



3790 98th Street NW
Edmonton, AB
T6E 6B4 Canada

TEL 780 440 7687
FAX 780 462 6784
TOLL FREE 800 314 2695
civeo.com

VIA EMAIL

March 7, 2019
(revisions to May 28, 2019 are italicized)

Regional Municipality of Wood Buffalo
7th Floor, 9909 Franklin Avenue
Fort McMurray, Alberta T9H 2K4

Attention: Annette Antoniak, CAO and Members of Administration

Dear Mesdames/Sirs:

**Re: Industry Engagement re Project Accommodations
Response to Working Group Request for Further Details from Civeo
Council Motion January 28, 2019: Administration Research Items (a)-(d)**

[Note: The purpose of this letter is to assist Administration in gathering information on items (a)-(d) in Council's motion adopted January 28, 2019 (copy attached) which motion is set to return to Council by June 30, 2019. Civeo's advance consent would be required for any other use of the contents of this letter. Finally, this letter does not include comments Civeo might have about bylaw amendments, motions or other processes relating to project accommodations. Those comments, if any, will be set out in separate correspondence at the appropriate time.]

As noted in my email earlier this week, I wish to thank you again for the opportunity for our Civeo team to meet with your working group this past Thursday, February 28. It was a very productive first engagement between our respective teams. As promised during our meeting, we agreed to provide more details about Civeo including our operations, employees, local area engagement and contributions within the Regional Municipality of Wood Buffalo (RM). Those details are outlined below.

As we are in the early stages of providing detailed information to the working group, we expect there may be questions or additional information you might need. We thus look forward to hearing from you so we can ensure the RM has the information it requires to make an informed decision regarding project accommodations in the region.

OPERATIONS

a. Company Overview

Civeo (NYSE: CVEO) is a workforce accommodations specialist dedicated to helping people maintain healthy, productive, and connected lives while living and working away from home. Our belief is that a well-rested employee with a balanced lifestyle will be more productive at work – making accommodation providers a key partner in the success of oil and gas operations.

Over the past 20 years, Civeo has been a leader in providing support to many large energy development, construction, expansion, turnaround, maintenance, operations and capital projects within the RM. Our focus has been to provide quality accommodations to the workforce associated with these projects so that energy producers can maintain ongoing, safe and efficient operations.

Civeo has been proud to work collaboratively with the RM in supporting the skilled trades-people who have been, and continue to be critically important to the different phases of these economically important projects.

Civeo owns and operates 17 lodges in the RM. These facilities are Open Lodges on long term leases with the Government of Alberta. While we serve local producers in the RM, we are independent from the producers and not a member of OSCA.

b. Civeo Lodges in the RM

Broadly speaking, project involvement for those staying in our lodges is for variable periods of time, ranging from a few weeks to months, depending on the scope and complexity of the projects the workers are involved in. Having safe, flexible worker accommodations available in close proximity to projects remains an essential part of the critical regional infrastructure necessary to sustain the model for safe, remote oil and gas developments.

The table below provides details about Civeo's lodges in the RM. These lodges are subject to extreme seasonality. Please advise if you would like more information about non-public occupancy numbers.

LODGE	CAPACITY	LOCATION
Anzac Lodge	526	NE-7-84-6-W4
Athabasca Lodge	2,005	E1/2-1-94-6-W4
Beaver River Lodge	1,243	E1/2-1-94-6-W4
Borealis Lodge	1,504	Suncor Main Plant
Christina Lake Lodge	30	28NE 4-7-76-W4
Conklin Lodge	1,012	NW 10-77-8-W4
Fort McMurray Village		
• Bighorn	760	Aostra Road
• Black Bear	530	
• Buffalo	573	
• Lynx	855	
• Wolverine	855	
• Grey Wolf Lodge	946	Hammerstone Quarry site
Henday Lodge		
Hudson Lodge	624	Voyageur Road

Mariana Lake Lodge	526	SW10-81-13-W4
McClelland Lake Lodge	1,997	NW10-97-20-W4
Wapasu Creek Lodge	5,174	E1/2-29-95-7-W4
Total Room Count	19,160	

c. Other Services

We employ a number of sustainable design techniques and ecological systems to reduce our footprint and energy consumption, as well as to promote energy efficiency. Imperative to our operations is responsible stewardship of the land and our commitment to return sites to their previous condition once we retire from the area.

Water Treatment Facility

Civeo owns and operates three municipal-sized water treatment facilities located at our Beaver River/Athabasca site. Our on-site treatment plant purifies water drawn from the Athabasca River and the potable water plant is capable of serving a city of more than 20,000 inhabitants and provides potable water to Civeo lodges located throughout the RMWB (and services RMWB, Indigenous Community and third party client needs). Civeo also operates two municipal sized waste water treatment plants at the same location, each plant receives sewage from throughout the northern portion of the RMWB.



Wastewater from our surrounding operations is treated to government health and environmental standards and returned to the river at higher purity level than when it was originally acquired. Civeo is the only accommodations company that is authorized to discharge into the river.

In 2018, we began contributing over \$215,000 annually in levies to the municipality from the operation of our own wastewater treatment facilities.

Laundry

Serving customers in Canada's oil sands region, Civeo's state-of-the-art commercial laundry facilities provide fast, reliable delivery service, computerized tracking systems, and operate with the environment in mind. In addition, our system uses 35 percent less water than a conventional laundry.

This laundry facility is located at the Beaver River Executive Lodge site: E1/2-1-94-6-W4.

EMPLOYEES AND EMPLOYMENT POLICIES

a. Employees

Our employee number varies based on occupancy at our lodges. At peak capacity, we maintain a staff of close to 2,000 in the RM. Currently, close to 10% of Civeo staff live in Fort McMurray.

b. Local/First Nation Hiring Policies

We have a local hiring protocol, with preference provided to local residents for all lodge-based jobs. This means that all non-union jobs in our lodges are first posted via local channels. If we are unable to fill the position locally, we will extend the posting to Alberta, and outward from there.

CONTRIBUTIONS IN THE REGION

a. Summary of Property Taxes paid in the RM

YEAR	AMOUNT
2015	\$ 7,321,438
2016	\$ 5,571,258
2017	\$ 4,412,151
2018	\$ 5,917,861 *
TOTAL	\$ 23,222,708

*includes Suncor lease flow through to RMWB for FMV site.

b. Local Procurement

We have demonstrated a commitment to supporting local business, wherever possible, through our local-first procurement policies, sourcing more than \$14 million of product and services from local area businesses in 2018 alone.

YEAR	TOTAL LOCAL (INCLUDES INDIGENOUS/ NON-INDIGENOUS)	LOCAL INDIGENOUS
2018	\$ 14,540,732.21	\$ 12,459,223.43
2017	\$ 14,554,458.33	\$ 6,602,488.88
2016	\$ 9,999,689.98	\$ 8,222,570.41
2015	\$ 9,743,211.99	\$ 8,126,852.95
2014	\$ 10,103,856.52	\$ 8,563,909.77

c. First Nations Partnerships

Civeo has three active partnerships with local Indigenous communities; Fort McKay, Fort McMurray #468 and Mikisew Cree First Nations. The revenues the communities earn through these partnerships flow directly into the community for social programs, employment, entrepreneurial development, housing and education.

These partnerships represent millions of dollars to Indigenous Peoples within the RM.

COMMUNITY COMMITMENT

Civeo is committed to being a positive force in the community. We partner with local stakeholders for long-term growth and sustainable development, and we operate in a responsible manner with particular emphasis on safety, people and the environment.

We encourage those using our facilities to support local businesses, including using the Fort McMurray airport. Further, we provide transportation services into Fort McMurray to allow our guests to shop and dine at local businesses.

a. Emergency Response

Civeo's ability to assist residents of Fort McMurray during times of crisis highlights our commitment to the region. We opened our doors to over 10,000 area residents, families and first responders during the 2016 Horse River fire, providing them, free of charge, with accommodations, food and access to emergency transportation services.

b. Community Infrastructure

We have invested in various community infrastructure projects.

- \$100,000 contribution to the Northern Lights Health Foundation's gratitude campaign from our venture with Fort McKay First Nation, Dene Koe.
- Built traffic lights at Fort McKay (approximately \$2.7 M) to address safety concerns at the intersection of Highway 63.
- Manage maintenance of Aostra Road.

c. Youth Programs

Together with the Mikisew Cree First Nation, we donated to the youth program at Northlands School in Fort Chipewyan that provides after-school programming. Employees at our McClelland Lake Lodge led a fundraising activity which involved the collection of recyclables. The funds raised were matched by our Mikisew partner and Civeo's corporate office, and donated to the Helping Hands program.

FIRST NATIONS COMMITMENT

As many of Civeo's projects in Canada operate in traditional territories, we work closely with Indigenous communities to explore mutually beneficial investment, employment and business opportunities. Our commitment to Indigenous Peoples is guided by the following principles:

- Civeo believes in the inherent rights of all Indigenous Peoples to maintain social, cultural and spiritual identities; exercise jurisdiction over traditional lands; and pursue sustainable economic prosperity.
- Civeo purposefully informs and educates employees, customers, suppliers and community stakeholders of the rights of self-determination of Indigenous Peoples as declared in the United Nations Declaration on the Rights of Indigenous Peoples.
- Civeo acknowledges the reliance of its business on the consent of, and partnership with, Indigenous Peoples.
- Civeo is committed to the principles of the Canadian Council of Aboriginal Business (CCAB) Progressive Aboriginal Relations (PAR) program and to:
 - Reach and maintain 15% of its Canadian workforce from Indigenous communities.
 - Develop and maintain meaningful business partnerships where revenues and profits are shared.
 - Create opportunities, expand capacity and build partnerships with Indigenous-owned businesses.
 - Make sustainable and meaningful contributions to communities and programs to support education and scholarship opportunities for the next generation of Indigenous leaders.

Civeo proudly maintains a Silver Level certification in the Canadian Council for Aboriginal Business (CCAB) Progressive Aboriginal Relations (PAR) program.

The underlying principle of Civeo's Indigenous Procurement Policy is to support the long-term economic interests of Indigenous Peoples by promoting the participation of qualified Indigenous businesses to work with us on capital projects and ongoing operations.

In closing, we look forward to working with you and your working group, and hearing from you in the near future.

Respectfully,



Al Shoening
President, Canada


COUNCIL MOTION
Administration Research
(Adopted January 28, 2019)

THAT Administration be directed to:

- (a) revisit the memorandums of understanding that have been signed in the last 10 years to see if they are still relevant;
- (b) undertake a community engagement initiative related to rotational workforce;
- (c) look at the individual project accommodation camps when they come up for approval and or renewal applications and work directly with industry partners to reduce the number of people utilizing camp accommodations as much as possible with the aim of reaching the MDP target of 10% by the year of 2030;
- (d) Work with industry to bring flights through the Fort McMurray International Airport

AND THAT Administration report back to Council by June 30, 2019.



Regional Municipality of Wood Buffalo 
@RMWoodBuffalo





May 29, 2019

Mayor Don Scott and Council
Regional Municipality of Wood Buffalo
7th Floor, 9909 Franklin Avenue
Fort McMurray, Alberta T9H 2K4

RE: Regional Municipality of Wood Buffalo Camp Moratorium

Dear Mayor and Council:

Canadian Natural Resources Limited (Canadian Natural) greatly values our longstanding, mutually beneficial relationship with the Regional Municipality of Wood Buffalo (RMWB). We appreciate that the RMWB has supported the oil and natural gas industry through its current challenges, including vocal support for market access and competitiveness. We know that these have been difficult times for all of us, but we are confident that by working together we can come out stronger.

Canadian Natural understands the desire of Council to increase the region's population, reduce unemployment, and support local businesses. We would like to continue to work with you to build a strong, vibrant region. Indeed, Canadian Natural offers incentives and housing plans to workers who live and work in Fort McMurray. We hire local contractors because they have the experience and skills needed to get the job done. We pay significant property taxes for both our facilities as well as our camps, which support the operating and infrastructure needs of the RMWB.

Canadian Natural is very concerned by the proposed moratorium on camps and dramatic increase to camp permitting fees. Pursuing this bylaw and fee increase undermines certainty, increases costs, and makes it more difficult to attract jobs and investment to the region. As the community continues recovery from the devastating wildfire and we navigate the economic challenges, this type of divisive policy is counter to the collaborative approach that has proven mutually beneficial in the past.

Camp facilities have always been included as a necessary measure to facilitate oil sands development. For example, the Social and Economic Impact Assessment for Canadian Natural's Horizon mine included fly in fly out (FIFO) and other measures as an effort to reasonably mitigate impacts to the community.

Canadian Natural's mining sites require employees to commute about two hours a day from Fort McMurray. We currently offer bus services, but we would be concerned about the safety implications of increased traffic and commute times. To attract and retain our workforce, it is important to offer employees choices about where they live and how they get to work.

The proposed camp moratorium would limit employee choices and make it more difficult to recruit needed workers. In fact, we are already experiencing difficulties attracting workers due to the uncertainty created by the proposed moratorium and increase to camp permitting fees. The measures would serve as a disincentive to keeping non-essential workers based in the region. Furthermore, the

Canadian Natural Resources Limited

Suite 2100, 855 - 2nd Street SW, Calgary, Alberta, T2P 4J8 T 403.517.6700 F 403.514.7677 www.cnrl.com

proposed camp moratorium is a step in the wrong direction with respect to creating and maintaining jobs across Alberta that depend on oil sands projects.

We hope that you will reconsider this proposed bylaw and fee increase so that we are able to move forward in a spirit of collaboration to our continued mutual benefit. For instance, Canadian Natural representatives have been active members of the Wood Buffalo Steering Committee. We believe there is an opportunity to revive and refocus this committee as a catalyst to drive initiatives including improving facilities and infrastructure that would lead to increased local employment, such as the twinning of Highway 63.

