
Dear Authorizations Review and Coordination Team:

I am writing on behalf of the Oil Sands Environmental Coalition (OSEC) regarding the Enhanced Review Process (ERP) for Suncor Energy Inc.’s (Suncor) Application Nos. 1857270, 1857274 and 075-94 (herein ‘the Applications’). The ERP was held July 17 and 18, 2017. Per the schedule circulated by the Alberta Energy Regulator (AER) on July 6, 2017, this submission comprises OSEC’s final comments.

There is significant alignment between these final comments, OSEC’s previous ERP submissions, and the areas of concern identified by the AER in its March 17, 2017 letter of denial. Many of the same issues were also raised in the July 2017 ERP submissions made by Donald Functional & Applied Ecology Inc. and John C. Errington and Associates Ltd. on behalf of Fort McKay Métis Community Association (McKay Métis) and Métis Nation of Alberta Association Fort McMurray Local Council 1935 (McMurray Métis).

Tailings management remains a critical public interest issue in Alberta, and the record of poor historic management indicates that stricter regulatory oversight is needed to drive necessary performance improvements. We urge the AER to ensure that any decisions it makes will increase accountability, transparency, and improved outcomes consistent with the objectives of the TMF.

Primary Areas of Concern

OSEC maintains there are four primary areas of concern that remain outstanding. These are as follows:

1. Need for additional Ready-To-Reclaim (RTR) and performance criteria
2. Unreasonable timelines for fluid tailings treatment and reclamation
3. Unclear decision points for triggering mitigation or contingency plans
4. Lack of viable terrestrial contingency plans for DDA3

These primary areas of concern were not fundamentally addressed by the incorporation of PASS technology into Suncor’s Tailings Management Plan (TMP), which constituted the basis for which the application was granted reconsideration by the AER. Moreover, during the ERP process Suncor did not propose any substantive solution pathways to address these persistent problems. OSEC subsequently maintains its position that Suncor’s Applications do not meet the intent of the TMF or the requirements of Directive 085. In the alternative, should the AER
approve the application, OSEC recommends that conditions of approval be applied that
diligently and comprehensively address all of these core issues. To this end, OSEC has prepared
recommended conditions for the AER to consider if it grants an approval decision.

1. Need for additional RTR and performance criteria

Suncor has proposed very limited RTR and performance criteria for its six deposits: Clay to
Water Ratio (CWR) for DDA1-MD9; no criteria for DDA2; CWR and Total Suspended Solids
(TSS) for DDA3; and the “completion of mitigation measures” for Ponds 5, 6 and 7. These
criteria leave significant uncertainty as to how the treated deposits will progress to be ready for
reclamation.

Directive 085 states “tailings deposits with higher uncertainty or more complexity, including
with the surrounding environment, may have more indicators, measures and performance criteria
associated with them.”\(^1\) It is clear from Suncor’s June 2 submission that the outcomes of their
fluid tailings treatment are uncertain.

**Recommended Condition of Approval**

1. Additional RTR criteria should be included in all deposits, such as pore water expression,
settlement, strength, and containment/immobilization of constituents of potential concern.

For DDA3, Suncor's proposed criteria of CWR $\geq 0.5$ annual average is not sufficiently
ambitious. During the ERP, Mr. Mitchell Holte stated that an average CWR of 0.52 is required to
meet the aquatic closure outcome, but that they actually anticipate a CWR of 0.65.\(^2\) A CWR $\geq$
0.65 reflects greater settlement, higher water release, a larger water cap, and quicker reclamation
outcomes. As this is what Suncor is expecting, we recommend it be utilized as a criteria. This
would additionally serve to provide more flexibility in terms of the deposit's capability to meet
different closure outcomes.

