

# Horizon North Pit Extension Project Fact Sheet

Proponent Information			
Proponent Name:	Canadian Natural Resources Limited	Date:	October 25, 2017
Project Name:	Horizon North Pit Extension	Company Contact Name and Information:	<b>Anita Sartori</b> <b>Michelle Barrett</b> Suite 2100, 855 – 2 <sup>nd</sup> Street SW Calgary, AB T2P 4J8
Name of Company that will hold Approval:	Canadian Natural Resources Limited	Company Website:	<a href="https://www.cnrl.com/horizon-oil-sands.html">https://www.cnrl.com/horizon-oil-sands.html</a>
General Project Information			
Type of Project (e.g., in-situ, mine, quarry, upgrader, etc.):	Oil Sands Mine	New Project, Expansion, Additional Phase or Modification:	Extension of mine pit <sup>(a)</sup>
Project Location (Legal Land Description and Longitude/Latitude) and Municipality:	Township 96-97, Range 11-12, west of the 4 <sup>th</sup> Meridian Regional Municipality of Wood Buffalo	Private, Federal or Provincial Land:	Provincial Land
Is any part of the project on or next to federal lands?	No	Identify Existing Land and Water Use(s), Resource Management, or Conservation Plans Within or Near the Project site:	Oil and gas, forestry, traditional land use
Total Project Area (ha):	Extension of North Pit: ~1,346. Extensions of Approved and New Overburden Storage Areas: ~2,102. Approximate total: ~3,448	Total Area to be Disturbed (ha):	Extension of North Pit: ~1,346 Extension of Approved and New Overburden Storage Areas: ~2,102 Approximate total: ~3,448
Projected Construction Start (Month/Year):	December 2020	Projected Operation Start (Month/Year):	December 2022
Life of Project for the North Pit Extension (# years, YYYY – YYYY):	Approximately 11 years, 2020-2031. Actively mined for approximately seven years	Post-Reclamation Land Use(s):	Primarily a dry landscape
Decommissioning Start and End for Horizon	2060-2070	Progressive Reclamation Start and End for Horizon	2009-2070

<sup>(a)</sup> Canadian Natural is proposing a northeast mine pit extension of the previously approved North Mine Pit at the Horizon Oil Sands Processing Plant and Mine (Horizon). The extension will be immediately adjacent and east of the existing approved North Pit, west of the Athabasca River and is within the Alberta Energy Regulator's (AER) Approved Project Boundary for Horizon. The mine extension and the additional area required for overburden storage represents an increase in disturbance area of approximately 7% and 11% respectively.

The proposed extension will be actively mined for approximately seven years with all ore continuing to be processed at the existing Horizon Central Processing Facility. Accordingly, an increase in water withdrawal from the Athabasca River is not required for this Project. The extension would be a continuation of the mine sequence, additional workforce would not be required and would not result in an increase in population, housing or camp requirements, local or regional traffic, and would not impact local or regional infrastructure or community services. Canadian Natural is preparing an EIA for the proposed Project with a focus on the potential incremental impacts that may result from the extension. Canadian Natural will be seeking regulatory approvals by amending the current Horizon approvals under EPEA, *Water Act*, *Public Lands Act* and *Oil Sands Conservation Act* (OSCA) through an Integrated Application. Existing environmental management and monitoring programs will be expanded to accommodate the development of the proposed Project.

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Project Description			
Project Products:	Ore	Types of Activity (major project processes, components including capacity/size, if available):	Extension of Horizon's oil sand mine including: road construction, tree clearing, surface water management, soil salvage, overburden/interburden removal and storage, truck and shovel mining, treated tailings deposition, capping, reclamation
Feedstocks and design feed rates (maximum daily, annual)	Not Applicable (N/A)	Products and design production rates (maximum daily, annual)	N/A
Byproducts and wastes (specify types, rates and storage capacities)	Overburden/Interburden, storage areas	Product storage facilities and capacities	No change
Power Source (if on site power generation describe quantity (MW) and facilities):	Existing onsite cogeneration facility will provide electrical power for the Project, no change required	Method of Product Transport (e.g., pipeline, rail, truck, etc.):	Truck
Average Production Capacity per Year (specify units):	Approximately 1.5 – 161 MT/year (Million Tonnes per year)	Infrastructure Requirements (e.g., roads, pipelines, water intake, storage, tankage, etc.):	As an extension of existing operations, the NPE will use existing infrastructure and extensions where required of roads. The existing water intake will be utilized
Location of End Market:	Horizon Oil Sands Processing Facility	Expected Types of Air Emissions (e.g., SO <sub>2</sub> , NO <sub>x</sub> , CO <sub>2</sub> , etc.):	SO <sub>2</sub> , NO <sub>x</sub> , NO <sub>2</sub> , CO, CO <sub>2</sub> , PM <sub>2.5</sub> , H <sub>2</sub> S, VOCs. The NPE Project is not expected to increase emissions from stationary or mobile sources
Project By-Products:	None	Types of Solid Wastes Generated:	Overburden/Interburden storage areas
Expected Types of Water Effluent Releases (note the water bodies the effluent will be released to):	No effluent releases	Will the project involve the manufacture and storage of explosives (Y/N):	No
Construction or Operation Camp Required (Y/N/Unknown. If yes, on-site or off-site):	Existing onsite	Method of Transport of Employees to Site (Construction and Operation):	Existing transportation methods (fly-in-fly-out, buses and some vehicles)
Estimated Construction Person-Years of Employment:	No change in workforce	Estimated Operation Persons-Years of Employment:	No change in workforce. Mine life extension of five (5) years

