



**Parkland**  
FUEL CORPORATION

# **Burnaby Refinery Operational Overview**

February 21, 2018



# REGIONAL PRODUCTS OVERVIEW

## **British Columbia's Competitive Supply Environment:**

- B.C. is not self sufficient in the supply and production of finished petroleum products.
- 2/3rds of the finished petroleum products consumed in B.C. are imported from Alberta.
- In the 1980's there were 4 operating petroleum refineries on Burrard Inlet.
- 3 of those were decommissioned and are now terminals for Alberta-based production.

## **Burnaby Refinery:**

- Burnaby Refinery has a capacity of approx. 55,000 barrels per day.
- Receives light sweet crude from Kinder Morgan Pipeline.
- Produces gasoline, diesel, jet fuel for local consumption:
  - 25% of transportation fuel in BC
  - 40% of YVR jet
  - 1/3 gasoline in the Greater Vancouver Area



## **Pipeline Overview + TMX project + Refinery Feedstock Supply**



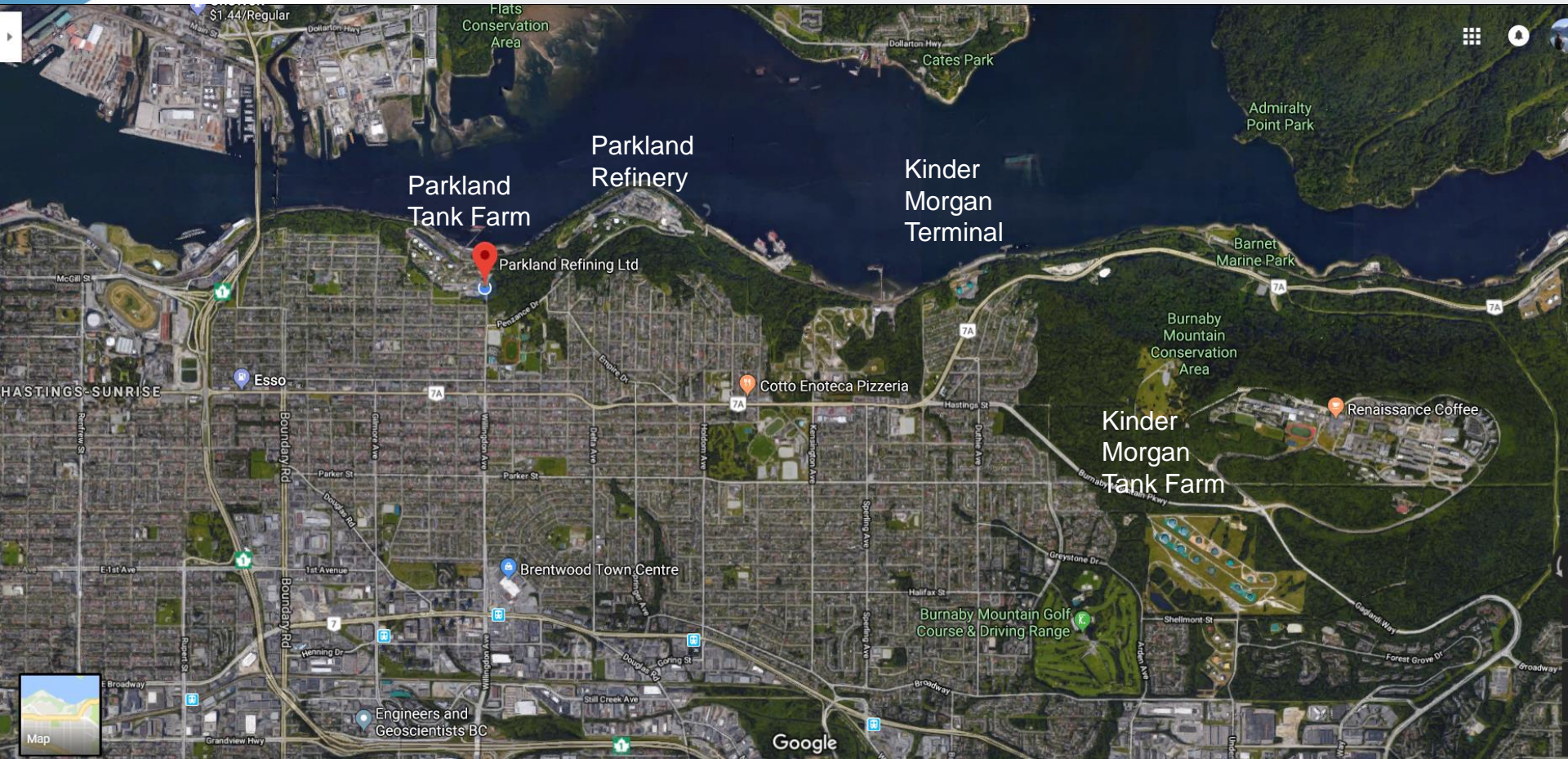
# PIPELINES AND THE BURNABY REFINERY

## Regulatory Overview:

- Pipelines in Burnaby are regulated Provincially by the BC Oil and Gas Commission (BCOGC)
- TransMountain pipeline crosses provincial boundaries is regulated Federally by the National Energy Board (NEB), now Impact Assessment