**Recommended Condition of Approval**

2. RTR criteria for DDA3 should be an annual average CWR $\geq 0.65$, as well as TSS $\leq$
500ppm.

*With any changes to Suncor's RTR criteria, OSEC expects Suncor to maintain their existing
fluid tailings profile. This may necessitate more aggressive fluid tailings treatment earlier in
the project lifecycle.*

For DDA1, Suncor is placing treated tailings in thin lifts before relocating it to its final resting
place in MD9. Directive 085 states that "[f]luid tailings are considered RTR when they have
been processed with an accepted technology, placed in their final landscape, and meet

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performance criteria.\textsuperscript{3} The Directive also states that when temporary locations are required, "RTR criteria will be developed for the interim placement location, as well as for the final placement location."\textsuperscript{4} Suncor's proposed RTR and performance criteria for DDA1 do not currently meet these requirements as they only set out RTR criteria for temporary location and fail to include RTR criteria for the final placement location.

**Recommended Condition of Approval**

3. Once the material is placed in MD9, Suncor should be held accountable for meeting the ambitious, stringent, and binding RTR criteria of CWR ≥ 1. An interim target of CWR ≥ 0.5 could be employed, but the fluid tailings should not be removed from Suncor's inventory until achieving CWR ≥ 1.

*With any changes to Suncor RTR criteria, OSEC expects Suncor to maintain their existing fluid tailings profile. This may necessitate more aggressive fluid tailings treatment earlier in the project lifecycle.*

For DDA2 RTR criteria have not been provided, due to the fact that Suncor does not plan to utilize it. This is not acceptable without a clear alternative delineated in the meantime. During the ERP, Mr. Holte stated that the criteria for DDA2 will be "the same criteria as DDA1."\textsuperscript{5} As such, OSEC's recommended changes to the RTR criteria for DDA2 are the same as for DDA1.

**Recommended Condition of Approval**

4. Suncor must provide RTR and performance criteria for DDA2 until a robust plan for the current volume allocated for DDA2 is provided. RTR criteria for DDA2 should be the same as for DDA1. Per OSEC's recommended condition of approval #3 for DDA1, an interim target of CWR ≥ 0.5 could be employed for DDA2, but the fluid tailings should not be removed from Suncor's inventory until achieving CWR ≥ 1.

For ponds 5, 6, and 7, Suncor has defined RTR criteria as "mitigation measures are complete." This vague description does not provide any indication of what constitutes acceptable performance, nor does it allow for monitoring of whether the deposits are meeting performance expectations over time as they move along the RTR to RFR trajectory. Directive 085 states that "RTR performance criteria will be used to determine when treated tailings are successfully progressing on a clear trajectory, from short- and medium-term outcomes towards long-term outcomes in the mine reclamation."\textsuperscript{6} With Suncor's proposed RTR criteria there is no means by which the fluid tailings could be placed back into the inventory if they are not in fact meeting expectations on the trajectory to RTR. This is extremely problematic, as the RTR classification is

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currently the central mechanism for monitoring compliance under Directive 085 and triggering management actions if and when necessary.

Recommended Condition of Approval

5. Elevation should be an RTR criteria for ponds 5, 6, and 7.

Suncor’s TMP currently proposes meeting relatively vague RTR criteria as a sole metric and benchmark for assessing fluid tailings treatment and reclamation. OSEC contends that this is not aligned with the stated purpose of the TMF, which is “to manage long term liability and environmental risk to the province.” This is because significant liabilities pertain to the process of bringing deposits from RTR to RFR, in order to actually achieve proposed reclamation outcomes. These pathways from RTR to RFR are not being measured, monitored, or managed in Suncor’s TMP, despite this phase of the process often being particularly uncertain and time-intensive. This is exemplified by Suncor’s proposed RTR to RFR timelines of: 2025-2080 in DDA1-MD9; 2019-2035 in Pond 5; and, 2053-2063 in DDA3. This intermediary stage leading up to RFR should be comprehensively accounted for by performance criteria.