Please feel free to contact our Manager, Surface Land and Stakeholder Relations Adele Thomson adele.thomson@cnrl.com or by telephone at 780-715-5727 if you would like to discuss further.

Yours truly,



Scott Stauth,
Chief Operating Officer – Oil Sands
Canadian Natural Resources Limited

CC: Hon. Jason Kenney, Premier
Hon. Kaycee Madu, Minister of Municipal Affairs
Hon. Sonya Savage, Minister of Energy
Laila Goodridge, MLA for Fort McMurray-Lac La Biche
Tany Yao, MLA for Fort McMurray-Wood Buffalo
Karim Zariffa, Executive Director Oil Sands Community Alliance (OSCA)
Al Reid, Executive Vice-President, Stakeholder Engagement, Safety, Legal & General Counsel –
Cenovus Energy
Darryl Hass, Vice President, Health, Safety, Environment and Sustainable Development –
ConocoPhillips Canada
Janet Annesley, Senior Vice President, Corporate Affairs – Husky Energy
Theresa Redburn, Senior Vice President, commercial and corporate development – Imperial Oil
Jeremy Gizen, Vice President, Subsurface Operations, Regulatory and Environment – MEG Energy
Eric Axford, Executive Vice President and Chief Sustainability Officer – Suncor Energy
Kara Flynn, Vice President, Government & Public Affairs – Syncrude
Scott Chalker, General Manager JV and Commercial NA – CNOOC International
Heather Scott, General Manager Oilsands – PetroChina Canada

ConocoPhillips Canada Resources Corp.
401 – 9th Avenue S.W.
Calgary, AB T2P 3C5

March 7, 2019

Annette Antoniak
Chief Administrative Officer
Regional Municipality of Wood Buffalo
9909 Franklin Avenue
Fort McMurray, Alberta T9H 2K4

RE: Camp Moratorium

Dear Ms. Antoniak,

Thank you for taking the time to meet with ConocoPhillips Canada (CPC) on February 13, 2019. We appreciate the opportunity to provide feedback in relation to Council's motion to put in place a moratorium on camps within 75km of Fort McMurray generally, and more specifically why a moratorium implemented through a land use bylaw would not apply to CPC's Surmont Regional Residence (SRR).

You may be aware that CPC's Surmont In Situ Oil Sands Project is operated pursuant to Alberta Energy Regulator (AER) Approval 48263-01-00. We have attached our approval to this letter for your reference and would point you specifically to the definition of "plant" on page 11 which includes our SRR within the scope of the project and the approval as follows:

- (kk) "plant" means all buildings, structures, process and pollution abatement equipment, vessels, storage facilities, material handling facilities, roadways, railways, pipelines, **camps**, well pads, borrow pits and other installations, and includes the land, located on Townships 80, 81, 82, 83, and 84, Ranges 5, 6, and 7, West of the 4th Meridian, as described in the application, that is being or has been used or held for or in connection with the Surmont enhanced recovery in-situ oil sands or heavy oil processing plant and oil production site;

CPC's AER approval in relation to the SRR would therefore supersede any land use bylaw placing a moratorium on camps enacted by the RMWB by virtue of s.619 of the *Municipal Government Act*.

Notwithstanding our view that a camp moratorium bylaw would not apply to CPC's SRR, CPC is prepared to work collaboratively with the RMWB, both directly and through the Oil Sands Community Alliance (OSCA), on initiatives to bolster the social and economic health of the region in the following ways:

- a. Where possible, continuing to use the Fort McMurray airport in order to transport our Fly-In-Fly-Out (FIFO) workers to and from our site. In 2018 alone, our employees and contractors made over 10,000 trips into the Fort McMurray airport.
- b. Where possible, continuing to invest in training and capacity development programs to remove barriers to employment. Since 2010, well over \$2 billion in contracts were awarded to local and indigenous contractors through construction and operation activities at Surmont, including contracts to First Nation joint ventures for operating our camp. Presently, we have 8 trainee positions focused on local indigenous employment.
- c. Our current hiring process allows for RMWB residents to apply for rotator positions at Surmont. Our goal is to treat all individuals fairly throughout all phases of the recruiting process. Any decision on recruitment and selection are based solely on objective and job-related criteria in line with business need and ConocoPhillips Global values, policies and positions.
- d. We will continue to work through OSCA to assess how industry can support the RMWB in areas of mutual interest.

As we discussed in our meeting, there are numerous adverse effects that a bylaw such as this would have on safety and the competitiveness of our industry. First and foremost, a camp moratorium would pose a safety hazard to our workers having to travel long distances to and from Fort McMurray. For worker safety, personal wellness and fatigue management reasons, this type of daily commute is not advisable. In addition, a camp moratorium would adversely impact industry's competitiveness in an already challenging market. Any expectations or directives put in place by the RMWB having the effect of increasing costs would have a chilling effect on an industry that supports Fort McMurray.

While we remain firm in our view that a camp moratorium bylaw would not apply to ConocoPhillips Canada's SRR given our regulatory approvals and we continue to fundamentally oppose the enactment of a camp moratorium for safety and economic reasons, CPC is nonetheless willing to continue to work with the RMWB on possible solutions. We look forward to continuing to engage with you as this process unfolds.

Sincerely,

CONOCOPHILLIPS CANADA



Steve Bradley
Vice President, Operations

Encl.

cc. Oil Sands Community Alliance

APPROVAL

ALBERTA ENERGY REGULATOR

ENVIRONMENTAL PROTECTION AND ENHANCEMENT ACT

R.S.A. 2000, c.E-12, as amended.

48263-01-00
APPROVAL NO.:

007-48263
APPLICATION NO.:

October 29, 2015
EFFECTIVE DATE:

September 30, 2025
EXPIRY DATE:

CONOCOPHILLIPS CANADA RESOURCES CORP.
APPROVAL HOLDER:

Pursuant to Division 2, of Part 2, of the *Environmental Protection and Enhancement Act*, R.S.A.2000, c.E-12, as amended, the approval for the following activity:

Surmont enhanced recovery in-situ oil sands or heavy oil processing plant and oil production site

is subject to the attached terms and conditions, and Schedules I to XI.



Steve Cook
Approvals Manager, Authorizations Branch
Alberta Energy Regulator

October 29, 2015

TERMS AND CONDITIONS ATTACHED TO APPROVAL

DEFINITIONS

- 1.1 All definitions from the Act and the regulations apply except where expressly defined in this approval and Schedule I.

GENERAL

- 2.1 The approval holder shall:
- (a) construct;
 - (b) operate;
 - (c) maintain; and
 - (d) reclaim;
- the plant in accordance with this approval.
- 2.2 The approval holder shall comply with the terms and conditions, and Schedules I to XI, attached hereto and forming part of this approval.
- 2.3 *Environmental Protection and Enhancement Act* Approval No. 48263-00-08 is cancelled.

AIR EMISSIONS

- 3.1 The approval holder shall not release any air effluent streams to the atmosphere except as authorized by this approval.
- 3.2 The approval holder shall control fugitive emissions and any air emission source not specified in condition 1 of Schedule IV in accordance with condition 3.3, unless otherwise authorized in writing by the Director.
- 3.3 With respect to fugitive emissions and any air emission source not specified in condition 1 of Schedule IV, the approval holder shall not release a substance or cause to be released a substance that causes or may cause any of the following:
- (a) impairment, degradation or alteration of the quality of natural resources;
 - (b) material discomfort, harm or adverse effect to the wellbeing or health of a person;
or
 - (c) harm to property or to the vegetative or animal life.

TERMS AND CONDITIONS ATTACHED TO APPROVAL

- 3.4 Releases of the following substances to the atmosphere shall not exceed the limits specified in TABLE 3.1.

TABLE 3.1: AIR EMISSION LIMITS

EMISSION SOURCE	SUBSTANCE	LIMIT
Plant total before (i.e. without) any sulphur recovery facilities	Sulphur dioxide	2.0 tonnes per day
Plant total (Phase 1 and 2) after (i.e. with) sulphur recovery facilities	Sulphur dioxide	1.6 tonnes per day
Each 76.3 MW steam generator	Oxides of nitrogen (expressed as NO ₂)	11.0 kilograms per hour
Each 87.2 MW steam generator	Oxides of nitrogen (expressed as NO ₂)	12.6 kilograms per hour
One 5.6 MW glycol heater	Oxides of nitrogen (expressed as NO ₂)	0.7 kilograms per hour
One 13.7 MW glycol heater	Oxides of nitrogen (expressed as NO ₂)	1.3 kilograms per hour
Each 23.16 MW glycol heater	Oxides of nitrogen (expressed as NO ₂)	2.2 kilograms per hour

- 3.5 The approval holder shall not operate the process equipment unless and until the associated pollution abatement equipment is operating.
- 3.6 The approval holder shall monitor the air emission sources as specified in TABLE 3.2, unless otherwise authorized in writing by the Director.
- 3.7 The approval holder shall report to the Director the results of the air emission source monitoring as required in TABLE 3.2, unless otherwise authorized in writing by the Director.

TERMS AND CONDITIONS ATTACHED TO APPROVAL

TABLE 3.2: AIR EMISSION SOURCE MONITORING AND REPORTING

EMISSION SOURCE	MONITORING			REPORTING FREQUENCY	
	PARAMETER	METHOD OF MONITORING	FREQUENCY	MONTHLY	ANNUALLY
Produced gas and residue or fuel gas to the central processing facility flare stacks, steam generators, and glycol heaters	Volumetric flow rates	Measured or Estimated	Continuously	No	No
Each of the flare stacks, steam generators, and glycol heaters	Sulphur dioxide	Calculated	Daily	Yes (tonnes per day)	Yes (tonnes per year)
Produced gas at each central processing facility	Hydrogen sulphide	Gas Analysis	Monthly	Yes	No
	Total hydrocarbons				
	Lower Heating Value				
Any one of the four 76.3 MW steam generators (from Phase 1) at the central processing facility	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once per year after initial commissioning stack survey	Yes	Yes
		CEMS Code or equivalent as authorized by the Director	Continuous, or equivalent as authorized by the Director		
Any six of the twenty three 76.3 MW steam generators (from Phase 2) at the central processing facility	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once per year after initial commissioning stack survey	Yes	Yes
		CEMS Code or equivalent as authorized by the Director	Continuous, or equivalent as authorized by the Director		
Any one of the two 87.2 MW steam generators	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once per year after initial commissioning stack survey	Yes	Yes
The 87.2 MW steam generator (from Phase 2)	Oxides of nitrogen (expressed as NO ₂)	CEMS Code or equivalent as authorized by the Director	Continuous, or equivalent as authorized by the Director	Yes	Yes
Each of the 87.2 MW steam generators	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once within six months of commissioning	Yes	Yes

TERMS AND CONDITIONS ATTACHED TO APPROVAL

EMISSION SOURCE	MONITORING			REPORTING FREQUENCY	
	PARAMETER	METHOD OF MONITORING	FREQUENCY	MONTHLY	ANNUALLY
Each of the 76.3 MW steam generators	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once within six months of commissioning	Yes	Yes
Each of the 23.16 MW glycol heaters	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once within six months of commissioning	Yes	Yes
The 5.6 MW glycol heater	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once within six months of commissioning	Yes	Yes
The 13.7 MW glycol heater	Oxides of nitrogen (expressed as NO ₂)	Manual stack survey as per <i>Alberta Stack Sampling Code</i>	Once within six months of commissioning	Yes	Yes

- 3.8 The approval holder shall notify the Director in writing a minimum of two weeks prior to any manual stack survey that is required to be conducted by this approval.
- 3.9 The approval holder shall submit the monthly CEMS Code data required in condition 3.6 electronically to the Alberta Environment File Transfer Protocol (FTP) site, which is used for the electronic submission of continuous emissions monitoring information.
- 3.10 The approval holder shall monitor ambient air parameters as specified in TABLE 3.3, unless otherwise authorized in writing by the Director.
- 3.11 The approval holder shall report to the Director the results of the ambient air monitoring as required in TABLE 3.3, unless otherwise authorized in writing by the Director.

TERMS AND CONDITIONS ATTACHED TO APPROVAL

TABLE 3.3: AMBIENT AIR MONITORING AND REPORTING

MONITORING STATION	PARAMETER	MONITORING PERIOD	REPORTING	
			MONTHLY	ANNUALLY
1 continuous ambient air monitoring station, as per <i>Air Monitoring Directive</i>	Sulphur dioxide concentrations, hydrogen sulphide concentrations, nitrogen dioxide concentrations, wind speed and wind direction	Six months prior to commencing operations, and continuously after commencing operations	Yes	Yes
	Total hydrocarbons concentrations	Continuously, during the second year of operation	Yes	Yes
8 passive exposure monitoring stations (4 per phase), as per <i>Air Monitoring Directive</i>	Nitrogen dioxide concentrations, sulphur dioxide concentrations, and hydrogen sulphide concentrations	Monthly	Yes	Yes

3.12 In addition to the annual reporting requirement in TABLE 3.2, the annual Air Emission Report shall include, at a minimum, all of the following information:

- (a) information related to the plant operation;
- (b) the performance of air pollution control equipment;
- (c) any trends in the emissions data;
- (d) information on any upgrades or modifications to the air pollution control and monitoring equipment;
- (e) a summary of contraventions reported pursuant to condition 1 of Schedule II;
- (f) any other information as required in writing by the Director.

TERMS AND CONDITIONS ATTACHED TO APPROVAL

WATER

- 4.1 The approval holder shall not release any substances from the plant to the surrounding watershed except as authorized by this approval.

