands and a 6 km buffer on each side of the shipping route from the berths out to Triple Island. • an expanded LSA and RSA for the other marine resources subcomponents, including marine habitats, marine sediment quality and marine fish and benthic invertebrates that includes the Project water lot area and a 500 m buffer around the western portion of the water lot. • an expanded LSA/RSA for the marine water quality subcomponent that includes a 5 km radius from the berth to incorporate up to eight PRPA marine water quality stations.
	Concerns regarding impacts to marine water quality, the marine environment and marine wildlife as a result of dredging activities.	The design of the jetty has been modified to eliminate both dredging and disposal at sea (DAS) activities, and thus Vopak expects to significantly reduce potential adverse environmental effects, in particular to marine resources, including marine habitat, marine water quality, marine sediment quality, marine mammals and marine birds. Vopak prepared a memo to provide more details related to the revised jetty design. Vopak Revised Design Memo is included as Appendix 1.
	Concerns related to impact on marine life from underwater blasting.	No underwater blasting will be required for the Project.

Topic	Concerns and Interests Identified	Vopak Response/Proposed Action
Local Economy	Economic opportunities for the local communities.	The Project will require a workforce of approximately 250 people during the two-year construction phase and approximately 39 people during the operational lifespan of the Project. Vopak is committed to working with local suppliers. Should the Project receive regulatory approval, Vopak has an interest in sourcing goods and services locally and will promote a hire-local culture. Vopak will also prepare a contracting and procurement criteria memo that will outline the different components that will be reviewed on all Requests for Information (RFIs), including a local business component.
Effects of the Environment on the Project	Interested in understanding what the risks of a tsunami, earthquake or storm surge would be on the Project infrastructure.	Effects of the Environment on the Project will be assessed in Section 7. Factors of safety are included in the design of Project infrastructure to avoid effects resulting from these natural events.
Health and Safety	Concerns around COVID-19 and the risks that increased travel to the local community from workers on the Project will pose on the health and wellbeing of the locals.	Vopak continues to engage with the local communities on the concerns and feelings surrounding the current coronavirus pandemic. The health and safety of local community members is of the utmost importance to the Vopak team. Based on feedback and comments received, Vopak developed a COVID-19 specific safety plan that must be adhered to by all Vopak employees. The Project also developed a COVID-19 safety plan for our contractors and sub-contractors. Vopak employees who do not reside in the local community are not traveling for work outside of their home province and the Project has increased the use of virtual communications. Additionally, Vopak postponed and delayed geotechnical and survey work to ensure that the work could be conducted as safely as possible.

5 Next Steps for Public Consultation

This report summarizes the public consultation activities conducted to date, as well as comments received. Vopak will continue implementing the activities outlined in the Consultation Plan. Vopak will also continue to engage with the public on the Project while preparing for Stage 3 public engagement activities that will take place throughout the draft EEE/Application Review Phase. These activities include but are not limited to:

- Ongoing information sharing through meetings, open houses in Prince Rupert/Port Edward and presentations.
- Attendance and participation in regulatory open houses on the draft EEE/Application.
- Tracking and responding to public comments on the draft EEE/Application.
- Development of Public Consultation Reports.
- Developing and maintaining communications tools and materials to share Project-related information to enable ongoing two-way communication and information sharing, such as the Project website and Project email address.
- Meeting with interested local communities and stakeholder to continue to engage with community members and stakeholders on the Project.

Vopak will review all input received and consider it in the Project planning, the environmental review process and in the development of communication materials.

6 Appendices

The following items noted in the Report are provided separately:

- Appendix 1: Vopak Revised Design Memo.

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Date: March 17, 2020

To: Lindsay Luke, BC Environmental Assessment Office & Jack Smith, Prince Rupert Port Authority

From: Marina Spahlinger, Vopak Pacific Canada

Subject: Vopak Pacific Canada – Design Changes

1. Introduction

Vopak Development Canada (Vopak) would like to inform the BC Environmental Assessment Office (BC EAO) and the Prince Rupert Port Authority (PRPA), representing federal regulatory authorities, of design changes related to the proposed Vopak Pacific Canada project.