## Burnaby Refinery key pipelines:

- Kinder Morgan/TransMountain supplies crude oil to Burnaby
- Kinder Morgan jet pipeline supplies the airport
- Park pipelines move products between manufacturing and distribution (Area 2 to Area 1)
- Crude pipeline between Kinder Morgan and the Refinery crude tanks





# KM PIPELINE + BURNABY REFINERY





# BURNABY REFINERY FEEDSTOCK LOGISTICS

## Overview:

- Facility runs on light sweet (low Sulphur) crude diet. This includes 'upgraded' synthetic crude from Alberta Athabasca oil sands.
- Facility does not run heavy crude or dilbit.
- Facility prefers to receive crude from pipeline.
- Previously facility had difficulty securing space on KM/TM pipeline and was augmenting supply by rail.
- Currently facility receives crude supply exclusively by pipeline and have not used rail facility in 2.5 years (June 2015).
- Currently reviewing logistics for bringing in alternate feedstocks for co-processing which may use rail (canola, tallow, etc).



# KM/TMX BURNABY PIPELINE PROJECT SITES + TIMELINE

**Kinder Morgan's Trans Mountain Expansion (TMX) project is not linked to Chevron, Parkland or the Burnaby Refinery. This information is for context only. For details visit [TMX website](#).**

