



Alberta Wilderness Association
"Defending Wild Alberta through Awareness and Action"

December 22, 2021

Jonathan Toews
Alberta Energy Regulator
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Re: Fort Hills Oil Sands Project – Operational Plan for the Sustainability of the Unmined Portion of the McClelland Lake Wetland Complex

Dear Mr. Jonathan Toews,

My name is Phillip Meintzer and I work as a Conservation Specialist for Alberta Wilderness Association (AWA). As you may know, AWA is an Alberta-based conservation group with 7,000 members and supporters in Alberta and around the world. AWA seeks the completion of a protected areas network and good stewardship of Alberta's public lands, waters and biodiversity to ensure future generations enjoy the abundant benefits they provide.

As we understand it, December 15, 2021 was the deadline for Suncor Energy Inc.'s submission of the McClelland Lake Wetland Complex (MLWC) Operational Plan as it relates to the Fort Hills Oil Sands Project (FHOSP). In light of this anticipated submission, we reviewed many of the foundational documents created to guide the development of this project, including (but not limited to):

- The 2002 Energy and Utilities Board Decision Report (hereafter EUB Decision Report),
- The December 2015 Alberta government's Water Act Approval No. 00151636-01-00 issued to Fort Hills Energy Corporation (Water Act Approval),
- Suncor's 2018 Conceptual Operational Plan – also known as the proposal to develop an Operational Plan for the sustainability of the non-mined portion of the MLWC (2018 Proposal).

Our reading of these key documents has allowed us to recognize four key commitments – among many others, which AER should ensure are satisfied before authorizing Suncor's proposed MLWC Operational Plan. These four commitments are listed below, along with which document(s) they were found within:

1. The proposed mitigation plan and associated design features will protect the unmined portion of the MLWC (EUB Decision Report, Water Act Approval, 2018 Proposal);
2. In defining the functionality of the MLWC – Develop a list of indicators, including those which recognize Indigenous traditional socio-cultural needs and values – through adequate consultation with local Indigenous communities (EUB Decision Report, Water Act Approval, 2018 Proposal); and
3. Agreement by all members of the MLWC Sustainability Committee on the proposed list of indicators and the FHOSP mitigation plan (EUB Decision Report);
4. MLWC Sustainability Committee recommendations should be considered and implemented in the development of the submitted Operational Plan (EUB Decision Report).

The Operational Plan should not be authorized by AER if any of these commitments have not been adequately addressed in the Operational Plan.

The following sections outline many of the specific commitments that have been made in the development of this project, and are organized based on the foundational document they were included within.

2002 EUB Decision Report:

The EUB recommended that the Government of Alberta direct TrueNorth, the FHOSP proponent, to convene a committee of stakeholders and regulators (hereafter referred to as the MLWC Sustainability Committee) to oversee the collection of baseline monitoring data, establish the natural variability of the wetland, establish criteria to protect the biotic diversity and function of the no-surface-access zone, critically evaluate proposed mitigation plans in relation to the protection criteria, and evaluate post-construction monitoring data and adaptive management.

The EUB Decision Report stated that this Sustainability Committee “would agree” on a set of indicators and objectives that would then be used to design baseline monitoring, assess potential mitigation plans, and eventually monitor their effectiveness.

We understand that the MLWC Sustainability Committee was established by Petro-Canada Oil Sands Inc., the successor FHOSP approval holder, in December 2005 following the recommendations included within EUB Decision Report. Based on the above statements, AWA expects to see that Suncor, the current FHOSP approval holder, will acknowledge in its proposed Operational Plan that all stakeholders participating on the Sustainability Committee have come to a consensus agreement on the list of indicators and objectives outlined in the FHOSP mitigation plan. This includes indicators that are appropriate for Western science as well as those that are valuable to Indigenous communities for traditional socio-cultural needs. If agreement has not been reached, we feel that the another Operational Plan must be prepared by Suncor for the AER’s consideration with a list of appropriate indicators agreed upon by all members of the Sustainability Committee.