PARTICIPATION IN REGIONAL INITIATIVES

- 5.1 The approval holder shall participate in the following regional monitoring programs and initiatives:

- (a) Wood Buffalo Environmental Association (WBEA);
- (b) Alberta Biodiversity Monitoring Institute (ABMI); and
- (c) Ecological Monitoring Committee for the Lower Athabasca (EMCLA).

unless otherwise authorized in writing by the Director.



Steve Cook
Approvals Manager, Authorizations Branch
Alberta Energy Regulator

October 29, 2015

SCHEDULE I DEFINITIONS

1. In all parts of this approval:

- (a) “Act” means the Environmental Protection and Enhancement Act, R.S.A. 2000, c.E-12, as amended;
- (b) “affected lands” means land which have received substances released from the plant;
- (c) “air effluent stream” means any substance in a gaseous medium released by or from a plant;
- (d) “annulus gas” means gas from the annulus of the oil and gas well casing;
- (e) “application” means the written submissions from the approval holder to the Director in respect of application number 001-48263 and any subsequent applications where amendments are issued for this approval;
- (f) “CEMS Code” means the *Continuous Emission Monitoring System (CEMS) Code*, Alberta Environmental Protection, Pub.No.Ref: 107, 1998, as amended;
- (g) “central processing facility” means those buildings, structures, pollution abatement equipment, process and storage facilities and land used in and for the processing of bitumen or heavy oil;
- (h) “chemical” means any substance that is added or used as part of the treatment process;
- (i) “commencing construction” means the act of removing vegetation and salvaging topsoil and/or subsoil;
- (j) “commencing operations” means to start up the plant, process unit or equipment for the first time with the introduction of feed material, electrical or thermal energy and the simultaneous production of products for which the plant, process unit or equipment was designed excluding predetermined period of commissioning or testing;
- (k) “continuous monitoring” means sampling or flow measurement through equipment that creates an uninterrupted output of the analysis or flow measurement;
- (l) “day”, when referring to sampling, means any sampling period of 24 consecutive hours;

SCHEDULE I DEFINITIONS

- (m) “decommissioning” means the dismantling and decontamination of a plant undertaken subsequent to the termination or abandonment of any activity or any part of any activity regulated under the Act;
- (n) “decontamination” means the treatment or removal of substances from the plant and affected lands;
- (o) “deep organic soil” means soil with surface organic horizons, as defined in *The Canadian System of Soil Classification (Third Edition)*, Agriculture and Agri-Food Canada, Publication 1646, 1998, as amended, that are greater than 40 cm in depth;
- (p) “Director” means an authorized employee of the Alberta Energy Regulator;
- (q) “dismantling” means the removal of buildings, structures, process and pollution abatement equipment, vessels, storage facilities, material handling facilities, railways, roadways, pipelines and any other installations that are being or have been used or held for or in connection with the plant;
- (r) “disturbed land” means any land disturbed by the approval holder in any manner in association with the activity which is subject of this approval;
- (s) “domestic wastewater” means wastewater that is the composite of liquid and water-carried wastes associated with the use of water for drinking, cooking, cleaning, washing, hygiene, sanitation or other domestic purposes, together with any infiltration and inflow wastewater, that is released into a wastewater collection system;
- (t) “domestic wastewater system” means the parts of the plant that collect, store or treat domestic wastewater;
- (u) “estimate” means a technical evaluation based on the sources contributing to the release, including, but not limited to, pump capabilities, water meters, and batch release volumes;
- (v) “fugitive emissions” means emissions of substances to the atmosphere other than ozone depleting substances, originating from a plant source other than a flue, vent, or stack but does not include sources which may occur due to breaks or ruptures in process equipment;
- (w) “grab” when referring to a sample, means an individual sample collected in less than 30 minutes and which is representative of the substance sampled;

SCHEDULE I DEFINITIONS

- (x) “grade” means the rise or fall of land surface over a specified distance, measured in the same units;
- (y) “industrial runoff” means precipitation that falls on or traverses the plant developed area;
- (z) “industrial runoff control system” means the parts of the plant that collect, store or treat industrial runoff from the plant;
- (aa) “industrial wastewater” means the composite of liquid wastes and water-carried wastes, any portion of which results from any industrial process carried on at the plant;
- (bb) “industrial wastewater control system” means the parts of the plant that collect, store or treat industrial wastewater;
- (cc) “ISO/IEC 17025” means the international standard, developed and published by International Organization for Standardization (ISO), specifying management and technical requirements for laboratories;
- (dd) “land reclamation” means the stabilization, contouring, maintenance, conditioning, reconstruction, and revegetation of the surface of the land to a state that permanently returns the land to a land capability equivalent to its predisturbed state;
- (ee) “manual stack survey” means a survey conducted in accordance with the *Alberta Stack Sampling Code*, Alberta Environment, 1995, as amended;
- (ff) “mineral soil” means a soil consisting of soil horizons that contain 17% or less organic C by weight as defined in *The Canadian System of Soil Classification (Third Edition)*, Agriculture and Agri-Food Canada, Publication 1646, 1998, as amended;
- (gg) “monitoring system” means all equipment used for sampling, conditioning, analyzing or recording data in respect of any parameter listed or referred to in this approval including equipment used for continuous monitoring;
- (hh) “month” means calendar month;
- (ii) “net or lower heating value” means the quantity of heat evolved on complete combustion where the combustion products remain as vapour at 15°C;
- (jj) “pad materials” means all geotextile and fill materials used to construct plant facilities;

SCHEDULE I DEFINITIONS

- (kk) “plant” means all buildings, structures, process and pollution abatement equipment, vessels, storage facilities, material handling facilities, roadways, railways, pipelines, camps, well pads, borrow pits and other installations, and includes the land, located on Townships 80, 81, 82, 83, and 84, Ranges 5, 6, and 7, West of the 4th Meridian, as described in the application, that is being or has been used or held for or in connection with the Surmont enhanced recovery in-situ oil sands or heavy oil processing plant and oil production site;
- (ll) “plant developed area” means the areas of the plant used for the storage, treatment, processing, transport, or handling of raw material, intermediate product, by-product, finished product, process chemicals, or waste material;
- (mm) “produced gas” means all gas associated with the production and treatment of oil or bitumen including, but not limited to, gas liberated at storage tanks, heaters, treaters, produced water facilities;
- (nn) “QA/QC” means quality assurance and quality control;
- (oo) “reclaimed soil” means soils that have had one or more of their natural horizons removed and replaced;
- (pp) “recontoured areas” means disturbed land that has been decommissioned, contoured and decompacted;
- (qq) “regulations” means the regulations enacted pursuant to the Act, as amended;
- (rr) “representative grab” means a sample consisting of equal volume portions of water collected from at least four sites between 0.20-0.30 metres below the water surface within a pond;
- (ss) “self-sustaining” means the degree at which a reclaimed ecosystem can maintain itself without requiring external support or human intervention;
- (tt) “shallow organic soil” means soil with surface organic horizons, as defined in *The Canadian System of Soil Classification (Third Edition)*, Agriculture and Agri-Food Canada, Publication 1646, 1998, as amended, that are less than 40 cm in depth;
- (uu) “soil” means mineral or organic earthen materials that can, have, or are being altered by weathering, biological processes or human activity;
- (vv) “species at risk” means any species:
 - (i) identified by the *Alberta Wildlife Act* as ‘Endangered’, ‘Threatened’ or ‘Species of Special Concern’,

SCHEDULE I DEFINITIONS

- (ii) listed in *The General Status of Alberta Wild Species*, 2005, as 'At Risk', 'May Be At Risk' or 'Sensitive',
 - (iii) classified as 'at risk' by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), or
 - (iv) listed under Schedule 1 of the *Canadian Species at Risk Act*;
- (ww) "subsoil" means the layer of soil directly below the topsoil layer and consists of:
- (i) B-horizons as defined in *The Canadian System of Soil Classification (Third Edition)*, Agriculture and Agri-Food Canada, Publication 1646, 1998, as amended, and rated as good, fair or poor as described in the *Soil Quality Criteria Relative to Disturbance and Reclamation*, Alberta Agriculture, 1987, as amended, or
 - (ii) the replaced subsurface layer in a reclaimed soil, and rated as good, fair or poor as described in the *Soil Quality Criteria Relative to Disturbance and Reclamation*, Alberta Agriculture, 1987, as amended;
- (xx) "tank" means a stationary device, designed to contain an accumulation of a substance, which is constructed primarily of non-earthen materials that provide structural support including wood, concrete, steel, and plastic;
- (yy) "topsoil" means the uppermost layer of soil and consists of one or more of the following:
- (i) all organic horizons (L, F, H and O) as defined in *The Canadian System of Soil Classification (Third Edition)*, Agriculture and Agri-Food Canada, Publication 1646, 1998, as amended,
 - (ii) A-horizons as defined in *The Canadian System of Soil Classification (Third Edition)*, Agriculture and Agri-Food Canada, Publication 1646, 1998, as amended, and rated as good, fair or poor as described in the *Soil Quality Criteria Relative to Disturbance and Reclamation*, Alberta Agriculture, 1987, as amended, or
 - (iii) the replaced surface layer in a reclaimed soil, and rated as good, fair or poor as described in the *Soil Quality Criteria Relative to Disturbance and Reclamation*, Alberta Agriculture, 1987, as amended;
- (zz) "volume estimate" means a technical evaluation based on the sources contributing to the release, including, but not limited to, pump capabilities, water meters, and batch release volumes;

SCHEDULE I DEFINITIONS

- (aaa) “water body” means any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood and includes but, not limited to, wetlands and aquifers;
- (bbb) “weeds” means vegetation defined as noxious or prohibited noxious by the *Weed Control Act*, 2011, as amended;
- (ccc) “week” means any consecutive 7-day period;
- (ddd) “well pad” means those wells, pumps, buildings, structures, process and storage facilities and land used in and for the production of bitumen or heavy oil;
- (eee) “wetland” means land that is saturated long enough to promote formation of water altered soils, growth of water tolerant vegetation and various kinds of biological activity that are adapted to wet environments; and
- (fff) “year” means calendar year.

SCHEDULE II GENERAL CONDITIONS

1. The approval holder shall immediately report to the Director by telephone any contravention of the terms and conditions of this approval at 1-780-422-4505.
2. The approval holder shall submit a written report to the Director within 7 days of the reporting pursuant to condition 1 of Schedule II.
3. The terms and conditions of this approval are severable. If any term or condition of this approval or the application of any term or condition is held invalid, the application of such term or condition to other circumstances and the remainder of this approval shall not be affected thereby.
4. The approval holder shall immediately notify the Director in writing if any of the following events occur:
 - (a) the approval holder is served with a petition into bankruptcy;
 - (b) the approval holder files an assignment in bankruptcy or Notice of Intent to make a proposal;
 - (c) a receiver or receiver-manager is appointed;
 - (d) an application for protection from creditors is filed for the benefit of the approval holder under any creditor protection legislation; or
 - (e) any of the assets which are the subject matter of this approval are seized for any reason.
5. If the approval holder monitors for any substances or parameters which are the subject of operational limits as set out in this approval more frequently than is required and uses procedures authorized in this approval, then the approval holder shall provide the results of such monitoring as an addendum to the reports required by this approval.
6. The approval holder shall submit all monthly reports required by this approval to be compiled or submitted to the Director on or before the end of the month following the month in which the information was collected, unless otherwise authorized in writing by the Director or specified in this approval.
7. The approval holder shall submit all annual reports required by this approval to be compiled or submitted to the Director on or before March 31 of the year following the year in which the information was collected, unless otherwise authorized in writing by the Director or specified in this approval.

SCHEDULE III ANALYTICAL REQUIREMENTS

1. The approval holder shall:

- (a) record; and
- (b) retain

all the following information in respect of any sampling conducted or analyses performed in accordance with this approval for a minimum of ten years, unless otherwise authorized in writing by the Director:

- (i) the place, date and time of sampling,
- (ii) the dates the analyses were performed,
- (iii) the analytical techniques, methods or procedures used in the analyses,
- (iv) the names of the persons who collected and analyzed each sample, and
- (v) the results of the analyses.

2. With respect to any sample required to be taken pursuant to this approval, the approval holder shall ensure that:

- (a) collection;
- (b) preservation;
- (c) storage;
- (d) handling; and
- (e) analysis

shall be conducted in accordance with the following, unless otherwise authorized in writing by the Director:

- (i) for air:
 - (A) the *Alberta Stack Sampling Code*, Alberta Environment, 1995, as amended,
 - (B) the *Methods Manual for Chemical Analysis of Atmospheric Pollutants*, Alberta Environment, 1993, as amended,

SCHEDULE III ANALYTICAL REQUIREMENTS

- (C) the *Air Monitoring Directive*, Alberta Environment, 1989, as amended, and
 - (D) the CEMS Code;
 - (ii) for industrial wastewater, industrial runoff, groundwater and domestic wastewater parameters:
 - (A) the *Standard Methods for the Examination of Water and Wastewater*, published jointly by the American Public Health Association, American Water Works Association, and the Water Environment Federation, 2010, as amended;
 - (iii) for soil:
 - (A) the *Soil Monitoring Directive*, Alberta Environment, 2009, as amended, and
 - (B) the *Soil Quality Criteria Relative to Disturbance and Reclamation*, Alberta Agriculture, 1987, as amended;
 - (C) the *Directive for Monitoring the Impact of Sulphur Dust on Soils*, Alberta Environment and Water, December 2011, as amended;
 - (iv) for waste:
 - (A) the *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, USEPA, SW-846, September 1986, as amended,
 - (B) the *Methods Manual for Chemical Analysis of Water and Wastes*, Alberta Environmental Centre, Alberta, 1996, AECV96-M1, as amended,
 - (C) the *Toxicity Characteristic Leaching Procedure (TCLP)*, USEPA Regulation 40 CFR261, Appendix II, Method No. 1311, as amended, or
 - (D) the *Standard Methods for the Examination of Water and Wastewater*, published jointly by the American Public Health Association, American Water Works Association, and the Water Environment Federation, 2010, as amended.
3. In addition to other requirements in this approval the approval holder shall:
- (a) monitor; and

SCHEDULE III ANALYTICAL REQUIREMENTS

(b) report

the information required by:

- (i) condition 3.6;
- (ii) condition 3.7;
- (iii) condition 3.10; and
- (iv) condition 3.11

of the terms and conditions of this approval.