Specifically, the design of the jetty has been modified to eliminate both dredging and disposal at sea (DAS) activities, and thus Vopak expects to significantly reduce potential adverse environmental effects, in particular to marine resources, including marine habitat, marine water quality, marine sediment quality, marine mammals and marine birds.

Vopak proposes to replace the proposed jetty structure with a jetty that includes a twin Multi Buoy Mooring (MBM) marine product transfer berth with associated loading platform and trestle structures. The use of an MBM system eliminates the requirement for large berthing and mooring dolphin structures in deep water and is an established and safe way to moor vessels. This technology has been used around the world; examples are included as Appendix 1.

A drawing showing the revised versus original project layout is included as Appendix 2. The design is preliminary and may be subject to change. Additionally, Vopak has made slight modifications to the layout of the on-land infrastructure, as presented in Appendix 2.

2. Summary of Changes

The summary presented in Table 1 is based on the conceptual re-design of the marine infrastructure and a preliminary high-level assessment of changes to potential environmental effects of the project. Changes to potential environmental effects of the project are primarily expected related to the Marine Resources Valued Component (VC), for which Vopak anticipates an overall reduction of potential effects.

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Table 1. Changes to the design of the marine infrastructure and potential implications to VCs

Original Design/Activity	Revised Design	Potential Implications

200 m long causeway	No causeway, the jetty is connected to shore via an access and pipe trestle	- Reduction of potential effects on Marine Resources VC such as:
		  - Reduction in potential direct loss of habitat
		  - Elimination of potential barrier to fish passage

Jetty footprint:
- 1,200 m long
- 10 m wide
- 2 x 30 by 20 m platforms
- 300+ piles
	Jetty is located north of the original design away from Coast Island, and extends slightly farther out into the sea. The footprint has been reduced to:
	- 1,100 m long
	- 5.6 m wide
	- 30 x 100 m twin loading platforms
	- +/- 60 piles
		- Reduction of potential effects on Marine Resources VC such as:
		  - Reduction in potential direct loss of habitat
		  - Potential change in type of habitat lost
		- Changes to the Marine Use and Navigation VC:
		  - Reduction in potential effects to the Marine Use and Navigation VC due to a smaller jetty footprint
		  - Although the jetty is slightly closer to the shipping route, standard mitigations (e.g. marine communications plan, safety zone) are expected to prevent changes to potential effects

1,000 m long trestle with 36 m spans	1,100 m long trestle with 95 m spans	- No implications currently identified to the Marine Use and Navigation VC. Smaller vessels are expected to be able to pass under the trestle and larger vessels are expected to need to go around Coast Island
A pipe rack for the (insulated) pipelines for products and utilities	No change	- No implications currently identified
Two berths for vessels up to 80,000 DWT	Two parallel multi buoy mooring (MBM) berths. The proposed MBMs will consist of 4- 5 large diameter, non-reclining MBs, with sufficient separation to clearance for safe entrance, maneuvering, mooring and exit	- No implications currently identified
Two loading platforms including all required equipment and systems	One loading platform serving both berths including all required equipment and systems	- No implications currently identified
One auxiliary platform for the firewater pump house, spill boom shed and electrical building	No auxiliary platform required. There will be a separate platform for the firewater pump near shore and the spill boom will be stored on the main loading platform	- No implications currently identified

Dredging	No dredging	- Reduction in potential effect on the Human Health VC due to avoidance of potential re-suspension of sediment
		- Reduction of potential effects on Marine Resources VC such as:
		  - Avoiding potential direct loss of habitat
		  - Avoiding resuspension of sediments
		- Reduction of potential effects on the Noise VC

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Original Design/Activity	Revised Design	Potential Implications