Suncor’s TMP must therefore contain detailed performance criteria for measuring, monitoring, and managing progress from RTR to RFR over the lifetime of all the deposits. In this vein, all performance criteria should be defined with specific dates, as well as spatial demarcations across each deposit. These milestones for incremental performance criteria should be distinct, with any deviations resulting in AER management actions and increased scrutiny of Suncor’s mitigation plans until the deposit is back on the approved RTR to RFR trajectory. This would provide the AER with tools to monitor both the treatment of fluid tailings as well as the trajectory to reclamation. This is aligned with Directive 085, which states “RTR performance criteria will be used to determine when treated tailings are successfully progressing on a clear trajectory, from short-and medium-term outcomes towards long-term outcomes in the mine reclamation plan and life of mine closure plan.”

Recommended Condition of Approval

6. To sufficiently monitor the progress of deposits over time as they move along the trajectory from RTR to RFR, Suncor must define binding performance metrics at specific intervals over time and space. Suggested criteria over time are captured by the chart in Table 1.

Failure to meet these incremental performance criteria should result in management actions and/or the impacted volume of fluid tailings being placed back into Suncor's inventory until the criteria are met.

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Table 1

<table>
<thead>
<tr>
<th>Deposit</th>
<th>RTR</th>
<th>Proposed Incremental Performance criteria</th>
<th>RFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDA3</td>
<td></td>
<td>CWR ≥0.65 TSS ≤ 500 ppm Pore water expression =60%</td>
<td>CCME guidelines Pore water expression = 80%</td>
</tr>
<tr>
<td>DDA1</td>
<td>Interim CWR≥0.5 Final CWR ≥1.0</td>
<td>CWR increases by X every year. Settlement of X metres occurs every year. TSS decreases by Xppm every year. Pore water expression increases by X% every year.</td>
<td>CWR = 3 Remaining settlement &lt;1-3 m Pore water expression = 80%</td>
</tr>
<tr>
<td>DDA2</td>
<td>Interim CWR≥0.5 Final CWR ≥1.0</td>
<td>CWR increases by X every year. Settlement of X metres occurs every year. Pore water expression increases by X% every year.</td>
<td>CWR = 3 Remaining settlement &lt;1-3 m Pore water expression = 80%</td>
</tr>
<tr>
<td>Pond 5</td>
<td>X ft</td>
<td>Settlement of X feet occurs every year. Pore water expression increases by X% every year.</td>
<td>1087 ft Pore water expression = 80%</td>
</tr>
<tr>
<td>Pond 6</td>
<td>X ft</td>
<td>Settlement of X feet occurs every year. Pore water expression increases by X% every year.</td>
<td>948 ft Pore water expression = 80%</td>
</tr>
<tr>
<td>Pond 7</td>
<td>X m</td>
<td>Settlement of X feet occurs every year. Pore water expression increases by X% every year.</td>
<td>298.3 m Pore water expression = 80%</td>
</tr>
</tbody>
</table>

2. Unreasonable timelines for fluid tailings treatment and reclamation

The stated objective of the TMF is for “fluid tailings accumulation to be minimized by ensuring fluid tailings are treated and reclaimed progressively during the life of a project.” As Suncor’s base mine has been in operation since 1967 and is expected to reach the end of its operating life in 2033, there is now little time left to manage the volume of fluid tailings that has accumulated over the last five decades.

In addition to this long history of fluid tailings accumulation, the Applications propose to defer reclamation activities until after Suncor’s base mine concludes revenue generating operations. Suncor’s proposed timelines for the six fluid tailings deposits in the Applications indicate that

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9 If criteria ‘X’ are found to be too prescriptive or limiting, a range or average of acceptable values could be utilized.
reclamation activities will not be concluded until 52 years after the end of mine life.\textsuperscript{11} Furthermore, Suncor states that “the DDA1-MD9 deposit as planned may express water and settle for at least 100 years and as long as several hundred years before reclamation can start.”\textsuperscript{12}

The liability associated with Suncor’s fluid tailings is thus not being minimized with progressive reclamation during the life of the project, as required by the TMF. In their June 2, 2017 ERP Submission, Suncor states they will “[adapt their] approach over the next 26 years as [they] gain a better understanding of long-term hydrology and climate conditions.”\textsuperscript{13} This continued deferral of responsibility represents liability for all Albertans in terms of ongoing monitoring and management, as well as a high degree of risk associated with the treatment and closure approaches for decades when the asset will no longer be generating revenue.