4. The information required in condition 3 of Schedule III, shall at a minimum, comply with:
 - (a) the *Alberta Stack Sampling Code*, Alberta Environment, 1995, as amended;
 - (b) the *Continuous Emissions Monitoring Systems (CEMS) Code*, Alberta Environmental Protection Environmental Service, 1998, as amended;
 - (c) the *Air Monitoring Directive – AMD 1989*, Environment Protection Services, Standards and Approvals Division, June 26, 1989, as amended; and
 - (d) the *Electronic Reporting of Continuous Emissions Monitoring (CEMS) Information User Manual*, Alberta Environment, 2003, as amended.
5. The approval holder shall analyse all samples that are required to be obtained by this approval in a laboratory accredited pursuant to ISO/IEC 17025, as amended, for the specific parameter(s) to be analyzed, unless otherwise authorized in writing by the Director.
6. The term sample as used in condition 5 of Schedule III does not include samples directed to continuous monitoring equipment, unless specifically required in writing by the Director.
7. The approval holder shall comply with the terms and conditions of any written authorization issued by the Director under condition 5 of Schedule III.

SCHEDULE IV AIR EMISSIONS

1. The approval holder shall only release air effluent streams to the atmosphere from the following air emission sources:
 - (a) from the Phase 1 central processing facility:
 - (i) the four 76.3 MW steam generator exhaust stacks;
 - (ii) the 87.2 MW steam generator exhaust stack;
 - (iii) the 5.6 MW glycol heater exhaust stack;
 - (iv) the 13.7 MW glycol heater exhaust stack;
 - (v) the 1000 kW power unit exhaust stack;
 - (vi) the two 0.7 MW slop treater exhaust stacks;
 - (vii) the central processing facility flare stack;
 - (b) from the Phase 2 central processing facility:
 - (i) the twenty three 76.3 MW steam generator exhaust stacks;
 - (ii) the 87.2 MW steam generator exhaust stack;
 - (iii) the two 23.16 MW glycol heater exhaust stacks;
 - (iv) the 730 kW power unit exhaust stack;
 - (v) the two 2.1 MW slop treater exhaust stacks;
 - (vi) the two 3.37 MW backup generators exhaust stacks;
 - (vii) the 1.68 MW backup generator exhaust stack;
 - (viii) the two 2.23 MW backup generators exhaust stacks;
 - (ix) the 1.391 MW backup generator exhaust stack;
 - (x) the 0.532 MW backup generator exhaust stack;
 - (xi) the two 2.20 MW backup generators exhaust stacks;
 - (xii) the 0.431 MW backup generator exhaust stack;

SCHEDULE IV AIR EMISSIONS

- (xiii) the 0.350 MW backup generator exhaust stack;
 - (xiv) the 0.270 MW backup generator exhaust stack;
 - (xv) the 0.180 MW backup generator exhaust stack;
 - (xvi) the high pressure central processing facility flare stack; and
 - (e) any other source authorized in writing by the Director.
2. The approval holder shall construct and maintain the following stacks according to the height requirements specified in TABLE 1 of Schedule IV, unless otherwise authorized in writing by the Director.

TABLE 1: STACK HEIGHTS

STACK	MINIMUM HEIGHT ABOVE GRADE (metres)
Phase 1	
Four 76.3 MW steam generator exhaust stacks	27.0
One 87.2 MW steam generator exhaust stack	27.0
One 5.6 MW glycol heater exhaust stack	15.0
One 13.7 MW glycol heater exhaust stack	9.2
One 1000 kW emergency power unit exhaust stack	4.4
Two 0.7 MW slop treater exhaust stacks	10.0
One central processing facility flare stack	48.8
Phase 2	
Twenty three 76.3 MW steam generator exhaust stacks	27.0
One 87.2 MW steam generator exhaust stack	27.0
Two 23.16 MW glycol heater exhaust stacks	15.0
One 730 kW emergency power unit exhaust stack	3.6
Two 2.1 MW slop treater exhaust stacks	10.2
One high pressure central processing facility flare stack	48.8
Two 3.37 MW backup generators exhaust stacks	6.5
One 1.68 MW backup generator exhaust stack	2.7
Two 2.23 MW backup generators exhaust stacks	5.5
One 1.391 MW backup generator exhaust stack	2.7
One 0.532 MW backup generator exhaust stack	5.9
Two 2.20 MW backup generators exhaust stacks	2.8
One 0.431 MW backup generator exhaust stack	5.9
One 0.350 MW backup generator exhaust stack	3.8
One 0.270 MW backup generator exhaust stack	2.0
One 0.180 MW backup generator exhaust stack	1.5

SCHEDULE IV AIR EMISSIONS

3. The net or lower heating value of the combined gas stream released to the central processing facility flare stack shall be maintained, at a minimum, at 12 MJ/m³ when adjusted for 101.325 kPa and 15°C by adding residue gas to the flare gas.
4. Annulus gas and produced gas shall be collected and burned as fuel, incinerated or flared.
5. The approval holder shall ensure that all oil production tanks are connected to the vapour recovery system.
6. All aboveground storage tanks containing liquid hydrocarbons or organic compounds shall conform to the *Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks*, Canadian Council of Ministers of the Environment, PN 1180, 1995, as amended.

SCHEDULE V INDUSTRIAL WASTEWATER AND INDUSTRIAL RUNOFF

1. The approval holder shall manage:
 - (a) industrial wastewater; and
 - (b) industrial runoff;as described in the application, unless otherwise authorized in writing by the Director.
2. The approval holder shall direct industrial wastewater, produced water and boiler blowdown as follows:
 - (a) to the Phase 1 central processing facility water recycle treatment unit;
 - (b) to the Phase 2 central processing facility water recycle treatment unit;
 - (c) to the two evaporator systems at the Phase 2 central processing facility;
 - (d) to the blowdown pond at the Phase 1 central processing facility
 - (e) to the active sludge dewatering system at the Phase 2 central processing facility;
 - (f) to an Alberta Energy Regulator approved disposal well; or
 - (g) to an Alberta Energy Regulator approved Waste Processing and Disposal Facility;unless otherwise authorized in writing by the Director.
3. The approval holder shall direct all industrial runoff from the plant developed area to the central processing facility water recycle treatment units, specifically one stormwater runoff pond at each central processing facility.
4. The approval holder shall direct all industrial runoff from the well pads to the industrial runoff control system at each well pad.
5. The approval holder shall only release industrial runoff from the industrial runoff control system at the central processing facility [and at the well pads].

LIMITS

6. Releases from the industrial runoff control system shall not exceed the limits for the parameters specified in TABLE 1 of Schedule V.

SCHEDULE V
INDUSTRIAL WASTEWATER AND INDUSTRIAL RUNOFF

TABLE 1: INDUSTRIAL RUNOFF CONTROL SYSTEMS LIMITS

PARAMETER	LIMITS
Discharge Volume	--
pH	≥ 6.0 and ≤ 9.5 pH units
Oil and Grease	No visible sheen
Chloride	≤ 500 mg/L

7. The approval holder shall not release any industrial runoff in a manner which will cause flooding or erosion or adverse effects to the receiving environment.

MONITORING AND REPORTING

8. The approval holder shall monitor the industrial runoff control systems as specified in TABLE 2 of Schedule V, unless otherwise authorized in writing by the Director.
9. The approval holder shall report to the Director the results of the industrial runoff control system monitoring as required in TABLE 2 of Schedule V, unless otherwise authorized in writing by the Director.

SCHEDULE V INDUSTRIAL WASTEWATER AND INDUSTRIAL RUNOFF

TABLE 2: INDUSTRIAL RUNOFF CONTROL SYSTEM MONITORING AND REPORTING

MONITORING						REPORTING
PARAMETER	PRIOR TO RELEASE		DURING RELEASE			ANNUALLY
	FREQUENCY	SAMPLE TYPE	FREQUENCY	SAMPLE TYPE	SAMPLE LOCATION	
Discharge volume (in cubic meters)	-	-	Once/day	Volume estimate	A/B	Yes
pH	Once	Representative grab	Once/day	Grab	A/B	
Oil and Grease	Once	Representative grab	Once/day	Grab	A/B	
Chloride (in mg/L)	Once	Representative grab	Once/day	Grab	A/B	
A = Discharge point of industrial runoff control system (industrial runoff pond) B = Discharge point of industrial runoff control system (well pads)						

10. In addition to the annual reporting in TABLE 2 of Schedule V, the annual Industrial Wastewater and Industrial Runoff Report shall include, at a minimum, all of the following information:
- (a) an assessment of the performance of:
 - (i) the industrial wastewater control system,
 - (ii) the industrial runoff control system, and
 - (iii) pollution abatement equipment;
 - (b) an overview of the operation of the plant;
 - (c) a summary and evaluation of management and disposal of industrial wastewater for the previous year;
 - (d) a summary and evaluation of management and disposal of industrial runoff for the previous year; and

SCHEDULE VI GROUNDWATER

1. The approval holder shall implement the Groundwater Monitoring Program described in ConocoPhillips Surmont Phase 2 Proposed Groundwater Monitoring Program, ConocoPhillips Canada Resources Corp., October 2010, as authorized in writing by the Director on November 2, 2012, unless otherwise authorized in writing by the Director.
2. The approval holder shall collect the samples extracted from the groundwater monitor wells using scientifically acceptable purging, sampling and preservation procedures so that a representative groundwater sample is obtained.
3. The approval holder shall:
 - (a) protect from damage; and
 - (b) keep locked except when being sampledall groundwater monitor wells, unless otherwise authorized in writing by the Director.
4. The approval holder shall conduct at least five groundwater sampling events to establish baseline conditions for:
 - (a) new facilities;
 - (b) expansion areas which were not covered in prior sampling events; and
 - (c) previously non-assessed relevant, non-saline hydrostratigraphic units at existing facilities;unless otherwise authorized in writing by the Director.
5. The approval holder shall conduct the sampling events referred to in condition 4 of Schedule VI at intervals of no less than one month and must demonstrate stable groundwater conditions.
6. If a representative groundwater sample cannot be collected because the groundwater monitor well is damaged or is no longer capable of producing a representative groundwater sample, the approval holder shall:
 - (a) clean, repair or replace the groundwater monitoring well; and
 - (b) collect and analyse a representative groundwater sample prior to the next scheduled sampling event;unless otherwise authorized in writing by the Director.

SCHEDULE VI GROUNDWATER

7. In addition to the sampling information recorded in condition 1 of Schedule III, the approval holder shall record the following sampling information for all groundwater samples collected:
 - (a) a description of purging and sampling procedures;
 - (b) the static elevations, above sea level and depth below ground surface, of fluid phases in the groundwater monitoring well prior to purging;
 - (c) the temperature of each sample at the time of sampling;
 - (d) the pH of each sample at the time of sampling; and
 - (e) the specific conductance of each sample at the time of sampling.
8. The approval holder shall carry out remediation of the groundwater in accordance with the following:
 - (a) *Alberta Tier 1 Soil and Groundwater Remediation Guidelines*, Alberta Environment and Sustainable Resource Development, May 2014, as amended; and
 - (b) *Alberta Tier 2 Soil and Groundwater Remediation Guidelines*, Alberta Environment and Sustainable Resource Development, May 2014, as amended.
9. The approval holder shall submit an annual Groundwater Monitoring Report to the Director.
10. The Groundwater Monitoring Report shall include, at a minimum, all of the following:
 - (a) a completed *Record of Site Condition Form*, Alberta Environment, 2009, as amended;
 - (b) a legal description of the plant and a map illustrating the plant boundaries;
 - (c) a topographic map of the plant;
 - (d) a description of the industrial activity and processes;
 - (e) a description of the regional hydrogeology;
 - (f) a hydrogeologic description and interpretation of the plant;

SCHEDULE VI GROUNDWATER

- (g) a lithologic description and maps, including cross-sections, of the surficial and the upper bedrock geologic materials at the plant;
- (h) borehole logs and completion details for groundwater monitoring wells;
- (i) the hydraulic conductivity of all surficial and bedrock materials at the plant;
- (j) a map(s) of groundwater flow patterns at the plant;
- (k) a cross-section(s) showing depth to water table, patterns of groundwater movement and hydraulic gradients at the plant;
- (l) a map of surface drainage within the plant and surrounding area including nearby waterbodies;
- (m) a map showing the location of all surface and groundwater users within at least a five kilometre radius of the plant, and a listing describing the surface water and the water well use details;
- (n) a map showing locations of all known buried channels within at least five kilometres of the plant;
- (o) a map of groundwater monitoring well locations and a table summarizing the existing groundwater monitoring program for the plant;
- (p) a summary of any changes to the Groundwater Monitoring Program made since the last groundwater monitoring report;
- (q) analytical data recorded as required in conditions 1 and 6(b) of Schedule VI;
- (r) a summary of fluid elevations recorded as required in condition 7(b) of Schedule VI and an interpretation of changes in fluid elevations;
- (s) a description of the groundwater sampling and analytical QA/QC procedures;
- (t) an interpretation of all the data in this report, including the following:
 - (i) diagrams indicating the location and extent of any contamination,
 - (ii) a description of probable sources of contamination, and
 - (iii) a site map showing the location and type of current and historical potential sources of groundwater contamination;

SCHEDULE VI GROUNDWATER

- (u) a summary and interpretation of the data collected since the Groundwater Monitoring Program began including:
 - (i) control charts which indicate trends in concentrations of parameters, and
 - (ii) the migration of contaminants;
 - (v) a description of any contaminant remediation, risk assessment or risk management action conducted at the plant;
 - (w) a proposed sampling schedule for the following year;
 - (x) recommendations for changes to the Groundwater Monitoring Program to make it more effective;
 - (y) any other information relevant to groundwater quality at the plant; and
 - (z) any other information as required in writing by the Director.
11. If the Groundwater Monitoring Report is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director, by the date specified in writing by the Director.
12. The approval holder shall only implement reductions to the Groundwater Monitoring Program as authorized in writing by the Director.