DAS	No DAS	- Reduction of potential effects on Marine Resources VC such as:
		  - Avoiding noise re-suspension of contaminated sediments
		  - Avoiding habitat alteration at the disposal site
		  - Avoiding risk of entrainment

Vessel berthing with berthing and mooring dolphins	Vessel berthing with MBM systems	- No implications currently identified. Standard mitigation expected to minimize any adverse effects to the Marine Use and Navigation VC that may be identified.
Cargo loading with loading arms	Cargo loading with (hybrid) hose transfer system with a hose tower	- No implications currently identified
Location (see Attachment)	Location (see Attachment): - Avoids drying islet between Ridley Island and Coast Island - Avoids north end of Coast Island	- No implications currently identified
Changes Unrelated to the Re-design of Marine Infrastructure		
Rail unloading racks	Location of rail unloading racks shifted slightly south (see Appendix 2)	- No implications currently identified
150 vessels per year along the shipping lane through PRPA waters and between Triple Island and the terminal	170 vessels per year, due to the smaller than anticipated size of the methanol vessels	- Potential effects to Marine Resources due to increased vessel traffic

None of the changes are expected to modify the effects assessment methodology, selection of VCs, or residual effects characterization criteria. None of the Local Study Areas (LSA) or Regional Study Areas (RSA) for the VCs are expected to change, except for:

- Minor modifications to the LSAs for the Marine Habitats and Marine Sediment Quality subcomponent[1] and the Soil and Terrain VC; and
- Minor modifications to the LSA and RSA for the Archaeology and Heritage VC.

Vopak does not expect any changes to local and regional study boundaries in the Terms of Reference/Application Information Requirements (TOR/AIR) for the Soil and Terrain VC. Vopak suggests the following changes to the description of local and regional study boundaries for the Marine Habitats and Marine Sediment Quality subcomponent and Archaeology and Heritage VC.

[1] Note that the new marine infrastructure is included in the existing LSA for other Marine Resources subcomponents due to the existing LSAs being defined broadly enough to already include the location of the new marine infrastructure.

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Table 20: Marine Habitats, Marine Sediment Quality Subcomponent Local and Regional Study Boundaries

VC	LSA	RSA
Marine Resources (Marine Habitats, Marine Sediment Quality)	The LSA for the subcomponents, including marine habitats and marine sediment quality will be defined as the Project water lot area[2] and a 500 m buffer around the western portion of the water lot **and marine footprint** that has potential to be affected by berthing vessels, trestle and loading platform construction, and other activities associated with the construction and operation of the Project. This LSA boundary is ecologically relevant as the area includes habitat for both migratory fish and sessile fauna including those in marine sediments.	The RSA for the subcomponents, including marine habitats and marine sediment quality will be defined as the boundaries of the ecosystem contained within Pacific Fishery Management Area 4.

Table 39: Archaeology and Heritage Resources Local and Regional Study Boundaries

VC	LSA	RSA
Archaeology	A 6**23** hectare area of the northern part of the Project land lot (includes Project footprint, rail racks, and laydown areas), as well as the marine footprint ~~**including the dredge pocket**~~. A 30 metre buffer is applied to potential areas of disturbance.	Ridley Island ~~**and the,**~~ the Project water lot area **and the western portion of the marine footprint. A 30 metre buffer is applied to potential areas of disturbance.**

Please see Appendix 3 for the revised LSA and RSA maps.

3. Conclusions

Potential effects of the project, including of the new jetty design will be assessed as part of the Environmental Effect Evaluation/Application (EEE/Application) of the project. At this point in time, minimal changes are expected in regard to the content of the TOR/AIR and include: removal of the DAS permit in the list of applicable authorizations; minor revisions to the project components and construction activities of the project description; removal of the dredging and DAS project activity/interaction from consideration in the effects assessments; and revisions to the local and regional study boundaries indicated above. Vopak proposes to address these changes in the Table of Concordance of the EEE/Application.