OSEC recognizes that treating fluid tailings is both complex and difficult, but by aggressively approaching life cycle tailings management now, Suncor will have more resources at their disposal to satisfactorily respond and adapt to any unexpected developments and outcomes.

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\begin{tabular}{|l|}
\hline
Recommended Condition of Approval \\
\hline
7. Suncor should be compelled to revise their timelines for DDA1, DDA2, and the terrestrial option for DDA3. This revision must significantly shorten the time required to reach a reclaimed state in all deposits. \\
\hline
\end{tabular}
\caption{Recommended Condition of Approval}
\end{table}

\begin{itemize}
\item OSEC anticipates that the timelines to get to RFR and complete reclamation will be shortened with the adoption of OSEC's recommended conditions of approval 1, 2, 3, 4, and 6. This is because these conditions would adjust RTR criteria for DDA1, DDA2, and DDA3 without allowing for any corresponding changes to Suncor's proposed fluid tailings profile.
\end{itemize}

3. **Unclear decision points for triggering mitigation actions and/or contingency plans**

Suncor's TMP does not currently have clear decision points for triggering mitigation actions or implementing the terrestrial closure option for DDA3. While these concerns were raised repeatedly by OSEC and other participants during the ERP, Suncor did not provide any tangible compromises or solution pathways. This gap is particularly pertinent to the aquatic capping option for DDA3, which represents 60% of Suncor's total fluid inventory and holds the greatest risk due to heavy reliance on unproven tailings management technology as defined by the TMF and Directive 085.

In addition to providing a viable contingency plan, OSEC maintains that Suncor must provide more details related to decision milestones that would ensure adequate time for treatment with alternative technology in preparation for terrestrial capping in DDA3. It is not reasonable for Suncor to make a definitive decision regarding water versus terrestrial capping six years after end of mine life (EML) in 2039, as is currently proposed in the TMP.

\begin{itemize}
\item \textsuperscript{11} Suncor Energy Inc. June 2, 2017. \textit{Response to Clarification Request}, Table II, 8.
\item \textsuperscript{12} Suncor Energy Inc. June 2, 2017. \textit{Response to Clarification Request}, 96.
\item \textsuperscript{13} Suncor Energy Inc. June 2, 2017. \textit{Response to Clarification Request}, 74.
\end{itemize}
During the ERP, Suncor acknowledged that they will be evaluating progress of DDA3 in 2023, 2029, 2033, and 2039.\(^\text{14}\) It is critical that the AER, Government of Alberta, and stakeholders are also made aware of the parameters Suncor will be using to measure success. These parameters must be made into binding benchmarks in the conditions of approval, to ensure that management decisions will be made in a manner that is both transparent and principled over the next decades.

**Recommended Condition of Approval**

8. Suncor must develop a performance plan for DDA3 that clearly and transparently defines what metrics will be measured and what results will constitute success in 2023, 2029, 2033, and 2039. These parameters should be defined for both DDA3 as well as research projects such as Suncor’s Demonstration Pit Lake (DPL), Syncrude’s Base Mine Lake and Suncor’s Ground Water Management Plan. As an example, it could be required that DPL meets CCME guidelines by year 10. This performance plan must also include defined management actions that will occur should performance metrics not be met.