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Regulatory and Environment Information			
Regulatory Board(s) (ERCB/NRCB/AUC):	Alberta Energy Regulator (AER) and Aboriginal Consultation Office (ACO)	Identify applicable sections of <i>Designated Physical Activities Regulation</i> pursuant to the <i>Canadian Environmental Assessment Act, 2012</i>	N/A. The NPE is not a "designated project" pursuant to CEEA 2012
<i>Environmental Protection and Enhancement Act</i> Approval Required (Y/N/Unknown):	Yes. Amendment of EPEA Approval No. 149968-01-01	<i>Public Lands Act</i> (Y/N/Unknown):	Yes. Amendment of MSL No. 033406
<i>Water Act</i> Approval Required (Y/N/Unknown. If yes, purpose):	Yes. Amendment required. Extension of Water Act Approved Fenceline for drainage activities associated with the footprint.	<i>Water Act</i> Licence Required (Y/N/Unknown. If yes, purpose, source and estimated volumes):	Yes, amendment required for the additional drainage area of the associated footprint. No increase in withdraw of water from the Athabasca River
Watercourse Crossings (type of crossing, any Class A to C waterbodies):	None	Waterbodies Required (Y/N/Unknown/NA. If yes, # and ha):	N/A
Will any of the components or activities associated with the project affect fish and/or fish habitat? (Y/N):	Yes	Are any works or undertakings proposed to take place in, on, over, under, through or across a navigable water? (Y/N):	No
Nearest Waterway/Waterbody (name and km):	Athabasca River (~0.3 km east of the NPE)	Nearest Water Well (km) (Domestic and Commercial):	Commercial: ~11.7 km west of Horizon North Pit Extension In 12-32-96-12W4 (Canadian Natural)  Domestic: N/A
Nearest Provincial Highway (# and distance):	Highway 63 (~1.9 km directly and ~34 km by road)	Access Improvements to Provincial Highway:	No
Traffic Impact Assessment Required (Yes/No/Unknown):	No	Historic Resources Impact Assessment Required (Y/N/Unknown):	Yes
Waste Disposition / Disposal (i.e., Disposal Well, Salt Caverns, Landfill, or Third-Party):	Existing onsite Class II Landfill, no change required		

**Note:** In accordance with the AER bulletin 2016-27 the proposed North Pit Extension would be consistent with the frameworks developed under the Lower Athabasca Regional Plan (LARP). The LARP, as intended, addresses the cumulative effects development of Oil Sands through balanced environmental, social and economic considerations.

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Stakeholder Information			
Nearest First Nation Reserve(s) and Métis Settlements (name and km):	Fort McKay First Nation #174C reserve lands (~13 km); and Fort McKay Métis Community (~19 km) south east of the extension of the North Pit	Nearest Residence(s) (km):	Fort McKay First Nation ~20.5 km <i>(Distance taken from the south east end of the extension of the North Pit)</i>
Aboriginal Groups Involved in Stakeholder Consultation:	Athabasca Chipewyan First Nation (ACFN); Fort McKay First Nation (FMFN); Mikisew Cree First Nation (MCFN); Fort McMurray #468 First Nation (FMFN #468)	Unique Environmental or Social Considerations (Describe or None):	None
Date Stakeholder Engagement Started (Public/Aboriginal):	November 28, 2017 (Public Notice)	Public Groups involved in Stakeholder Engagement:	To be determined based on responses received from Public Notice.