

June 14, 2016

Strathcona Refinery

Strathcona County Council

Presented by: Bill Lawrysyn - Imperial

Strathcona Refinery location



Edmonton Rail Terminal aerial view





Quick facts

Imperial has owned and operated a refinery in Strathcona County since 1948

Strathcona refinery can process ~ 189,000 barrels of crude oil per day

Land-locked refinery with connectivity to conventional and synthetic crudes

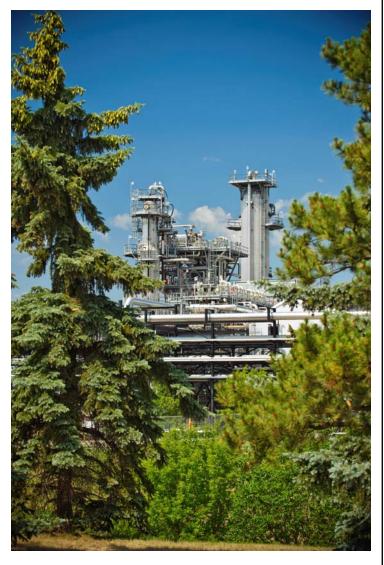
Manufactures a full range of gasoline, diesel and aviation fuels, lubes, waxes, asphalts, and liquid petroleum gases

Supplies products to an area from Northern Ontario to British Columbia; NWT to Northern US

Employment

- ~ 430 full time employees
- ~ 290 long term contractors

Additional contractors for projects and turnarounds





Safety and environment

Strong Safety Culture – LPS Inc. system in use for several years

- LPS Inc. is a internationally recognized company specializing in a behavioral based approach to loss prevention, annual assessment conducted
- Injury rates below provincial averages
- Safety performance recognized both externally and within the company

Outstanding Environmental Performance

"Protect Tomorrow. Today."

- New impounding basin project completed 2014, increased wastewater treatment capability
- No recordable spills or releases over the last three years
- Excellent compliance record against operating approval, no water discharge contraventions and only a single air contravention over the last three years





Part of the community

Areas of focus guide our giving and community engagement – Education, Environment, Aboriginal, and projects in communities where Imperial operates

United Way – Imperial and Unifor local 21A run an award winning workplace campaign, \$580,000 in 2015

Strathcona County Library – 2016 marks the 20th year of support for the summer reading and youth volunteer programs

RiverWatch Science Program – supporting the floating science classroom on the North Saskatchewan River

Skills Canada Alberta – promoting and encouraging Alberta youth to explore careers in trades and technology

National Volunteer Week – supporting NVW activities through the Information and Volunteer Centre for Strathcona County

Linking Generations – supporting caring communities through the development of positive intergenerational relationships



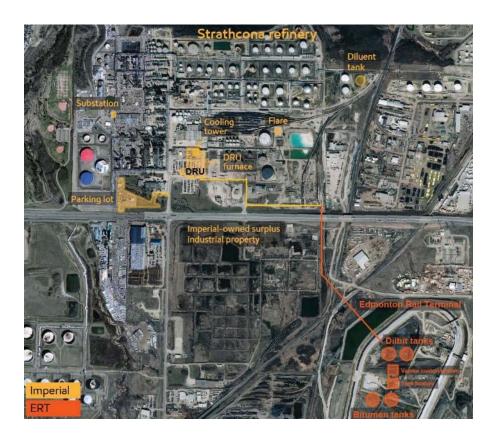




Strathcona Refinery

Diluent Recovery Project

Project overview

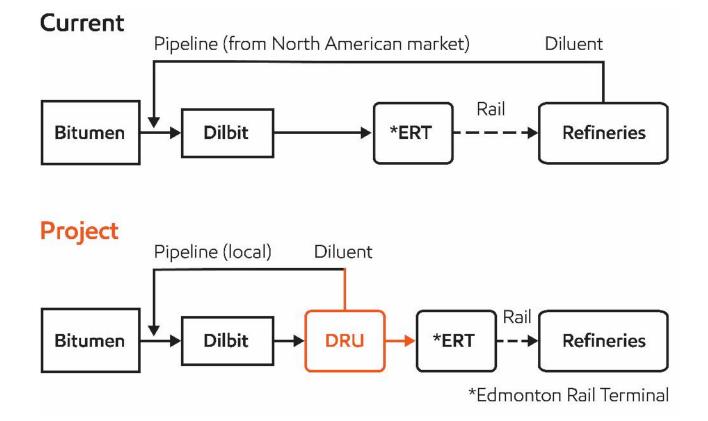


- The diluent recovery unit (DRU) would be built within the existing Strathcona refinery site, located at 3400 Baseline Road, near Edmonton, Alberta
- Diluted bitumen and bitumen handling facilities will be built at the Edmonton Rail Terminal (ERT)
- The proposed unit would have the capacity to process up to 200,000 barrels of diluted bitumen per day



Project overview

- Through a process known as fractionation, the DRU would remove diluent from diluted bitumen and reduce the volume of fluid prior to shipping
- It would consist of a fractionation tower, furnace, heat exchangers and stabilizer tower
- Construction of a DRU at Strathcona refinery would result in greater transport efficiencies and improve market access
- Removing diluent at the refinery avoids unnecessary transportation over a distance of thousands of kilometres



Environment

Air

- Emissions from the proposed diluent recovery unit (DRU) and associated facilities are expected to meet current and future Alberta limits and federal air quality standards:
- The current back-up flare used for maintenance activities will be replaced with a new flare stack
 - The new flare stack will be of a similar height to the existing one and incorporate a low noise design and steamassisted smokeless flare tip

Water

- Project will meet requirements of Alberta Water Act, and Code of Practice for Watercourse Crossings
- Fish Habitat Assessment completed by a qualified aquatic environmental specialist
- The DRU project is not expected to adversely affect surface water, groundwater, soil, vegetation, fish or wildlife

Noise

 Noise levels would be managed to maintain current levels in nearby neighbourhoods through a combination of low noise technology employed in the design, and noise reduction initiatives implemented elsewhere in the refinery





Traffic strategy

- During construction, traffic volume to and from the refinery would be similar to the level seen during a typical maintenance project
- A traffic management plan would be reviewed with local affected municipalities and controls put in place as required (light timing, special constables, signage, etc.)





Proposed project timeline

- Public consultations are currently underway to support the regulatory applications
- Stakeholders will have the opportunity to engage with Imperial and provide feedback on the proposed changes and identify concerns
- Imperial is committed to addressing questions and concerns throughout the regulatory process
- Construction of the Strathcona diluent recovery unit (DRU) could begin as early as 2018
- Startup of the facilities could occur as early as 2020

Formal public consultation

Environmental and operating site permitting

Engineering

Procurement/fabrication

Construction