The EUB decided that it was in the public’s interest to approve mining within the MLWC, subject to establishing an appropriate mitigation plan for protecting the unmined portion of the wetland complex – as directed by the amendments to the Alberta government’s sub-regional Integrated Resource Plan (IRP) on June 14, 2002. Therefore, AWA expects Suncor’s submitted Operational Plan will include an appropriate mitigation plan for protecting the unmined portion of the MLWC. Since the mitigation plan was directed to include the following key components, they should be clearly outlined as part of the submitted Operational Plan:

- reducing seepage to the MLWC through installation of OPTA perimeter wells [recognizing that minesite design change may have changed the applicability of this item];
- minimizing interaction of natural groundwater flow with reclamation deposits through in-pit barrier wall and capping materials;
- managing overburden water levels in the part of the MLWC not directly affected so that the water table would be adequately maintained;

- directing overburden dewatering water to the Athabasca River, if necessary; and directing and/or treating initial end-pit lake release to the Athabasca River, if necessary.

Based on our understanding, this mitigation plan needs to be agreed upon by all members of the Sustainability Committee. If the Committee's members do not agree unanimously, or very nearly unanimously, that the mitigation plan will successfully protect the unmined portion of the MLWC, then the AER should not consider in depth, much less approve, Suncor's Operational Plan until agreement has been reached.

The summary section of the EUB Decision Report contains a list of 15 Conditions of Board Approval which were assembled from the content of the report. In this list of approval conditions, condition 13 is stated as follows. Condition 13 – As each of the following issues is resolved, the Board directs TrueNorth to submit for approval a new water management plan, including plant and site wide water balances, an evaluation of possible environmental impacts, and an evaluation of impacts to the mine plan. The issues to be resolved include:

- a. Detailed design of the new tailings management plan,
- b. Detailed evaluation and design of seepage control from the OPTA,
- c. Treatment or management of basal aquifer water,
- d. In-stream flow needs and need for on-site temporary water storage, and
- e. Implementation of recommendations from the MLWC Sustainability Committee,

Based on the wording used for Condition 13e, recommendations put forward by the MLWC Sustainability Committee need to be implemented and reflected in the Operational Plan. If all Sustainability Committee recommendations have not been acknowledged and implemented as part of the Operational Plan, then the proposed Operational Plan should not be considered in depth, much less approved, until that has been accomplished.

2015 Water Act Approval:

The original FHOSP Water Act Approval No. 00151636-00-00 was issued December 30, 2002 by Alberta Environment. The renewed FHOSP Water Act approval 00151636-01-00, was issued December 9th, 2015 by the Alberta Energy Regulator (AER) to Fort Hills Energy Corporation (the Approval Holder) for the purpose of developing the Fort Hills Oil Sands Processing Plant and Mine (FHOSP) subject to a set of terms and conditions attached within the Approval.

The Approval outlines specific obligations that are required to be met by the Approval Holder, including some that relate to the McClelland Lake Wetland Complex (MLWC) and McClelland Lake. These commitments are stated in Approval Conditions 3.11 to 3.13, but we would like to draw your attention specifically to Condition 3.13 below.

Condition 3.13 – The Operational Plan referred to in condition 3.11 and 3.12 shall contain, at a minimum:

- Physical and biological conditions in the MLWC [the 2002 Approval specified “physical and biological baseline conditions in the MLWC” which AWA believes should not have been altered in the renewed Approval];

- Design features or measures, and other as required for the protection of the non-mined portions of the MLWC;
- A wetland monitoring program containing as a minimum a yearly survey of vegetation species distribution, abundance, health, and string and flark configuration as compared to baseline studies;
- A monitoring program to study groundwater and surface water levels and water quality in overburden and muskeg; flow measurements of polishing ponds, and level monitoring in McClelland Lake;
- Proposed investigation and monitoring necessary to verify the model prediction that the MLWC will not drain towards the dewatering area through the groundwater flow system;
- Indicators to evaluate the tolerance of the MLWC to project effects;
- The necessary contingency mitigation measures to maintain the water table, water chemistry and water flow within limits as indicated by natural fluctuations to maintain ecosystem diversity and function of the non-mined portions of the MLWC during operation and reclamation of the project;
- A detailed schedule for the implementation of each component of the plan.