*Suncor could be allocated a prescribed amount of time (i.e. six months) after the approval of the TMP to develop this performance plan. The proposed plan should be reviewed by stakeholders in an open and transparent process similar in design to the ERP, prior to any decisions being made by the AER.*

**4. Lack of viable terrestrial contingency plans for DDA3**

Requirement 11 of Section 4.6 in Directive 085 states that "where there are uncertainties with the chosen fluid tailings treatment technologies, the fluid tailings management plan must identify mitigation measures and contingency plans to manage poor performance." Moreover, Requirement 12 of Section 4.6 in Directive 085 states that "[i]n cases where water-capped fluid tailings technology is used to generate the inventory forecast in the profiles, an alternative treatment technology to treat equivalent volumes of fluid tailings with associated implementation timeframes must be provided." Suncor is accordingly required to provide a contingency plan for unproven tailings technologies. OSEC has consistently raised concerns that Suncor’s proposed water capping of 524\(^\text{15}\) million cubic meters of fluid tailings in DDA3 lacks adequate contingency planning. In its initial decision letter dated 17 March 2017, AER similarly indicated that inadequate information was provided to ensure that the terrestrial capping alternative could achieve viable closure outcomes.

Suncor’s assessment indicates that if fluid tailings treated to a suitable quality for water capping were to be terrestrially capped instead, the deposits would settle by 40 meters, and need to be managed for 150 years or more. This approach constitutes neither a realistic nor viable alternative to water capping.

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Ultimately, the treatment of fluid tailings with Suncor’s permanent aquatic storage system (PASS) technology and water capping is unproven and does not yet have regulatory approval in Alberta. During the ERP, Suncor expressed a high degree of confidence in the success of the Demonstration Pit Lake (DPL) project and PASS. However, industry has previously been highly confident in technologies that have unfortunately not performed to expectations. This occurred with Suncor's Tailings Reduction (TRO) technology, which has had a much poorer performance at industrial scale than was anticipated during the testing phase. Therefore a prudent approach to managing the risk and uncertainty of an untested technology would include a viable terrestrial alternative for managing the fluid tailings associated with DDA3 with reasonable timelines and a high likelihood of success.

**Recommended Condition of Approval**

9. Suncor must propose a terrestrial outcome for DDA3 that is viable and reclaimed in a reasonable time frame. The following parameters should be minimum requirements for the proposed plan:
   a. Fluid tailings placed in DDA3 must meet RTR criteria as per Suncor's existing profile, or sooner.
   b. Remaining settlement at RFR must be <1-3 m (as per proposed RFR criteria for DDA1-MD9).
   c. The deposit must be fully reclaimed by 2063 (as per the DDA3 aquatic cover proposal).

*Suncor could be allocated a prescribed amount of time (i.e. six months) after the approval of the TMP to develop this contingency plan. The proposed plan should be reviewed by stakeholders in an open and transparent process similar in design to the ERP, prior to any decisions being made by the AER.*

**Supplementary Areas of Concern**

While OSEC has been repeatedly advised that systemic concerns are out of scope for the ERP and will be addressed through other processes, the current state of all TMPs under review – including Suncor’s Applications – has made it clear that they remain unresolved. OSEC would like to be clear in stating that while these issue areas may be out of scope for this ERP, they are outstanding and resolving them will be critical to the issuance of any decision on Suncor’s TMP. This includes the following five issue areas:

1. Disclosure of closure and reclamation liabilities
2. Mine Financial Security Program (MFSP)
3. Compliance and enforcement
4. Cumulative effects management
5. Stakeholder engagement
6. Water return policy
1. Disclosure of closure and reclamation liabilities

There has been insufficient transparency from the AER in the making of the methodology and data used to calculate total closure and reclamation liabilities for the oilsands mining sector. Albertans have the right to understand both the revenue generated from the extraction of these natural resources, as well as the future costs associated with their clean-up. Furthermore, to adequately regulate the energy industry, the AER must understand the economic, environmental and social impacts of resource development. Without understanding the cost implications of Suncor's TMP, the regulator cannot knowledgeably weigh the various trade offs.

Moreover, in early 2017, AER released an estimate of total closure and reclamation liabilities for oilsands and coal mines of $23.2 billion. However, there has been insufficient transparency in the making of the methodology and data behind this publicly available figure. OSEC continues to advocate that this information be made available for public access by Alberta taxpayers. It is unacceptable that stakeholders have not yet been given access to this information.