[2] Vopak expects the waterlot boundary to change in the future to fully encompass the revised jetty design. However, in the absence of a revised waterlot boundary, Vopak has broadened the LSA to account for the marine footprint and the extent of anticipated effects. Vopak does not expect future changes to the waterlot boundary to change the effects assessment. The same applies to the Archaeology and Heritage Resources LSA and RSA.

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Appendix 1 – Examples of Multi Buoy Mooring (MBM) Systems

Terminal	Location	Owner	Coordinates (Decimal Degrees)
Barbers Point Terminal Multi Buoy Mooring	Kapolei, HI, United States	Chevron	21.26638889° 158.09972222°
Caniçal Fuel Terminal	Zona Franca Industrial da Madeira, Caniçal, Concelho de Machico	Galp Energia	32.743164° -16.729326°
Jebel Dhana Terminal	Jebel Dhana, UAE	Shuweihat Power Company	24.17027778° 52.55027778°
Shell Terminal Sri Lanka	Colombo, Sri Lanka	Shell	7.01500000° 79.83222222°
El Segundo Refinery	El Segundo, CA	Chevron	33.911622° -118.45282°
Refineria La Pampilla	LA Pampilla, Peru	Repsol	-11.916653° -77.161688°
Rasa Offshore Terminal	Acajutla, El Salvador	Formerly Chevron, now Puma Energy	13.568843° -89.841285°
Multi Directional Loading Facility	Luanda, Angola	Puma Energy	-8.774667° 13.279806°
Punta Rincon International Terminal	Punta Rincon, Panama	Minera Panama	9.022519° -80.695495°
Barrow Island CBM Marine Terminal	Barrow Island, WA, Australia	Chevron	-20.811960° 115.557275°

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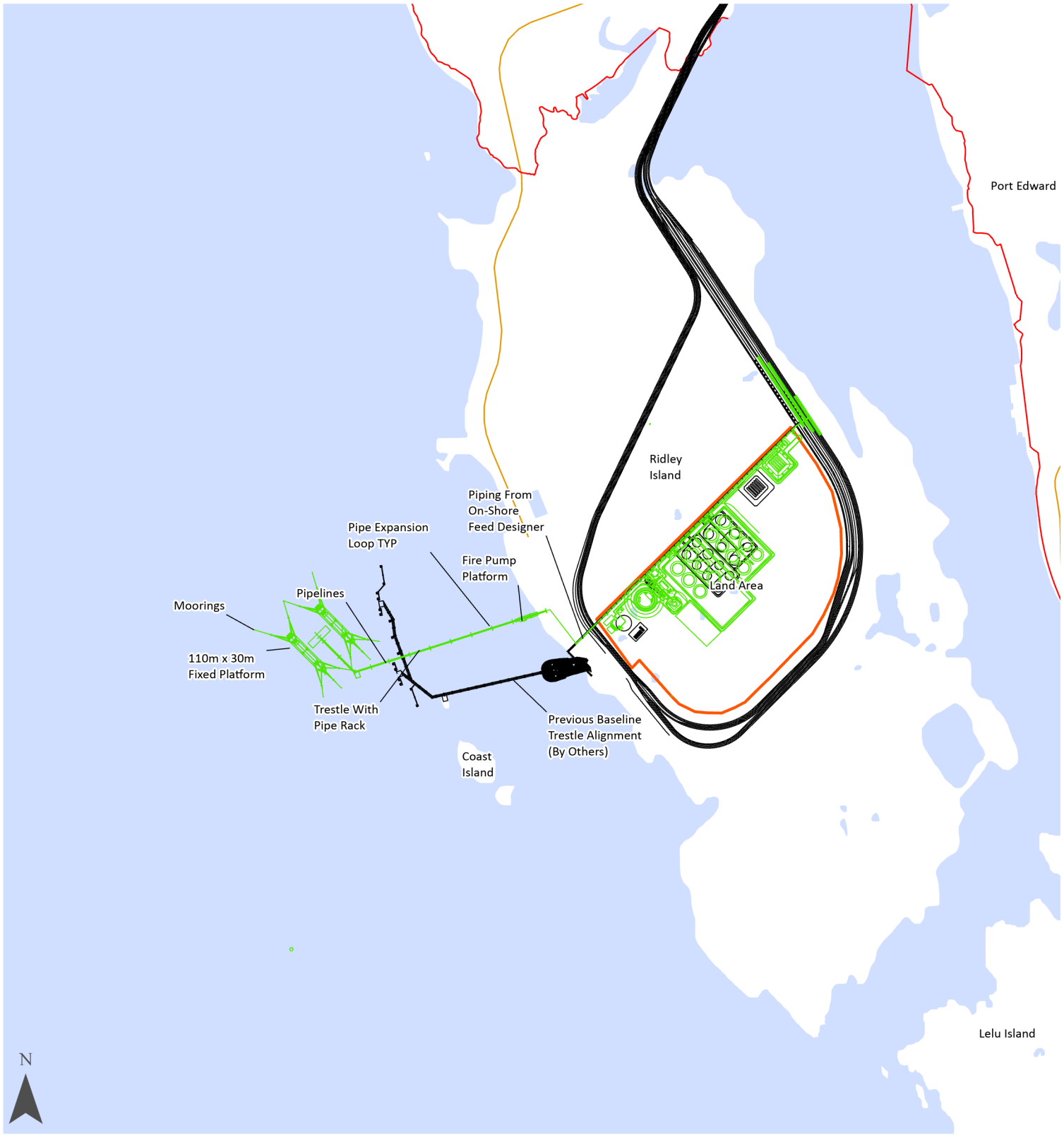
Appendix 2 – Revised Project Layout