SCHEDULE VII SOIL

1. In addition to any other requirements specified in this approval, the approval holder shall conduct all of the following activities related to soil monitoring and soil management required by this approval in accordance with the *Soil Monitoring Directive*, Alberta Environment, 2009, as amended:
 - (a) designing and developing proposals for the Soil Monitoring Program;
 - (b) designing and developing proposals for the Soil Management Program;
 - (c) all other actions, including sampling, analysing, and reporting, associated with the Soil Monitoring Program; and
 - (d) all other actions, including sampling, analysing and reporting, associated with the Soil Management Program.

MONITORING AND REPORTING

2. The approval holder shall submit a Soil Monitoring Program proposal to the Director according to the following schedule:
 - (a) for the first soil monitoring event, on or before November 30, 2016; and
 - (b) for the second soil monitoring event, on or before November 30, 2021;unless otherwise authorized in writing by the Director.
3. If any Soil Monitoring Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director, by the date specified in writing by the Director.
4. The approval holder shall implement the Soil Monitoring Program as authorized in writing by the Director.
5. If an authorization or a deficiency letter is not issued within 120 days of the applicable date required by condition 2 of Schedule VII, the approval holder shall implement the Soil Monitoring Program:
 - (a) in accordance with the program as set out in the proposal submitted by the approval holder; and
 - (b) within 270 days after the applicable date required by condition 2 of Schedule VII.

SCHEDULE VII SOIL

6. The approval holder shall submit each Soil Monitoring Program Report obtained from the soil monitoring referred to in conditions 4 and 5 of Schedule VII to the Director according to the following schedule:
 - (a) for the first Soil Monitoring Program Report, on or before November 30, 2017;
and
 - (b) for the second Soil Monitoring Program Report, on or before November 30, 2022;unless otherwise authorized in writing by the Director.
7. If any Soil Monitoring Program Report is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director, by the date specified in writing by the Director.

SOIL MANAGEMENT PROGRAM

8. If the Soil Monitoring Program, or any other soil monitoring, reveals that there are substances present in the soil at concentrations greater than any of the applicable concentrations set out in the standards in the *Soil Monitoring Directive*, Alberta Environment, 2009, as amended, the approval holder shall develop a Soil Management Program proposal.
9. If a Soil Management Program proposal is required pursuant to condition 8 of Schedule VII, the approval holder shall submit a Soil Management Program proposal to the Director according to the following schedule:
 - (a) for Soil Management Program proposal that is triggered by the findings from the first soil monitoring event, on or before the date in condition 6(a) of Schedule VII;
 - (b) for Soil Management Program proposal that is triggered by the findings from a second soil monitoring event, on or before the date in condition 6(b) of Schedule VII; or
 - (c) for any other soil monitoring event not specified in this approval, within six months of completion of the soil monitoring event.
10. If any Soil Management Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director, by the date specified in writing by the Director.
11. The approval holder shall implement the Soil Management Program as authorized in writing by the Director.

SCHEDULE VII SOIL

12. If the approval holder is required to implement a Soil Management Program pursuant to condition 11 of Schedule VII, the approval holder shall submit an annual Soil Management Program Report to the Director, unless otherwise authorized in writing by the Director.
13. If any Soil Management Program Report is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director, by the date specified in writing by the Director.

SCHEDULE VIII WILDLIFE

1. In addition to any other requirements specified in this approval, the approval holder shall conduct wildlife mitigation in accordance with the *Integrated Standards and Guidelines Enhanced Approval Process (EAP)*, Alberta Energy Regulator and Government of Alberta, December 1, 2013, unless otherwise authorized in writing by the Director.
2. The approval holder shall take all steps necessary, as described in the application, to prevent wildlife from coming into contact with the industrial wastewater control system, unless otherwise authorized in writing by the Director.
3. The approval holder shall develop a Wildlife Mitigation Program when one or more of the following occurs:
 - (a) the approval holder is unable to conduct mitigation in accordance with condition 1 of Schedule VIII or any part thereof;
 - (b) the project includes above-ground pipelines;
 - (c) species at risk occur or have a high potential to occur within the plant, which are not in accordance with condition 1 of Schedule VIII; or
 - (d) any other project effects on wildlife identified in the application, that require mitigation beyond what is described by the documents listed in condition 1 of Schedule VIII;unless otherwise authorized in writing by the Director.
4. If a Wildlife Mitigation Program is required pursuant to condition 3 of Schedule VIII, the approval holder shall submit a Wildlife Mitigation Program proposal to the Director on or before June 30, 2016, unless otherwise authorized in writing by the Director.
5. The Wildlife Mitigation Program proposal referred to in condition 4 of Schedule VIII shall address, at a minimum, all of the following for the discrepancies identified in condition 3 of Schedule VIII:
 - (a) a description of the alternative mitigation strategies that will be implemented to meet the Desired Outcomes as stated in the *Integrated Standards and Guidelines Enhanced Approval Process (EAP)*, Alberta Energy Regulator and Government of Alberta, December 1, 2013, as amended;
 - (b) a description of the mitigation strategies planned to facilitate wildlife movement and habitat use including, at a minimum, all of the following:
 - (i) a description of project above-ground pipelines including:

SCHEDULE VIII WILDLIFE

- (A) a map of the above-ground pipelines,
 - (B) clearance under the pipe,
 - (C) width of rack and right-of-way corridor, and
 - (D) length of above-ground pipelines,
 - (ii) mitigation strategies that consider physical and behavioural characteristics of wildlife and address:
 - (A) line of sight issues,
 - (B) adequacy of vegetation cover (i.e. type and extent), and
 - (C) relationship of infrastructure to natural movement corridors (i.e. riparian areas), and temporal and spatial migration patterns of wildlife;
 - (c) detailed descriptions of mitigation measures to minimize project effects on species at risk throughout the life of the project;
 - (d) description of the mitigation strategies that will be implemented to address any project-level effects and site-specific issues;
 - (e) detailed descriptions of mitigation measures to minimize project-induced impacts to fisheries and aquatic habitat at a defined sub-tertiary watershed scale; and
 - (f) any other information as required in writing by the Director.
6. If the Wildlife Mitigation Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.
7. The approval holder shall implement the Wildlife Mitigation Program as authorized in writing by the Director.
8. The approval holder shall monitor the long-term cumulative effects on biodiversity and wildlife in the region, in cooperation with other oil sands developers, and coordinated with efforts undertaken with the Alberta Biodiversity Monitoring Institute, unless otherwise authorized in writing by the Director.
9. In cooperation with the Provincial Woodland Caribou Management Coordinator and the regional Alberta Fish and Wildlife Program Manager, the approval holder shall submit a

SCHEDULE VIII WILDLIFE

Woodland Caribou Mitigation Plan and Monitoring Program proposal to the Director six months prior to the commencement of commercial development activities within a designated Caribou Range, unless otherwise authorized in writing by the Director.

10. The Woodland Caribou Mitigation Plan and Monitoring Program proposal shall include, at a minimum, all of the following:
 - (a) an outline of the actions which will be implemented to mitigate the effects of the project on Woodland Caribou;
 - (b) a description of how the approval holder will contribute to the monitoring of woodland caribou, consistent with provincially recognized priorities;
 - (c) a description of the approval holder's alignment with the *Woodland Caribou Policy for Alberta*, Alberta Sustainable Resource Development, 2011, as amended, including the following government-led initiatives:
 - (i) maintaining and restoring caribou habitat,
 - (ii) management efforts that will recognize habitat changes naturally in type and location over time,
 - (iii) prudent management of the land base and associated development, and
 - (iv) effectively managing wildlife populations; and
 - (d) any other information as required in writing by the Director.
11. If the Woodland Caribou Mitigation Plan and Monitoring Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.
12. The approval holder shall implement the Woodland Caribou Mitigation Plan and Monitoring Program as authorized in writing by the Director.
13. The approval holder shall submit a Wildlife Monitoring Program proposal to the Director on or before June 30, 2016, unless otherwise authorized in writing by the Director.
14. The Wildlife Monitoring Program proposal shall, for monitoring not addressed by conditions 8 or 12 of Schedule VIII, describe the methods that will be applied:
 - (a) to assess the effectiveness of the mitigation in relation to:

SCHEDULE VIII WILDLIFE

- (i) the *Sensitive Species Inventory Guidelines*, 2010, as amended, for relevant species,
 - (ii) the effects of linear disturbances, including above-ground pipe,
 - (iii) the occurrence of species at risk, and
 - (iv) industrial wastewater control systems;
 - (b) site specific project effects predicted in the application;
 - (c) to monitor fisheries and aquatic habitat at a defined sub-tertiary watershed scale; and
 - (d) any other information as required in writing by the Director.
15. If the Wildlife Monitoring Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.
16. The approval holder shall implement the Wildlife Monitoring Program as authorized in writing by the Director.
17. The approval holder shall submit a Comprehensive Wildlife Report to the Director according to the following schedule:
- (a) for the first Comprehensive Wildlife Report, on or before May 15, 2018;
 - (b) for the second Comprehensive Wildlife Report, on or before May 15, 2021; and
 - (c) for the third Comprehensive Wildlife Report, on or before May 15, 2024;
- unless otherwise authorized in writing by the Director.
18. The Comprehensive Wildlife Report shall include, at a minimum, all of the following:
- (a) the methods and results of the monitoring, conducted pursuant to conditions 12 and 16 of Schedule VIII;
 - (b) mitigation implemented pursuant to conditions 7 and 12 of Schedule VIII;
 - (c) effectiveness of the mitigation implemented pursuant to conditions 7 and 12 of Schedule VIII;

SCHEDULE VIII WILDLIFE

- (d) authorized adaptive management measures taken or planned;
 - (e) changes proposed to the monitoring programs;
 - (f) changes proposed to the mitigation programs; and
 - (g) any other information as required in writing by the Director.
19. If the Comprehensive Wildlife Report is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

CONSTRUCTION

1. The approval holder shall ensure that woody debris removal allows for all topsoil to be:
 - (a) conserved; and
 - (b) stockpiled;in accordance with this approval, unless otherwise authorized in writing by the Director.
2. The approval holder shall salvage topsoil for land reclamation as follows:
 - (a) salvage all topsoil from:
 - (i) mineral soils,
 - (ii) shallow organic soils, or
 - (iii) reclaimed soils;
 - (b) from areas of deep organic soil where pad materials will be left in place during land reclamation:
 - (i) salvage topsoil to a minimum depth of 40 cm, or
 - (ii) submit to the Director, for written authorization, an alternate plan for obtaining topsoil prior to commencing construction; or
 - (c) no topsoil salvage from areas of deep organic soil where pad materials will be removed during land reclamation;unless otherwise authorized in writing by the Director
3. The approval holder shall salvage subsoil from any:
 - (a) central processing facility; or
 - (b) well padlocated on:
 - (i) mineral soils,
 - (ii) shallow organic soils, or

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

- (iii) reclaimed soils;

unless otherwise authorized in writing by the Director.

- 4. Subject to condition 3 of Schedule IX, the approval holder shall salvage all subsoil:

- (a) separately from topsoil; and
- (b) to a maximum thickness of 30 cm;

unless otherwise authorized in writing by the Director.

- 5. The approval holder shall:

- (a) conserve; and
- (b) stockpile

all topsoil separately from subsoil.

- 6. The topsoil stockpiles referred to in condition 5 of Schedule IX shall be:

- (a) on undisturbed topsoil or on a material that will not cause the mixing, loss or degradation of the topsoil;
- (b) adequately separated from other stockpiles to ensure no mixing, loss or degradation of the topsoil;
- (c) on stable foundations;
- (d) accessible and retrievable;
- (e) contoured to allow for vegetation and stabilization;
- (f) identified with a permanent signpost;
 - (i) within 3 months of commencing construction for new stockpiles, or
 - (ii) on or before May 31, 2016 for existing stockpiles; and
- (g) controlled for weeds.

- 7. The subsoil stockpiles referred to in condition 5 of Schedule IX shall be:

- (a) on areas where the topsoil has been removed;

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

- (b) adequately separated from other stockpiles to ensure no mixing, loss or degradation of the subsoil;
 - (c) on stable foundations;
 - (d) accessible and retrievable;
 - (e) contoured to allow for vegetation and stabilization;
 - (f) identified with a permanent signpost:
 - (i) within 3 months of commencing construction for new stockpiles, or
 - (ii) on or before May 31, 2016 for existing stockpiles; and
 - (g) controlled for weeds.
8. The approval holder shall take all steps necessary to prevent wind or water erosion of all stockpiles including, but not limited to, one or more of the following:
- (a) establishing a vegetative cover; or
 - (b) use of silt fences, tackifiers, mulches, tarps or other erosion control products; or
 - (c) any other steps authorized in writing by an Inspector.
9. The approval holder shall immediately suspend salvage of:
- (a) topsoil; or
 - (b) subsoil
- if directed to do so in writing by an Inspector, or when:
- (i) wet or frozen conditions,
 - (ii) high wind velocities, or
 - (iii) any other field condition or operation
- will result in mixing, loss or degradation of the topsoil or subsoil.
10. The approval holder shall recommence salvage of:
- (a) topsoil; or

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

(b) subsoil

only when the field conditions in condition 9 of Schedule IX no longer exist or if directed to do so in writing by an Inspector.