Condition 3.13 outlines the specific requirements that need to be met by Suncor's Operational Plan to be submitted in December 2021. We would like to highlight the requirement that the Operational Plan must include design features or measures, and other measures as required for the protection of the non-mined portion of the MLWC. This requirement explicitly states that these design features or measures must protect the non-mined portion of the wetland complex. If the proposed features do not adequately meet this requirement, then Suncor's Operational Plan should not be approved until can substantiate any/all claims for protection.

As acknowledged in the previous section where we reviewed the 2002 EUB Decision Report, Condition 3.13 of the 2015 Water Act Approval includes a requirement that the Operational Plan must contain a list of indicators to evaluate the tolerance of the MLWC to project effects. Although it is not explicitly stated within the Approval, this list of indicators should include those of biological significance to monitor the health and functionality of the non-mined portion of the MLWC, as well as indicators based on Indigenous traditional and cultural knowledge developed through consultation with local communities. These requirements are outlined in greater detail within the 2018 Proposal for the Operational Plan, which we will review in the following section.

2018 Proposal (for the MLWC Operational Plan):

Suncor submitted the 2018 Proposal to satisfy the requirements of the 2015 Water Act Approval No. 151636-01-00 (as amended), which we have described previously. These requirements have been used to outline six objectives to guide the development of the Operational Plan to be submitted in 2021 and how these objectives will be met through the next four years as the Operational Plan is developed. The six objectives are listed below and we have highlighted commitments made in relation to specific objectives in the following section.

1. Define baseline conditions of the MLWC and watershed – using baseline monitoring data collected since 2000;

2. Define functionality of the MLWC – includes the development of a list of indicators (including those based on Traditional Knowledge) with associated triggers and limits;
3. Assess potential impacts of mine development – using numerical models to simulate/predict mine operations and closure;
4. Establish necessary design features and contingency mitigation measures – using numerical models to simulate design features to protect the unmined portion of the MLWC;
5. Develop an Effects Monitoring Program (EMP) – to allow for comparison using reference sites that are similar to the MLWC, but not disturbed by the FHOSP; and
6. Develop a Response Framework – outlining the steps to be taken if an indicator goes outside of the defined range for triggers and/or limits.

Objective 1 – Defining Conditions:

According to the 2018 Proposal, initial baseline monitoring data was collected from 2000 to 2002, with new baseline monitoring programs started in 2007 with input from the MLWC Sustainability Committee. These baseline monitoring programs have resulted in a 10+ year dataset (2007 to 2017) and the 2018 Proposal includes a commitment that this historical baseline data and analysis will be included in the first Annual Progress Report – as required by 2015 Water Act Approval Condition 3.12. No baseline monitoring data (to-date) was included as part of this 2018 Proposal.

Baseline conditions represent the state of the environment and its natural variability prior to industrial development. AWA is concerned with the baseline monitoring component of the 2018 Proposal and the upcoming 2021 Operational Plan. We note that the 2018 Proposal states that the MLWC Sustainability Committee expressed concerns that ongoing operations in the region may be impacting the baseline monitoring results. This indicates that measured baselines might not represent true baselines in the absence of industrial development as they should. We hope to see this issue addressed in the submitted Operational Plan, as understanding baseline conditions is paramount to assessing potential impacts from the FHOSP and protecting the functionality of the MLWC.

Objective 2 – Defining Functionality:

Objective 2 outlines Suncor’s intent to develop a suite of indicators that represent the functionality of the MLWC. In 2009, the Sustainability Committee defined functionality as: “the individual and collective physical, hydrological, chemical and biological processes performed by the MLWC that relate directly to the characteristics of the ecosystem and its capacity to interact with the adjacent landscape.” The Proposal acknowledges that an important component of functionality includes traditional values, traditional ecological knowledge, and traditional land use information.

The 2018 Proposal states that the development of indicators was to be accomplished through:

- Characterizing and evaluating ecosystem diversity in the MLWC;
- Selecting indicators for ecosystem diversity and function, including indicators that represent traditional land use;
- Understanding natural variability of these indicators, considering weather and climate variability; and
- Defining limits and thresholds for each indicator that would initiate mitigation response plans.

The 2002 EUB Decision Report acknowledges that the list of indicators used to define functionality of the MLWC within the Operational Plan should be agreed upon by the Sustainability Committee, and the 2018 Proposal furthers Suncor's commitments through the inclusion of indicators that represent traditional land use. AWA believes that if the Operational Plan submitted in December 2021 does not include a list of indicators which satisfy these two requirements, then the proposed Operational Plan should not be considered in depth, much less approved, until those conditions are met.