PRPA Jurisdiction

Highways

Major Streets

Area of Interest

Ocean

Original Project Components

Updated Project Components

Project Location:
Ridley Island, Prince Rupert, BC

Client:
Vopak Development Canada

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Project Alignment Change

Created by: ECH	Checked by: MB/EM	Date: 2020/02/25
Coord. Sys.:NAD 1983 CSRS UTM Zone	Scale: 1:23,488	Reference No: 655902-GEN-5

0 270 540 1,080 1,620 2,160 Meters

MXD Path: \\Sli2606\projects\Current Projects\Vopak Development\656431 Env. Assmt\40_Execution\45_GIS_Dwgs\GIS\Vopak_Pro_3\Vopak_Prc_3.aprx

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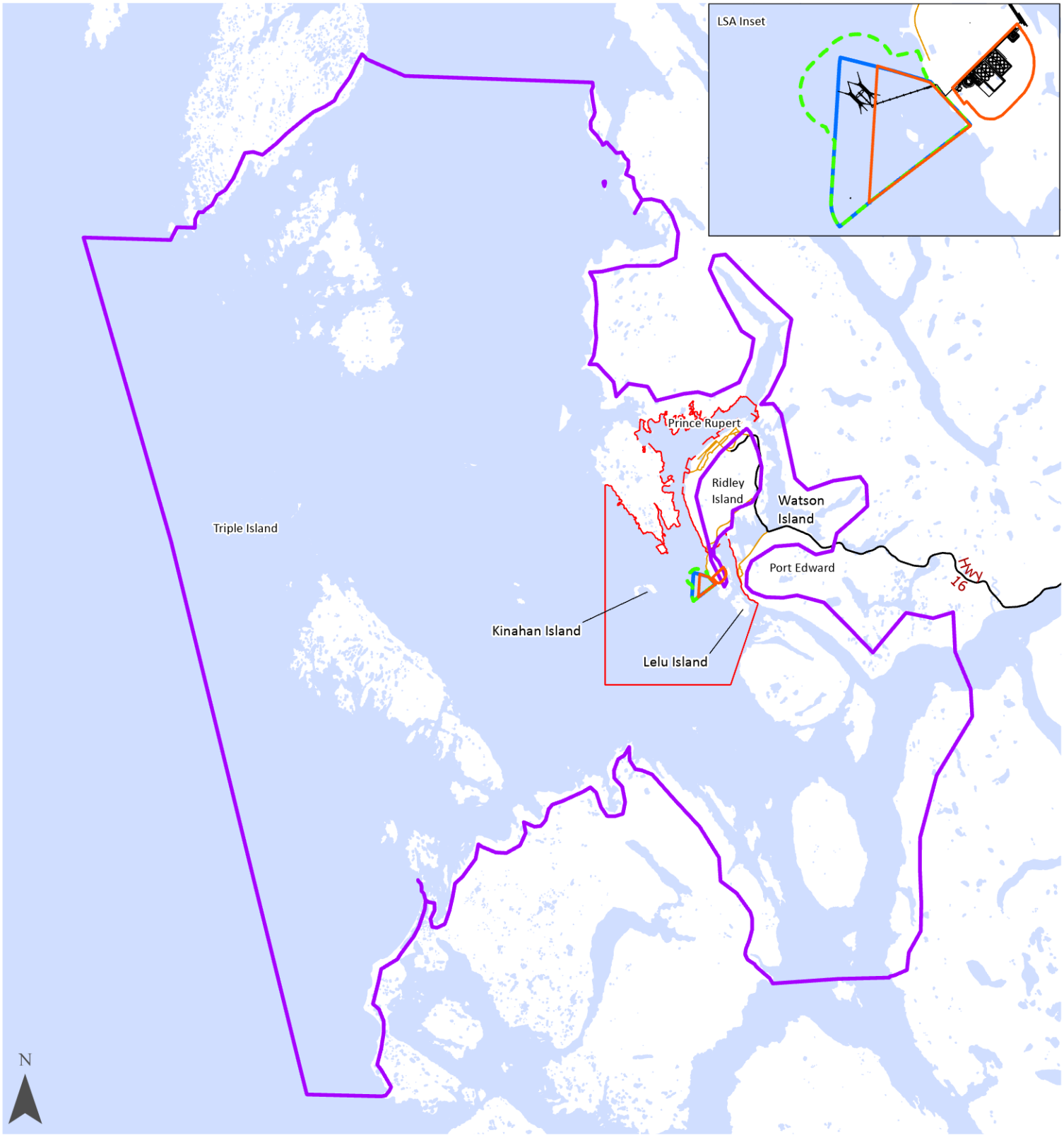
Appendix 3 – Revised Study Boundaries



Study Areas
- Original LSA
- Updated LSA
- RSA
- PRPA Jurisdiction
- Project Components

Roads
- Highways
- Major Streets
- Area of Interest
- Ocean

Project Location:
Ridley Island, Prince Rupert, BC

Client:
Vopak Development Canada

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Marine Resources Marine Habitats and Marine Sediment Quality LSA and RSA

Created by: ECH	Checked by: MB/EM	Date: 2020/03/11
Coord. Sys.:	Scale: 1:420,000	Reference No: 655902-MD-25