11. The approval holder shall implement drainage control measures to minimize erosion and sedimentation.
12. The approval holder shall submit a Pre-Disturbance Assessment and Conservation & Reclamation Plan to the Director:
 - (a) prior to commencing construction; or
 - (b) as otherwise notified in writing by the Director.
13. The approval holder shall prepare the Pre-Disturbance Assessment and Conservation & Reclamation Plan in accordance with the *Guidelines for Submission of a Pre-Disturbance Assessment and Conservation & Reclamation Plan Under an Environmental Protection and Enhancement Act Approval For an Enhanced Recovery In-Situ Oil Sands and Heavy Oil Processing Plant and Oil Production Site, Alberta Environment, 2009*, as amended, unless otherwise authorized in writing by the Director.
14. In addition to the requirements specified in condition 13 of Schedule IX, the Pre-Disturbance Assessment and Conservation & Reclamation Plan shall include:
 - (a) a revegetation plan that addresses, at a minimum, all the following:
 - (i) information that takes into consideration the *Guidelines for Reclamation to Forest Vegetation in the Athabasca Oil Sands Region*, 2nd Edition, 2009, as amended, if applicable,
 - (ii) species list, seeding rates and methods, and
 - (iii) information about surrounding vegetation;
 - (b) a discussion about how the Conservation and Reclamation Plan relates to the Project-Level Conservation, Reclamation and Closure Plan authorized under condition 30 of Schedule IX; and
 - (c) any other information as required in writing by the Director;

unless otherwise authorized in writing by the Director.

15. The approval holder shall implement the Pre-Disturbance Assessment and Conservation & Reclamation Plan as submitted, unless otherwise notified in writing by the Director.

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

16. The approval holder shall implement the Pre-Disturbance Assessment and Conservation & Reclamation Plans identified in the letter from the Alberta Energy Regulator dated October 29, 2015.
17. The approval holder shall only implement changes to a submitted Pre-Disturbance Assessment and Conservation & Reclamation Plan upon submission of a revised Pre-Disturbance Assessment and Conservation & Reclamation Plan, unless otherwise notified in writing by the Director.

DECOMMISSIONING

18. The approval holder shall apply for an amendment to this approval by submitting a:
 - (a) Decommissioning Plan; and
 - (b) Land Reclamation Plan;to the Director.
19. The approval holder shall submit the:
 - (a) Decommissioning Plan; and
 - (b) Land Reclamation Planreferred to in condition 18 of Schedule IX within six months of:
 - (i) the plant as a whole, or
 - (ii) any central processing facility,ceasing operation, except for repairs and maintenance, unless otherwise authorized in writing by the Director.

DECOMMISSIONING PLAN

20. The Decommissioning Plan referred to in condition 18 of Schedule IX shall include, at a minimum, all of the following:
 - (a) a plan for dismantling the plant;
 - (b) a comprehensive study to determine the nature, degree and extent of contamination at the plant and affected lands;
 - (c) a plan to manage all wastes at the plant;

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

- (d) evaluation of remediation technologies proposed to be used at the plant and affected lands;
- (e) a plan for decontamination of the plant and affected lands in accordance with the following:
 - (i) for soil or groundwater, *Alberta Tier 1 Soil and Groundwater Remediation Guidelines*, Alberta Environment and Sustainable Resource Development, May 2014, as amended,
 - (ii) for soil or groundwater, *Alberta Tier 2 Soil and Groundwater Remediation Guidelines*, Alberta Environment and Sustainable Resource Development, May 2014, as amended,
 - (iii) for drinking water, *Canadian Environmental Quality Guidelines*, CCME PN1299, 1999, as amended, and
 - (iv) for surface water, *Environmental Quality Guidelines for Alberta Surface Waters*, Alberta Environment and Sustainable Resource Development, 2014, as amended;
- (f) confirmatory testing to indicate compliance with the remediation objectives;
- (g) a plan for maintaining and operating contaminant monitoring systems;
- (h) a schedule for activities (a) through (g) above; and
- (i) any other information as required in writing by the Director.

LAND RECLAMATION PLAN

21. The Land Reclamation Plan referred to in condition 18 of Schedule IX shall include, at a minimum, all of the following:
- (a) the final use of the reclaimed area and how equivalent land capability will be achieved;
 - (b) removal of infrastructure;
 - (c) re-establishment of drainage and how it will be integrated with adjacent land;
 - (d) a description of reclaimed topography and how the reclaimed landforms will approximate the natural landforms adjacent to the plant;
 - (e) a soil replacement plan;

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

- (f) erosion control;
- (g) a revegetation plan that includes, at a minimum, all of the following:
 - (i) species list, seed source and quality, seeding rates and methods,
 - (ii) fertilization rates and methods,
 - (iii) a vegetation management plan, and
 - (iv) wildlife habitat plans where applicable;
- (h) techniques and procedures for returning disturbed lands to equivalent wildlife habitat capability;
- (i) reclamation sequence and schedule; and
- (j) any other information as required in writing by the Director.

RECLAMATION

GENERAL

- 22. The approval holder shall conduct land reclamation activities on all disturbed land in an on-going and progressive manner.
- 23. The approval holder shall reclaim disturbed land in a manner that results in a return of land capability equivalent to what existed prior to disturbance, unless otherwise authorized in writing by the director.
- 24. The approval holder shall remove all watercourse crossings as part of land reclamation, unless otherwise authorized in writing by the Director.
- 25. The approval holder shall reclaim all roads, including:
 - (a) removal of culverts and other structures;
 - (b) recontouring;
 - (c) re-establishment of drainage;
 - (d) decompaction of subsoil;
 - (e) replacement of topsoil; and

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

(f) revegetation;

unless otherwise authorized in writing by the Director.

26. The approval holder shall progressively re-establish surface drainage during land reclamation such that it is integrated with the adjacent land.

LANDSCAPE AND CLOSURE PLANNING

27. The approval holder shall submit a Project-Level Conservation, Reclamation and Closure Plan to the Director on or before June 30, 2017, unless otherwise authorized in writing by the Director.

28. The Project-Level Conservation, Reclamation and Closure Plan shall include, at a minimum, all of the following:

- (a) identification of specific conservation and reclamation practices, plans and objectives for specific geographical areas based on environmental and landscape features;
- (b) consideration of environmental constraints and associated commitments;
- (c) inclusion of all current and future disturbance areas;
- (d) integration of landforms, topography, vegetation, water bodies, and watercourses with adjacent undisturbed areas and adjacent reclamation areas; and
- (e) any other information as required in writing by the Director.

29. If the Project-Level Conservation, Reclamation and Closure Plan is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.

30. The approval holder shall implement the Project-Level Conservation, Reclamation and Closure Plan as authorized in writing by the Director.

CONTOURING AND MATERIALS PLACEMENT

31. The approval holder shall contour disturbed land such that the reclaimed landforms approximate the natural landforms in the areas adjacent to the plant.

32. The approval holder shall ensure that reclaimed slopes are no steeper than 3:1, unless otherwise authorized in writing by the Director.

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

33. The approval holder shall cap any unsuitable material, as described in the *Soil Quality Criteria Relative to Disturbance and Reclamation*, Alberta Agriculture, 1987, as amended, where unsuitability is not related to contamination, with 1.0 metre of soil material having a good, fair or poor rating, as described in the *Soil Quality Criteria Relative to Disturbance and Reclamation*, Alberta Agriculture, 1987, as amended, prior to subsoil and topsoil replacement.
34. The approval holder shall replace all salvaged subsoil on recontoured areas:
- (a) where the subsoil was salvaged from; and
 - (b) prior to topsoil replacement;
- unless otherwise authorized in writing by the Director.
35. The approval holder shall replace all topsoil that was salvaged or allocated under condition 2(b) of Schedule IX on areas where pad materials will be left in place during land reclamation, unless otherwise authorized in writing by the Director.
36. Subject to condition 35 of Schedule IX, the approval holder shall replace all salvaged topsoil on recontoured areas such that the average depth of the replaced topsoil in the reclaimed soil for each reclamation area is equivalent to or greater than 80% of the original topsoil depth, unless otherwise authorized in writing by the Director.
37. The approval holder shall immediately suspend replacement of:
- (a) topsoil; or
 - (b) subsoil
- if directed to do so in writing by an Inspector, or when:
- (i) wet or frozen conditions,
 - (ii) high wind velocities, or
 - (iii) any other field condition or operation
- will result in mixing, loss or degradation of topsoil or subsoil.
38. The approval holder shall recommence replacement of:
- (a) topsoil; or
 - (b) subsoil

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

only when the field conditions in condition 37 of Schedule IX no longer exist or if directed to do so in writing by an Inspector.

39. The approval holder shall maintain a weed control program until new vegetation is established and is self-sustaining.

RESEARCH

40. The approval holder shall submit a project specific Wetland Reclamation Trial Program proposal to the Director on or before September 30, 2018, unless otherwise authorized in writing by the Director.
41. The Wetland Reclamation Trial Program proposal shall include, at a minimum, all of the following:
- (a) trial plans for the removal or partial removal of pad materials from well pads and roads located in wetland ecosystems with emphasis on dominant wetland ecosystems that have been disturbed;
 - (b) the reclamation of the areas specified in (a) to pre-disturbance wetland ecosystems or a similar self-sustaining wetland ecosystem as appropriate;
 - (c) the possible reuse of the bed and fill material removed from the areas specified in (a) as construction or backfill material;
 - (d) a monitoring program; and
 - (e) any other information as required in writing by the Director.
42. If the Wetland Reclamation Trial Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.
43. The approval holder shall implement the Wetland Reclamation Trial Program as authorized in writing by the Director.
44. The approval holder shall:
- (a) participate in; and
 - (b) contribute to
- regional multi-stakeholder forum(s) that includes development of wetland reclamation strategies, to the satisfaction of the Director.

SCHEDULE IX CONSTRUCTION, DECOMMISSIONING AND RECLAMATION

MONITORING

45. Effective until the updated Reclamation Monitoring Program in condition 46 of Schedule IX is authorized in writing by the Director, the approval holder shall implement the Reclamation Monitoring Program described in the report *Reclamation Monitoring Plan and Revegetation Plan*, dated November 2005, as authorized in writing by the Director on February 17, 2006, unless otherwise authorized in writing by the Director.
46. The approval holder shall submit an updated Reclamation Monitoring Program proposal to the Director on or before December 31, 2016, unless otherwise authorized in writing by the Director.
47. The Reclamation Monitoring Program proposal shall include, at a minimum, all of the following:
 - (a) a monitoring plan to assess soils, vegetation and wildlife on reclaimed areas that includes, but not limited to, all of the following:
 - (i) proposed methodology, and
 - (ii) monitoring schedule;
 - (b) performance measures to assess reclamation success;
 - (c) how corrective measures will be identified and implemented;
 - (d) how the data will be used in adaptive management for future reclaimed areas; and
 - (e) any other information as required in writing by the Director.
48. If the updated Reclamation Monitoring Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.
49. The approval holder shall implement the Reclamation Monitoring Program as authorized in writing by the Director.

REPORTING

50. The approval holder shall submit an annual Conservation and Reclamation Report to the Director.
51. The approval holder shall prepare the annual Conservation and Reclamation Report in accordance with the *Guidelines for Submission of an Annual Conservation and*

**SCHEDULE IX
CONSTRUCTION, DECOMMISSIONING AND RECLAMATION**

Reclamation Report Under an Environmental Protection and Enhancement Act Approval for an Enhanced Recovery In-Situ or Heavy Oil Processing Plant and Oil Production Site, Alberta Environment, 2011, as amended, unless otherwise authorized in writing by the Director.

52. In addition to the requirements specified in condition 51 of Schedule IX, the annual Conservation and Reclamation Report shall include, at a minimum, all of the following:
- (a) a summary on the status of the following:
 - (i) Project-Level Conservation, Reclamation and Closure Plan,
 - (ii) Wetland Reclamation Trial Program,
 - (iii) activities required under condition 44 of Schedule IX, and
 - (iv) Reclamation Monitoring Program; and
 - (b) any other information as required in writing by the Director.

**SCHEDULE X
DOMESTIC WASTEWATER**

1. The approval holder shall not release any substances from the domestic wastewater system to the surrounding watershed except as authorized by this approval.
2. The approval holder shall direct all domestic wastewater at the plant to a septic tank with subsequent disposal to a domestic wastewater treatment facility holding a current approval under the Act.
3. The approval holder shall only dispose of sludge produced by the domestic wastewater system at a domestic wastewater treatment facility holding a current approval under the Act.