## **Pipeline:**

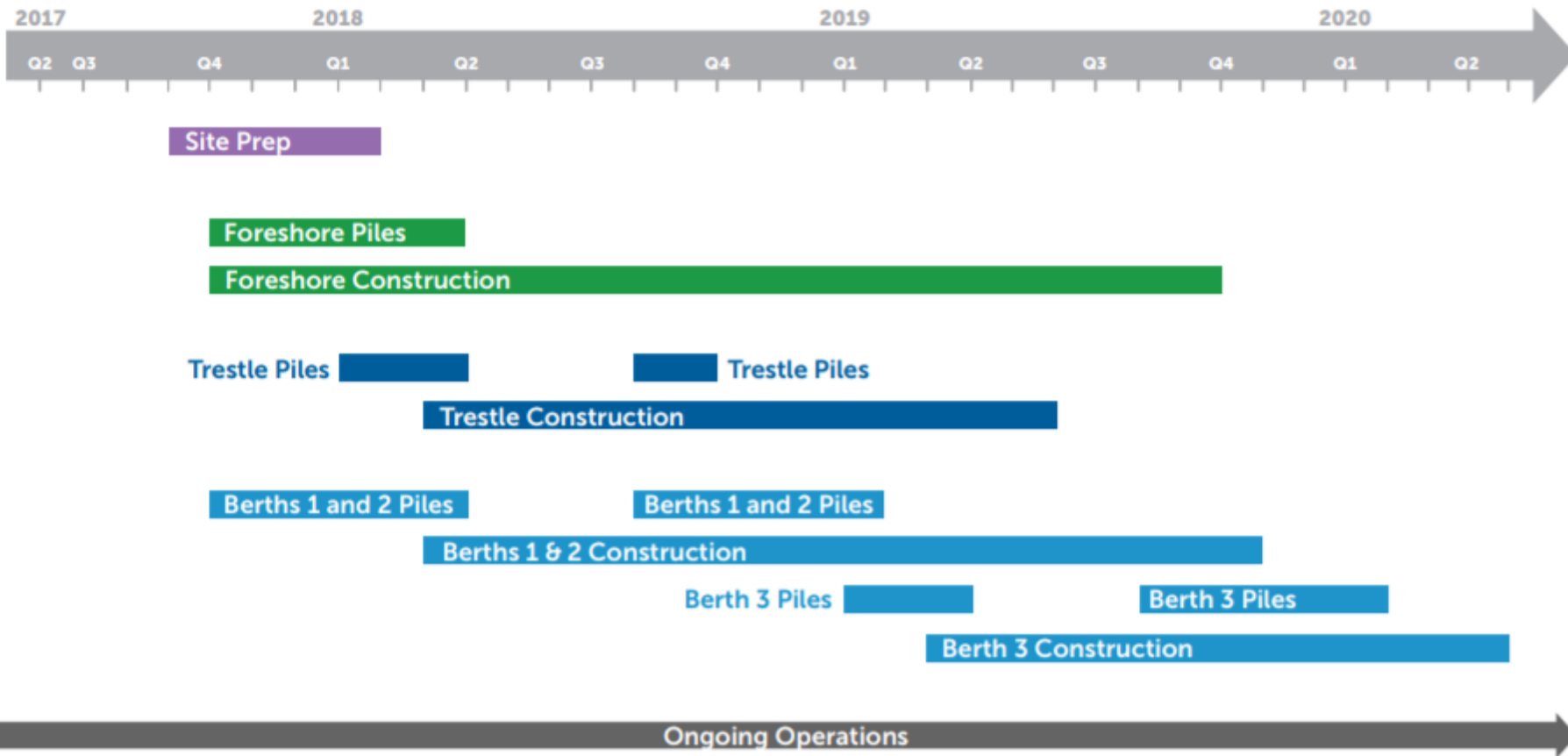
- Scope: The twinned pipeline will carry diluted bitumen, light sweet crude as well as finished products to the Burnaby terminal.
- Construction status: unknown timeline.

## **Westridge Marine Terminal:**

- Scope: expanded marine facility to be able to receive large tankers.
- Construction status: Construction has begun with site preparation activities to support ongoing operations including modifications and relocation of existing terminal infrastructure. Activities during this period include but are not limited to in-water and foreshore pile driving, rip-rap removal and the demolition of an existing utility dock.



## Westridge Marine Terminal Construction Timeline



Source: [www.transmountain.com](http://www.transmountain.com)



## **Emergency Notification System Status**



# EMERGENCY NOTIFICATION SYSTEM STATUS

- Parkland is committed to the same level of resource support to a local emergency notification system as Chevron previously did. This still requires the lead from the City of Burnaby for adoption and implementation.
- Parkland has not been in conversations locally or in Calgary with KM/TMX re: Burnaby refinery emergency notification system.
- Federal Government has a new system that may be applicable: <https://alertready.ca/>
- Parkland Refinery is committed to working with local and senior governments on emergency response and emergency notification systems.



## **Turnaround: Permanent Structures**



# TURNAROUND INFRASTRUCTURE

- We are currently in the middle of our 2018 turnaround event
- The event will include a tremendous amount of work including the replacement of the flare stack, an overhaul of the cooling tower, changing out the catalyst in seven different reactors, and taking eight operating process plants offline for equipment inspection, replacement, and repairs.
- This work requires several large cranes and a significant amount of scaffolding to complete the scope.
- After the turnaround, the refinery 'skyline' will return to pre-turnaround conditions.
- There are no new structures other than a meteorological station and the parking lot.



# PARKING LOT STORMWATER MANAGEMENT AND SLOPE STABILITY ON PENZANCE

- All surface runoff from the parking lot is going to the new stormwater ponds created at the base of the parking lot on site and is being managed.
- No new surface runoff was generated on the City right of way and no drainage patterns were changed on Penzance.
- Slope stability project on the south side of Penzance was related to instability by the BC Hydro infrastructure. BC Hydro has taken steps to ensure slope stability on their right-of-way.
- If trees or slope stability issues are observed on Penzance please contact the City of Burnaby.





**Questions?**