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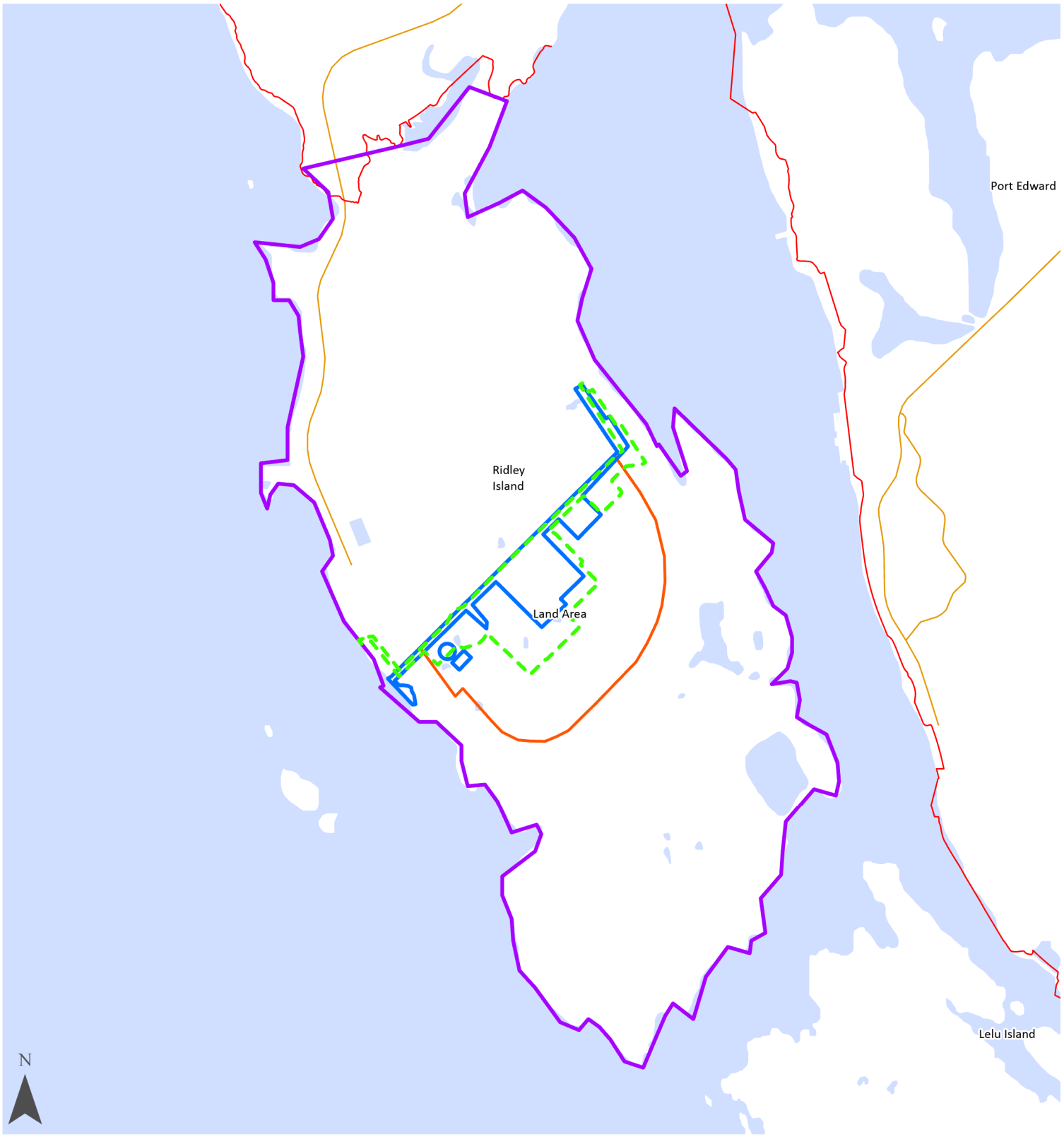

Local Study Areas
- Updated LSA
- Original LSA
- RSA
- PRPA Jurisdiction

Roads
- Highways
- Major Streets
- Area of Interest
- Ocean

Project Location:
Ridley Island, Prince Rupert, BC

Client:
Vopak Development Canada

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Terrain and Soils LSA and RSA

Created by: ECH	Checked by: MB/EM	Date: 2020/03/02
Coord. Sys.:NAD 1983 CSRS UTM Zone	Scale: 1:23,488	Reference No: 655902-MD-23