SCHEDULE XI WETLANDS AND WATER BODIES

1. The approval holder shall submit an updated Wetland and Water Body Monitoring Program proposal to the Director on or before September 30, 2016, unless otherwise authorized in writing by the Director.
2. The updated Wetland and Water Body Monitoring Program proposal shall include, at a minimum, all of the following:
 - (a) a summary of any wetland and water body monitoring conducted to date and an analysis of results;
 - (b) an analysis of the results from the monitoring conducted in (a);
 - (c) corrective measures identified and implemented through the monitoring conducted to date;
 - (d) an updated plan to monitor natural wetlands and water bodies for natural variability;
 - (e) an updated plan to determine and monitor the potential effects on wetlands from:
 - (i) seepage, drainage and discharge from the plant,
 - (ii) roads, well pads or other infrastructure constructed within wetland and water bodies,
 - (iii) ice and dust control on roads,
 - (iv) construction of the ice roads,
 - (v) surface water withdrawals,
 - (vi) groundwater withdrawals,
 - (vii) air emissions, and
 - (viii) any additional disturbances that may affect wetland ecosystems;
 - (f) a plan to monitor water bodies upstream and downstream from potential impacts for surface water quality and quantity and any other appropriate response variables;
 - (g) corrective measures and a schedule of implementation, where appropriate, to protect affected wetlands and water bodies;
 - (h) reporting schedule; and

**SCHEDULE XI
WETLANDS AND WATER BODIES**

- (i) any other information as required in writing by the Director.
- 3. If the updated Wetland and Water Body Monitoring Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director by the date specified in writing by the Director.
- 4. The approval holder shall implement the Wetland and Water Body Monitoring Program as authorized in writing by the Director.

Economic Stimulus – RMWB

Key Data

- Population = < 65,000
- Regional Unemployment Rate = 5.5% (1.0% lower than provincial average)

Hiring Strategy

- Create job postings specific to local area
- Use social media and local advertising to target local candidates
- Leverage the Applicant Tracking System (ATS) to filter and prioritize by location of residence
- Promote employee referral program, create targeted retention program
- Hire through values and attitudes – “Rest in Peace the Resume”
- Target passive candidates
- Improve and expedite screening process
- Have clear job postings and descriptions of pre-requisites for hiring
- Re-engage previous employees and applicants
- Use employee testimonials, short videos, employee experience sound bites
- Host hiring “happy hours” and open houses at local lodges
- Incentivize relocation (offset by transportation and overtime costs of deployed employees)
- Be visible, engaged and pro-active in removing employment barriers
- Create a competitive culinary contest where applicants are “auditioning for employment” while serving breakfast to underprivileged community members, as an example

Key Partnerships

- Chipewyan Prairie
- Sekui

Community Involvement

- Refine and maintain a clear employer brand and representation in community
- Enrich the community through events and activities that having meaningful impact on residents (e.g. feeding underprivileged community members through the culinary applicant contest)



Wayne S. Pon
Operations Readiness Manager
587.476.2053
wayne.s.pon@exxonmobil.com

May 28, 2019

Annette Antoniak
Chief Administration Officer, RMWB
Regional Municipality of Wood Buffalo
7th Floor, 9909 Franklin Avenue
Fort McMurray, Alberta T9H 2K4

Via email: Annette.Antoniak@rmwb.ca

Dear Ms. Antoniak,

First of all thank you and your team for the time you shared with us last week. We really appreciated the opportunity to share the Imperial Family experience with you and to the robust discussions that occurred during the tour and subsequent meeting. This collaborative approach to solution discovery is important to Imperial, especially as we look to address the concerns that precipitated the camp moratorium motion.

It is equally important that we recognize and thank the Regional Municipality of Wood Buffalo (RMWB) for the actions you have already undertaken, including the significant effort in leading the way to reduce the non-residential to residential property tax ratio to 5:1 by 2028. We also acknowledge that in providing a reduced property tax regime RMWB has decreased their own revenue proportionally creating its own challenges. However, these actions are appreciated and critically important as the oil sands industry continues to struggle with competitiveness.

With respect to our recent discussions, we clearly heard from you the need for industry to step into the communication void and actively respond to mis-information in the media, such as the recent Maclean's article on remote camps. We also heard that even locally there isn't a strong understanding of the people and logistics side of our business, including seasonal and turnaround needs. For example, fly-in fly-out operations hire locally as well as embed local and Indigenous requirements in the procurement process. For Imperial this amounts to approximately 200 local operations workers, contractors and sub-contractors residing in the RMWB who utilize the bussing we provide between Fort McMurray and Kearl at the start and end of their rotation. Highlighting this in local career fairs, trade shows and townhalls would help in this understanding.

We also heard that it is important for our workers to have the opportunity to see more than just the camp and mine aspects of the region, so they can see what the area has to offer to residents. With the distance between Kearl and Fort McMurray, it is more challenging for us to provide that opportunity to our workers while on rotation due to safety consideration. However, we are interested in supporting the RMWB and providing our workers with information on the lifestyle the region provides in a manner that does not compromise their safety. Once the RMWB's current communications campaign has been finalized, Imperial would like to meet with the Administration to see how we can support the efforts and carry the campaign's message to our current and future workers.

Other actions underway by the RMWB such as Park and Ride as well as HOV lanes will facilitate transportation to and from the mines. For some operations this will provide daily transportation for their workers, while for others it opens up the opportunity to use Fort McMurray amenities while on rotation, and for those further away such as Imperial it would potentially support getting our workers to site safely at the start of their rotation and home again after. These projects could also translate to increased usership of YMM as it would be easier for workers, from all oil sands operations, to commute from Fort McMurray.

Finally we heard specific asks of industry and Imperial:

- Use YMM as a transportation hub, look for ways to support increased operational usership
- Provide flexibility, enabling off rotation residency in Fort McMurray through relocation support and other incentives
- Work with Keyano College to ensure that programs are tailored to the skills we need now and into the future.
- Support the RMWB's infrastructure advocacy and lobbying efforts

Although the camp moratorium motion has been a challenge for industry it has brought a concerted focus on collaboration solution development with the goal of increasing the residency and vibrancy of the region. Imperial is looking forward to continued collaboration, ideally without the potential implementation of a moratorium to distract the solution space. We believe significant strides have been made through our discussions with the Administration and will be bringing forward many recommendations to Imperial (Kearl and Aspen) leadership for approval and implementation. I am looking forward to a date in the near future when I can share those actions with you as part of our commitment to the region.

Sincerely,



Wayne S. Pon
Operations Readiness Manager

c.c: Simon Younger



MEG ENERGY

May 7, 2019

Annette Antoniak
Chief Administrative Officer
Regional Municipality of Wood Buffalo
9909 Franklin Avenue
Fort McMurray, Alberta
T9H 2K4

BY EMAIL

Dear Ms. Antoniak:

Re: Regional Municipality of Wood Buffalo (RMWB) Proposed Camp Moratorium

Thank you for the opportunity to provide feedback in relation to the motion passed by the Council of the RMWB to put in a place a moratorium on worker accommodations ("camps") within a 75 kilometre radius of the Urban Service Area (USA) of Fort McMurray.

As previously outlined by MEG Energy ("MEG"), the area encompassed by the proposed bylaw that would result from the passing of this motion would exclude MEG's only operating facility in the RMWB, the Christina Lake Regional Project ("CLRP"). However, the radius in the proposed bylaw would cover MEG's Surmont Project ("Surmont") leases located just north of Janvier.

Since the beginning of our involvement in the discussions around this motion, MEG has first and foremost always recognized the situation in which the Council finds itself in the current economic environment. As a mid-size oil sands producer with a single operating facility, MEG and the RMWB share many similarities – we are each highly susceptible to the impact of the price of oil, we each have experienced leadership changes during the course of the current downturn, and each of us is trying to adapt to the current economic reality. Faced with similar challenges, MEG believes that we can support each other and find some mutually beneficial outcomes.

Towards that end, MEG believes that we are aligned on the principal objectives that we each value and are trying to achieve:

1. Health, safety and quality of life. Adherence to the highest possible standards of safety and protecting the ability of all employees, contractors, and local residents to be themselves "fit for duty" and surrounded by others in the same condition. Both MEG and the RMWB want to ensure that we create the conditions, policies, and incentives that will allow for everyone to work, live and thrive in a healthy and productive environment.
2. Economic development. MEG and the RMWB are each seeking to lead, shape, and contribute to the region's economic development and growth and ensure the value created from production in the oil sands benefits all people. To that end, there are employment, training, and contracting objectives and commitments that are in place, many of them focused on rural Indigenous communities. We each recognize the leading role that camps and associated infrastructure play in helping to ensure the economic benefits of development are shared and valued throughout the region.



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3. Regulatory certainty. Well-defined processes and clearly articulated expectations provide parties operating within a regulatory context with the tools needed to make decisions and/or engage in further evaluation. Stable regulatory environments pave the way for investment and major projects require investors to have confidence in the long-term validity and maintenance of existing regulatory approvals. This is in the best interest of both MEG and the RMWB, who each have to manage regulatory environments across multiple jurisdictions (federal, provincial and municipal).
4. Preservation of capital. MEG and the RMWB each have extensive financial resources tied up in existing infrastructure. Whether tangible costs of capital, the implementation of business plans or decreasing cost-structures, neither MEG nor the RMWB can ignore the significant resources invested to date in the areas of transportation, facilities, and operations required to sustain the business environment that we all rely on.

As openly recognized by you and other members of the Administration several times during meetings held during the first quarter of this year, the CLRP is outside of the proposed camp moratorium radius and the need for camps to operate there is not in question. In fact, to date even the public debate within Council seemed to indicate that the elimination of camps is not actually the best outcome or the most feasible. Instead, it is the creation of incentives that can entice workers who are not local to the region to relocate.

MEG is a net positive contributor to the RMWB from the CLRP. Currently, MEG pays full municipal taxes from that project despite requiring much fewer resources from the RMWB than projects located in closer proximity to Fort McMurray. So as MEG looks ahead to the potential for a future Surmont Project, that is where there is greater potential to assist the RMWB in meeting the objectives that are behind the proposed camp moratorium. However, based on MEG's regulatory application and analysis for the Surmont Project, camps would still form part of the business model and as a result, in MEG's view the proposed camp moratorium should not apply to the Surmont Project. But there are some tangible steps, some of which are being developed based on experiences gained from the CLRP, which could be applied by MEG to support the objectives behind the proposed camp moratorium for the Surmont Project. Those include:

- a) Explicitly stating in job descriptions that the Project is located within the RMWB and encouraging qualified applicants from surrounding communities to apply;
- b) Participating individually and collectively, through the Oil Sands Community Alliance (OSCA), in initiatives and engagement forums with the RMWB on issues relevant to population growth for the entire RMWB and Fort McMurray;
- c) Contributing to additional community investment initiatives within the RMWB that have the potential to enhance the quality of life of residents; and
- d) Participating in meetings with the Fort McMurray Airport Authority to better understand and analyze the value of the Fort McMurray Airport and its potential to support camp-based employees.



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Thank you again for the opportunity to provide feedback on the proposed camp moratorium and we appreciate the time you are taking to gather the information necessary for your Administration team to fully inform Council of the potential impacts of their motion. We look forward to continuing to work with you and participate in future discussions related to this issue.

Sincerely,

Ted Lamb
Vice President, Operations

cc: Dennis Vroom - Strategist, Stakeholder Relations, RMWB
Rory O'Connor - Manager, Consultation and Community Relations, MEG Energy
Karim Zariffa - Executive Director, OSCA

PCC-CM-LR00002

Via email

May 8, 2019

Ms. Annette Antoniak
CAO
Regional Municipality of Wood Buffalo
9909 Franklin Avenue,
Fort McMurray, Alberta
T9H 2K4

Dear Ms. Antoniak:

Thank you for the opportunity to meet with PetroChina Canada Ltd. (PCC) on May 6, 2019. Open communication between the Regional Municipality of Wood Buffalo (RMWB) and the region's oil sands companies is essential. Through this dialogue, we believe all stakeholders can work together and collaborate on shared solutions that will ensure a vibrant Fort McMurray community and a competitive oil sands industry.

Since PCC first opened its doors in 2010, PCC has made significant investments into Alberta's oil sands and in the RMWB. We own the MacKay River Commercial Project (MRCP)¹, the Dover Commercial Project (DCP)² and have a non-operated interest in the Grand Rapids Pipeline System (GRPS). These investments have greatly expanded the oil sands development on the West side of the Athabasca River. Moreover, the MRCP is targeting the Upper McMurray formation, a challenging oil sands formation which is outside of the main McMurray formation and has not been extensively developed. PCC is the first company to develop an Upper McMurray project at a large scale. Between our investments to date and long-term development plans in this area, PCC has and will ideally continue to contribute to the long-term sustainability of the RMWB.

PCC understands the importance of vibrant sustainable communities and our business practices in the RMWB, and have contributed in these ways:

- PCC's operations rely on the Fort McMurray International Airport (YMM) for the transportation of employees into and out of the region. In 2018, this equated to approximately 4,300 flights for PCC alone.

¹ The MRCP was approved in 2011, it is a Steam Assisted Gravity Drainage (SAGD) operation with maximum approved capacity of 150,000 over four phases.

² The DCP was approved in 2014, it is a Steam Assisted Gravity Drainage (SAGD) operation with maximum approved capacity of 250,000 over five phases.

- PCC does not have an aerodrome at the MRCP facility, instead we utilize YMM.
- PCC posts operational (site-based) positions on several platforms and supports hiring of local workers directly from the RMWB.
- PCC integrates Local and Aboriginal companies into our supply chain for goods and services in support of our operations. PCC's procurement procedures consider and assess Local and Aboriginal content in the bid evaluation process.
- PCC's community investment has focused on supporting the region's Aboriginal communities, Keyano College and not-for-profit organizations such as the Northern Lights Health Foundation (NLHF).

PCC is a new oil sands operator, starting construction of our MRCP facility in 2013, with first steam achieved in December 2016 and first production in 2017. Bitumen production in 2019 has averaged approximately 8,000 barrels per day (bpd), and PCC continues to innovate and apply new technology in order to ramp up production to our approved Phase 1 capacity of 35,000 bpd.