Recommended Conditions of Approval

10. Suncor must publicly disclose the undiscounted costs to suspend, abandon, remediate, reclaim and monitor Millennium and NSE mines.

11. Suncor must publicly disclose the undiscounted costs to treat and reclaim the Suncor base mine fluid tailings. This must include detailed cost information for their chosen technologies, as well as leading alternative technologies they have rejected.

*Suncor could be allocated a prescribed amount of time (i.e. one month) after the approval of the TMP to compile and release this information.*

2. Mine Financial Security Program (MFSP)

In July 2015 the Auditor General reported that “without […] improvements [to the Mine Financial Security Program], if a mine operator cannot fulfill its reclamation obligations and no other private operator assumes the liability, the province is at risk of having to pay substantial amounts of public money”.

The Mine Financial Security Program (MFSP) is “intended to operate as a long-term incentive to prevent approval holders from deferring reclamation to the end of a project.” Tailings treatment and reclamation represents a significant portion of the total closure liability for the oilsands sector. The heavily asset-based design of the MFSP is a high-risk approach to liability management in the 21st century, when there are many unknowns associated with energy futures at provincial, national, and international scales. OSEC therefore requests that the MFSP be

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comprehensively and formally reviewed to ensure Albertans are adequately protected. The need for this review is reflected in the TMF, where it states that Alberta Environment and Sustainable Resource Development is responsible for "revising the Mine Financial Security Program to include the liability associated with fluid tailings, and ensure alignment with the Framework."19

**Recommended Condition of Approval**

12. Suncor must clarify the impact of the MFSP on the security they will be posting until the end of mine life. Per the MFSP requirements, it is assumed that Suncor will be posting security in increments of 10% starting next year until they have posted 100% at six years before end of mine life.

**3. Compliance and enforcement**

The compliance and enforcement mechanisms of Directive 085 are currently insufficient. The consequences for non-compliance must be clear, predetermined, and sufficiently severe to deter non compliance. All proposed performance criteria as well as Suncor’s fluid tailings profile must therefore be subject to diligent surveillance of compliance over time.

Moreover, due to the shape of Suncor's fluid tailings profile and the late stage in the mine's lifecycle, the total volume trigger and total volume limit will only be of consequence during the years 2025 and 2026. As a result the profile deviation trigger will be the primary tool available to the AER to enforce Directive 085 as it applies to Suncor’s fluid tailings inventory. The profile deviation trigger should correspondingly be applied during the growth phase of Suncor's new tailings, as well as the decline phase of both new and legacy tailings. The profile deviation trigger must also be based on annual tailings growth, as using a rolling average would substantially diminish the ability for the AER to be responsive to exceedances.

Finally, Suncor must be held strictly accountable to the current fluid tailings profile, which indicates the equivalent volume of legacy fluid tailings will be treated by 2025.

**Recommended Conditions of Approval**

13. Suncor’s legacy tailings must be treated by 2025 as currently projected, and if Suncor misses treatment volumes by 20% or more in any year management actions must be triggered.

14. Suncor’s new tailings must be treated according to or before the profile submitted by Suncor. Suncor must ensure that any changes to RTR criteria will not change their current profile, and that any changes to overall timelines to reach RFR will only improve the current profile.

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15. All other criteria proposed by Suncor or included as conditions of approval must be tracked and monitored, with AER management actions incurred for any deviations.

4. Cumulative effects management

The TMF originally promised to stakeholders and Albertans a new policy direction that would approach tailings management at a regional level for the first time. However, there has been a lack of effective mechanisms for managing tailings accumulation, treatment, and reclamation at a regional landscape level. OSEC has consistently communicated that a cumulative cap to tailings volumes should be enacted through Directive 085, so as to ensure the objectives of the TMF are sufficiently met. OSEC seeks to understand how the tailings volumes presented in Suncor’s Applications will fit within AER’s understanding of permissible total cumulative fluid tailings volumes, and whether the approval of the Applications will conceivably impact the review processes of plans submitted by other operators.