Objective 4 – Establish Necessary Design Features and Contingency Mitigation Measures

Design features and contingency mitigation plans will be used to maintain the functionality of the non-mined portion of the MLWC during preparation, operation, and closure of the FHOSP. The 2018 Proposal states that Fort Hills will continue to evaluate options to be used in isolation or combination until the submission of the final Operational Plan in 2021. To evaluate the effectiveness of various design features, mine operations are simulated with each mitigation option including reclamation and closure scenarios. Results will include a risk assessment associated with each design feature. As options are assessed, they will be refined and selected for incorporation into the Operational Plan. AWA looks forward to the opportunity to review the Operational Plan's list of proposed design features and associated risk assessments.

The 2018 Proposal states that the MLWC Sustainability Committee requested information on measures that could be implemented if unintended consequences arise and sustainability is not maintained in the unmined portion of the MLWC. Fort Hills acknowledged that success is an important component of the design features that are developed in support of the Operational Plan, but if assessments suggest that the confidence in achieving successful outcomes with a specific design feature is low, alternative measures will be identified for further discussion with the Sustainability Committee.

We are concerned that the previous statement seems to indicate that Fort Hills has not considered the possibility that any/all design features could result in unintended consequences for the unmined portion of the MLWC. Unless there is extremely high confidence that the chosen design features will successfully protect the unmined portion of the MLWC, then Fort Hills should acknowledge the concern expressed by the Sustainability Committee and ensure that measures are in place if unintended consequences arise and sustainability is not maintained. As mentioned in our summary of the 2002 EUB Decision Report, the mitigation plan needs to be agreed upon by the MLWC Sustainability Committee and all recommendations put forward by the Committee need to be implemented. Based on these statements, the Operational Plan needs to address the Sustainability Committee's concerns around unintended consequences. We look forward to reviewing the submitted Operational Plan to ascertain whether these measures have been included or not.

Objective 6 – Develop a Response Framework

A Response Framework is necessary to outline what actions will be taken by Fort Hills if and when indicators start to deviate from natural variability or model prediction. Progress on the development of the Response Framework is to be included in the Annual Progress Reports, with the final design to be included in the submitted Operational Plan.

The 2018 Proposal states that the Aboriginal Advisory Group (AAG) will support and be involved in the development of the Response Framework from both Traditional Knowledge and technical perspectives.

The AAG will identify cultural values associated with the McClelland fen that will contribute to the baseline understanding of the fen and will support the establishment of management thresholds.

The MLWC Sustainability Committee reviewed a draft version of the 2018 proposal and requested that the development of a Response Framework include actions that would stop further development until cause of a given change has been identified and an appropriate mitigation solution is developed and implemented.

AWA looks forward to reviewing the Operational Plan for evidence that Fort Hills included Traditional Knowledge in the development of the Response Framework, and to ensure that the recommendations from the MLWC Sustainability Committee have been addressed in the submitted Response Framework.

Final Comments:

It is AER's responsibility to ensure that Suncor fulfills all FHOSP requirements and commitments, especially the four key commitments highlighted within this letter. The protection of the unmined portion of the MLWC is our primary concern, and Suncor's Operational Plan needs to outline – with a very high degree of certainty – that their mitigation plan and design features will protect this outstanding wetland ecosystem. If any one of these commitments is not adequately addressed, the MLWC Operational Plan must not be authorized until the proponent can provide sufficient evidence to the contrary.

The MLWC and surrounding watershed sustains some of Alberta's deepest soil carbon layers and vital natural water bodies including McClelland Lake and patterned fens. It supports rare plant communities and provides an important stopover point and breeding grounds for many migratory bird species along one of North America's major migratory flyways. Given the unique importance of this wetland ecosystem, Suncor must conclusively demonstrate that their Operational Plan will guarantee the protection of the unmined portion of the complex.

We look forward to the opportunity to review the Operational Plan for the sustainability of the non-mined portion of the MLWC, to ensure that the commitments outlined previously have been addressed.

Sincerely,

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