As a new operator in the region, PCC is striving to achieve free cash flow and positive net income from our investment in the MRCP in the short-term and sustain profitability in the long term. However, in support of the RMWB's objectives, PCC commits to exploring additional solutions that could contribute to sustainability of the RMWB:

- Consider and plan a phased approach to staffing that supports the hiring of local workers and to encourage workers to relocate to the region.
- Designate YMM as a transportation hub.
- Gather industry data and conduct analysis to compare / contrast programs offered by other producers with oil sands operations to share information and practices that support the region.
- Support a multi-stakeholder advocacy effort for increased investment in local and regional infrastructure, on the West side of the Athabasca, particularly focusing on Highway 686.
- Explore synergies and partnership opportunities with Keyano College with the goal of increasing the availability of RMWB-based skilled workers that the oil sands industry needs.

PCC believes that collaboration towards mutually beneficial outcomes is the best solution to ensure the sustainability of the region, both socially and economically. With this principle in mind, PCC cannot support any camp moratorium bylaw that will put the safety of our employees and operations at risk and undermine the competitiveness of our project. The driving distance to the MRCP is over 75 km from the Urban Service Area and takes approximately 2 hours (weather and road conditions dependent) and the route is mostly on gravel roads. Even if the majority of the MRCP's operational staff lived in the RMWB, PCC would still require an operations lodge for health and safety purposes.

Other unintended consequences of a camp moratorium bylaw would mean that PCC's reliance on YMM for transit of operational staff into and out of the region would decrease significantly. At a

time when YMM is struggling with low passenger numbers, the region truly needs the oil sands industry to support YMM and to invest to make it the viable transportation hub and link to the rest of the province, the country and international destinations.

If the RMWB Mayor and Council determine that a camp moratorium bylaw is their preferred approach, PCC requests that bylaw be worded so that it applies only to operations camps within a 75 km driving distance or within a one hour commute. Health and safety concerns, as well as increased costs from additional regulatory burden must be paramount when the RMWB and Mayor and Council consider the most effective ways to revitalize the Fort McMurray community.

PCC looks forward to on-going engagement with the RMWB, on both the camp moratorium bylaw and on other areas of mutual interest. We are certain that the development of shared solutions will foster conditions that will support the sustainability of the RMWB and the competitiveness of the oil sands industry.

Sincerely,



Judy Mah
VP Corporate Development
PetroChina Canada Ltd.



Suncor Energy Services Inc.
P.O. Box 4015
Main Mailroom, Tar Island
Fort McMurray, AB
Canada T9H 3E3

May 28, 2019

Mayor Scott and Council
Regional Municipality of Wood Buffalo
9909 Franklin Avenue
Fort McMurray, Alberta T9H 2K4

Re: Proposed camp moratorium and fee increase bylaws

Dear Mayor Scott and Council,

Suncor has been a major employer and a community member in the region since the mid-1960s. Given the adverse effects of the proposed camp moratorium and significant fee increase for camp licenses and permits, we wish to share our perspective on these critical issues and the potential impacts to our business, workers and the community.

Suncor is committed to working collaboratively to find solutions to further strengthen the region's economy, and bring more qualified workers and families here; this is evident in our hiring practices. However, using the camp moratorium and a 6,600 percent increase on permitting fees to attempt to achieve these objectives will be counterproductive and will have significant unintended consequences to our business and the region.

Suncor has four operating sites in the region: two have a live and work model and two have a camp-based model due to their remote location. Our sites closer to Fort McMurray use nearby camps almost exclusively to facilitate planned and unplanned maintenance events that require a dedicated workforce for short periods, but otherwise proudly rely on a local workforce.

The two remaining operating sites are a considerable commute from Fort McMurray (potentially 2 to 4 hours/day depending on weather) and require a camp based workforce. The current moratorium proposal would include these sites and would result in significant commutes for workers, posing a significant safety, wellness, productivity and economic risk.

Over the last two years and despite the difficult economy and uncertain regulatory environment, Suncor has hired and transferred more than 1,100 employees and their families into the region. Despite our efforts to hire local candidates and strategies to attract potential employees to move

to Fort McMurray, we continue to face recruiting challenges and have a significant number of vacancies for critical skilled positions – including supervisory, professional and trades even at the sites where the commute is reasonable. This challenge would be exacerbated by longer commutes associated with our remote locations should the camp moratorium come into force.

Suncor remains committed to hiring locally and developing the regional labour force, while also using workers from outside the region to effectively staff our operations where reasonably required, recognizing this combined model is the optimal approach for safety, wellness and efficiency. Workforce availability and flexibility for remote sites and instances of planned and unplanned maintenance is critical to our operations

The proposed moratorium and fee increases will have several negative and unintended consequences, including:

- Creating safety and wellness risks for workers;
 - long commutes over varied road conditions;
 - greater worker fatigue as a result of long commutes;
 - work/life balance implications leading to higher turnover;
- significant cost implications for industry;
 - this industry is already struggling in a difficult economic environment. Relocating existing camp infrastructure, increased transportation costs, personnel changes, and substantial camp fee increases will significantly add to our current challenges.
- reducing the future supply of accommodations to support maintenance events and remote locations;
 - third party camp providers are advising that the moratorium may limit their investment in the region and impact the supply of camps, even for remote locations, potentially adversely affecting our ability to execute planned and unplanned maintenance activities; and
- challenging the productivity and economics of our current and future projects;
 - increased safety issues, increased costs, reduced supply of accommodations and greater worker fatigue are all expected to have significance impacts on the productivity and economics of our operations potentially limiting future investment; and
 - limiting our ability to properly staff our operations.

Suncor has invested significant capital and resources into the infrastructure associated with our camps which are an integral part of our provincially approved operations, supporting safe and efficient operations, particularly at our remote sites. Suncor is of the view that the passage of the bylaw imposing a moratorium on camps would be harmful to our business and unlawful under the *Municipal Government Act*.

This issue is not new to the industry, which has longed preferred to work with local residents wherever reasonably possible. To this end, the industry solicited a survey of rotational workers

through the Oil Sands Community Alliance ("**OSCA**") in 2017. This survey revealed that while 48 per cent of respondents said they would consider moving to the RMWB, they also identified community barriers that make RMWB less attractive. We believe it is these barriers that we must collaboratively address to find a solution that benefits the RMWB, local businesses, and industry.

Suncor already recruits locally, offers incentives and relocation packages, uses local infrastructure such as the Fort McMurray airport when possible, hires local contractors, and supports community investment across the entire region. In addition, we recently launched a regional people strategy, which focuses on attracting and retaining our approximately 5,000 employees in the region. RMWB's senior administration recently reviewed Suncor's regional people strategy to better understand the challenges and potential actions we can collaboratively and individually advance. We believe together we can continue to advance attraction and retention in the region.

Suncor's operations will keep us active in the region for decades to come but regulations and actions by the municipality can have a profound effect on how successful we all are and how much industry invests in the region. For this reason, Suncor is committed to continue working with the RMWB to make the region a more resilient, responsive, and attractive place to live and work. Having a strong and robust local workforce is in both of our interests. However, the proposed camp moratorium and camp fee increase will not advance these objectives and we urge the Mayor and Council to abandon these initiatives and commit to working positively and collaboratively with community members and industry on building RMWB for the long term.

Sincerely,



Bruno Francoeur
Regional Operations Executive
Suncor Energy

Cc: Hon. Kaycee Madu, Minister, Municipal Affairs
Tany Yao, MLA, Fort McMurray - Wood Buffalo
Laila Goodridge, MLA, Fort McMurray - Lac La Biche



May 27, 2019

Mayor Don Scott and Council
Regional Municipality of Wood Buffalo
9909 Franklin Avenue
Fort McMurray, Alberta T9H 2K4
(sent via email)

Re: Proposed camp moratorium and fee increase bylaws

Dear Mayor Scott and Council,

This letter is to share Syncrude's concerns and provide additional information concerning the measures you are considering to reduce the use of Fly-in and Fly-out (FIFO) to run and maintain oil sands facilities in the region.

We'd like to thank you for the time and interest taken by the RMWB administration to hear our perspectives and share the work they're doing in support of the proposed bylaw. While encouraging more workers to reside in Wood Buffalo is sensible and complementary to Syncrude's current practices of supporting a vibrant community, we fully agree with our industry partners that the proposed moratorium is overly punitive. The implication that camp permits will not be renewed or have fees hiked brings unnecessary uncertainty to our industry at a time when we can least afford it. Neither the community nor industry benefits from compromising our competitiveness at this critical time.

Syncrude is a Fort McMurray-based company with our headquarters and operations here. The vast majority of our 4,700 employees are based in the region. While the motion targeting FIFO doesn't affect Syncrude as much as other operators, there would be unintended impacts to our facilities within the 75-km radius of the urban service area for the proposed moratorium.

We appreciate the comments throughout this debate about Syncrude's commitment to the community. We're proud to call this region home and have developed many strategies to make Wood Buffalo an even more vibrant community where our workers are eager to raise their families. Syncrude continues to work in the region to ensure local residents share in the economic and social benefits from our operation. Examples of our commitment to the community include:

- Spending \$5.4 billion in economic contributions in 2017 with 39 per cent spent in Wood Buffalo.
- Continued preference to hire from within the region; 90 per cent of all new hires in 2017 were local.
- Sustaining our company and the region through the Mildred Lake Extension (MLX) project, which will maintain our current level of production, jobs, economic activity and community benefits when the North Mine reaches the end of its oil sands deposit in the mid-2020s. We completed our regulatory hearing in early 2019 for our application to develop the MLX project.
- Investing \$6 million annually in programs, projects and initiatives focused on areas including healthcare, education, job training, recreation and arts and culture. Organizations receiving funding include: the Northern Lights Regional Health Foundation, Wood Buffalo Food Bank, YMCA Northern Alberta, Wood Buffalo Regional Library, United Way, The Hub Family Resource Centre as well cultural events and minor sports.

- More than \$8.5 million in support of various Keyano College programs and projects since 2007, including the state-of-the-art Oil Sands Power and Process Engineering Lab, mobile heavy equipment operator simulator lab and the Syncrude Aboriginal Trades Preparation Program.
- Syncrude spent a record \$518 million with local Aboriginal businesses in 2018. Our total cumulative local spend now exceeds \$3.5 billion in the past 25 years.
- Good Neighbours program saw 258 Syncrude employees volunteer more than 13,000 hours with non-profit 93 organizations in 2018. As a result, Syncrude support totaled \$404,000 in volunteer, busing and matching education grants.
- Showcasing our region to tradespeople working on our major turnaround project in 2018 with transportation and passes to MacDonald Island Park on their days off.

Syncrude also has a comprehensive housing program to encourage and support new employees and their families to successfully transition into the region. It consists of a relocation program as well as a housing program. Syncrude also has an active student program that introduces them to the region with free housing and transportation for their work term.

It is important, however, to stress while we do not use FIFO in our day-to-day operations, camps remain a vital part of our business model. Most of Syncrude's camp usage continues to be for maintenance turnarounds and projects. Due to this importance, the bylaw needs to ensure these activities are unaffected through an appropriate exemption for "turnaround, exploration, maintenance periods and capital projects" as outlined in your motion.

Syncrude's only FIFO use is for employees within the region. Our rotational program with the community of Fort Chipewyan has been in place for more than 30 years. Commuting daily to these communities from our site is not an option. Because the motion bluntly targets camps, it creates more of the unnecessary uncertainty we referred to at the outset.

These camps represent a considerable investment made by industry and its partners. It is one many made in the past when the community's population was past capacity. These assets give the region flexibility and a buffer against the inevitable swings of a resource economy as well. They also played a critical role in the successful restart of our operation following the 2016 wildfire. Many of the camp facilities in the region, including the ones used by Syncrude, are either owned outright by Aboriginal businesses based in the region or are joint ventures with Aboriginal communities in the region. They provide quality service while also ensuring a meaningful local economic impact in jobs and purchasing to our communities in the region.

Even though we do not use FIFO for non-resident permanent employees and there have been indications that our use of camps may still be permitted, we are still very concerned about the direct and indirect effects this motion's moratorium and permit review aspects will have. For example, our employees working at Aurora mine already face a lengthy drive to their worksite from their homes in Fort McMurray. An increase in highway traffic and delays could make their commute untenable.

Practically speaking, an artificial restriction of overall camp space in the region will likely create inflationary cost pressures and less ability to efficiently manage camp needs during peak periods, especially during maintenance turnarounds. Although we strive to stagger our major maintenance turnaround with other operators, unplanned events cause overlap in use. In those cases, limited camp space will have a detrimental impact in restoring operations in a timely manner as we wouldn't be able to house the required workers.

Our entire industry is also facing uncertainty in global markets and export capacity, compounded by regulatory and legislative changes at the federal and provincial levels. Even if council's current proposal

will have little direct effect on Syncrude, the last thing industry needs is for the municipal government to add to existing uncertainty and operating costs by moving forward with an initiative that threatens to add restrictions to development approvals. It undermines existing investments made in our sector from which our community has benefitted greatly and sends the wrong message to anyone considering future investment in the RMWB.

We ask council to recognize the unintended consequences of pursuing measures like this far outweigh any benefits to the community or the industry that supports it in the short or long term. Instead, we encourage the municipality to continue working collaboratively with our oil sands partners to ensure the long-time success of both the community and industry.

Thank you for taking the time to consider our concerns on this important issue. Syncrude remains committed to this region. It is home to our employees and valued neighbours and we know working together is the most effective way to create a vibrant region. As always, we look forward to discussing this or any other matter you feel can help improve our community.

Sincerely,



Kara Flynn
Vice President, Government and Public Affairs
Syncrude

Cc: Hon. Sonya Savage, Minister, Energy
Hon. Kaycee Madu, Minister, Municipal Affairs
Tany Yao, MLA, Fort McMurray - Wood Buffalo
Laila Goodridge, MLA, Fort McMurray - Lac La Biche
Annette Antoniak, Chief Administrative Officer, RMWB