On a related note, there is currently no formal regulatory process for reviewing and approving landscape planning at a regional scale. OSEC is concerned about the final landscapes that would be generated by the sum of all submitted TMPs, and whether the regional landscape will be able to sustain the number of open water bodies that have been proposed from both ecological sustainability and cultural standpoints. As the approval of Suncor’s Applications would ultimately lock in trajectories for reclamation and closure, OSEC is extremely concerned by this absence of regional landscape analysis. These final landscapes will impact future generations of local stakeholders for hundreds of years, and the fact that there has been no regulatory oversight to date needs to be immediately rectified.

**Recommended Condition of Approval**

16. Based on future changes to reclamation policies at both the regional and project level scale, Suncor must submit an updated tailings management plan. This updated plan must reflect reclamation and closure outcomes that are aligned with provincial policy direction on regional land-use planning.

5. Stakeholder engagement

Directive 085 states that operators must "provide performance data, information, and analysis to verify that it is following its fluid tailings management plan, profiles, and conditions of approval." Per the Directive, Suncor will be reporting annually on how deposits are meeting RTR criteria. However, Suncor should also be obliged to report on all performance criteria, metrics, indicators, and conditions of approval. It is extremely important that reporting on all the aforementioned aspects is included in annual reports to ensure proactive, transparent, and inclusive stakeholder engagement.

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During the AER's public comment period for Directive 085, Dr. Gillian Donald made a submission on behalf of Fort McMurray Métis. In this submission, a request was made for an annual multi-stakeholder forum for companies to report on their annual performance. This forum would include presentations from each company as well as presentations from the government and/or the AER on cumulative performance. OSEC is supportive of this suggestion, and seeks to be fully involved as a participant.

### Recommended Condition of Approval

17. In its annual reports, Suncor must include the following:

a. All data, research, and monitoring activities regarding how fluid tailings deposits are meeting RTR criteria \textit{and} incremental performance criteria.

b. All data, research, and monitoring activities regarding compliance with conditions of approval.

c. All data, research, and monitoring activities regarding triggers and decision points for mitigation actions and contingency plans.

18. An annual multi-stakeholder forum should be held for Suncor to report on annual performance. This forum should be open to all interested stakeholders and interested parties, including OSEC.

\textit{Suncor will be expected to provide funding for this annual multi-stakeholder forum, such that all stakeholders and interested parties, including OSEC, may be involved.}

OSEC suggested in its recommended conditions of approval #8 and #9 that the AER allocate a prescribed amount of time after approval of the TMP for Suncor to design supplementary metrics for triggering mitigation and contingency plans. This approach intends to improve transparency without an unreasonable and/or limiting degree of prescriptiveness. The success of this approach, however, is entirely dependent upon the inclusion of stakeholders in reviewing the metrics Suncor proposes. It follows that these supplementary metrics form the basis of Suncor’s Performance Management Plan with stakeholder involvement. While this Performance Management Plan will be most critical to DDA3, it should be designed to include all deposits. Once complete, OSEC strongly recommends that the AER invite all stakeholders to review and provide input on Suncor's Performance Management Plan. This will provide confidence to stakeholders that Suncor's fluid tailings are being managed transparently and proactively, by ensuring that the long-term metrics for measuring and monitoring performance are sufficient.