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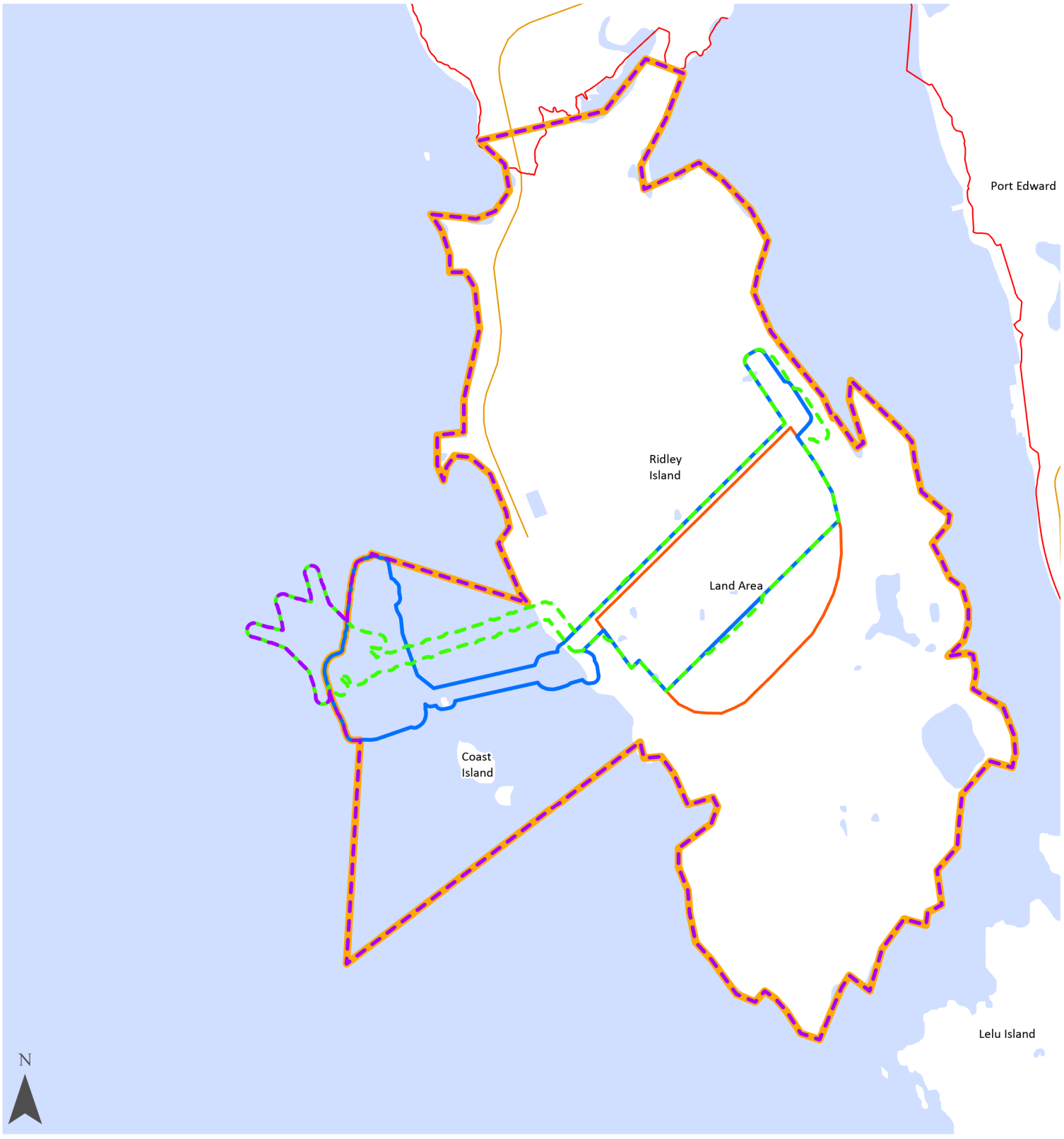

Study Areas
- Original LSA
- Original RSA
- Updated LSA
- Updated RSA
- PRPA Jurisdiction

Roads
- Highways
- Major Streets
- Area of Interest
- Ocean

Project Location:
Ridley Island, Prince Rupert, BC

Client:
Vopak Development Canada

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Archaeological and Heritage Resources
LSA and RSA

Created by: ECH	Checked by: MB/EM	Date: 2020/03/10
Coord. Sys.:	Scale: 1:23,488	Reference No: 655902-MD-24

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