After Suncor's Performance Management Plan has been reviewed and approved by the AER and stakeholders, progress should be reported on annually to stakeholders during the annual multi-stakeholder forum (see OSEC's recommendation #18). This would be supplementary to the annual report on Directive 085 that Suncor is already beholden to producing. During the ERP, Mr. Holte stated that Suncor has "proposed [their] milestones and fulsome update in 2023 when [they] will have substantial information to have a good discussion on where things are at and where they are performing, both in our aquatic development program, the demonstration pit lake,
[and] performance of DDA3 itself." Further, Mr. Holte stated that Suncor will "provide updates on [their] terrestrial development and aquatic programs in a really meaningful way in [2023] and every five years [thereafter]." Suncor should correspondingly engage directly with the AER and stakeholders at critical milestone years for each deposit, to have a fulsome discussion about whether they are meeting the expectations of the Performance Management Plan. For example, stakeholders should be involved in evaluating progress of DDA3 in Suncor's proposed milestone years of 2023, 2029, 2033, and 2039. If expectations are not being met, collaborative decisions can be made regarding mitigation actions and contingency plans.

**Recommended Condition of Approval**

19. Suncor must design a Performance Management Plan within a prescribed period of time following an approval decision. When complete, this Performance Management Plan should be reviewed by stakeholders in an open and transparent process similar in design to the ERP, prior to any decisions being made by the AER.

a. Progress according to the Performance Management Plan must be reported on annually in the multi-stakeholder forum proposed in OSEC's recommended condition of approval #18.

b. Suncor must directly engage with the AER and stakeholders in milestone years of all deposits for a joint review of progress, and with collaborative decisions made on mitigation and contingency plans if deemed necessary.

*Suncor is expected to provide resources for all stakeholders and interested parties, including OSEC, to be involved in the review of Suncor's performance management plan as well as collaborative discussions in milestone years.*

In Section 5 of Dr. Donald's July 28, 2017 ERP submission, the issue of inadequate funding and capacity for participation of First Nations and Métis communities in the Government of Alberta's multi-stakeholder policy initiatives is discussed. This issue has now been raised many times to both industry and the Government of Alberta, and OSEC is broadly supportive of Dr. Donald's recommended approval conditions in Section 5.1 of her submission.

**6. Water return policy**

In the Applications, water release is a key component of Suncor’s tailings management strategy. This is highly problematic due to the fact that there is currently an absence of provincial policy direction on water return.

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Recommended Conditions of Approval

22. Based on future changes to water return policy at both the regional and project level scale, Suncor must submit an updated tailings management plan. This updated plan must reflect water management plans that are aligned with provincial policy direction on water return from oilsands mines.

Procedural Comments

OSEC very much valued the opportunity to meet with representatives from Suncor, the AER, Fort McKay Métis Community Association, Athabasca Chipewyan First Nation, and McMurray Métis Local 1935 for the ERP. OSEC is supportive of the ERP as an innovative regulatory forum to assist the AER in its decision making on technical matters, as well as to provide an opportunity for all Statement of Concern filers to engage with proponents through open dialogue regarding our areas of concern. The process provided a positive environment to discuss outstanding concerns in a collaborative and unprejudiced manner. However, the success of the forum is ultimately reliant on all parties coming to the table with a willingness to compromise and adapt approaches based on stakeholder concerns. In OSEC's view, Suncor unfortunately did not demonstrate a willingness to substantively address the concerns of the other parties and find collaborative solutions. For this reason, OSEC is of the opinion that pursuing a hearing or supplementary discussions will not produce different outcomes in this case.

Conclusion

OSEC maintains its position that Suncor’s Applications do not meet the intent of the TMF or the requirements of Directive 085. In the alternative, if an approval decision is made by the AER, conditions of approval must be comprehensive to ensure the commitments Suncor is agreeing to are clear and provide a strong basis for the AER and stakeholders to evaluate compliance.

OSEC is interested in continuing to work with the AER, Suncor, and other ERP participants to attempt to ensure that any forthcoming conditions of approval from the AER will adequately address these insufficiencies and gaps in Suncor's current TMP. Furthermore, OSEC reserves the right to continue reviewing all available information and to raise additional concerns in the future, as regulatory proceedings on this file continue to move forward.

Sincerely,

Jodi McNeill
Analyst, Responsible Fossil Fuels
Pembina Institute
On behalf of the Oil Sands Environmental Coalition