



## TSM Verification Summary Report

### Facility Information

Name of company	Canadian Natural Resources Limited (Canadian Natural)
Name of facility	Horizon
Address	Canadian Natural's Horizon Oil Sands Operations (Horizon) are located approximately 70 km north of Fort McMurray, Alberta.
Country of operation	Canada
Products/metals produced on site	Synthetic Crude Oil
Types of operations included in scope:	
Mining	<input checked="" type="checkbox"/> Key operations at Horizon include oil sands mining operations and a bitumen extraction plant. Bitumen (heavy crude oil) produced on-site is also upgraded and refined on-site to synthetic crude oil.
Milling	<input type="checkbox"/>
Smelting	<input type="checkbox"/>
Hydrometallurgical	<input type="checkbox"/>
Refining	Horizon produces bitumen that is upgraded and refined on-site to synthetic crude oil.
Other ( <i>please explain</i> )	Ore Preparation, Slurry Conditioning, Extraction, Froth Treatment, and upgrading and refining as noted above.
Types of infrastructure included in scope:	
Roads	<input checked="" type="checkbox"/>
Rails	<input type="checkbox"/>
Ports	<input type="checkbox"/>
Other ( <i>please explain</i> )	Airport



## Verifier and Verification Information

Verification firm	Envirochem Services Inc.
Confirmation that all verifiers involved in the verification are accredited TSM verifiers	Yes
Date(s) of verification activities (dd/mm/yyyy – dd/mm/yyyy)	6/11/2023 – 10/11/2023 (onsite verification activities, including virtual interviews with employees with employees at the Corporate Office in Calgary on November 10, 2023)
Verification period	31/12/2022 – 10/11/2023
Summary of the verification methodology	<p>The Verification of Canadian Natural's Horizon Facility's 2023 Self-Assessments were completed by Neil Allen of Envirochem Services Inc. and Dianne Rubinoff of Rubinoff Environmental Inc., in accordance with MAC's requirements for completing TSM Verifications.</p> <p>Neil Allen and Dianne Rubinoff are both Verification Service Providers (VSPs) certified by the Mining Association of Canada and meet the Terms of Reference for Verification Service Providers established by the Mining Association of Canada.</p>
Summary of the verification activities	<p>The in-person on-site Verification activities completed at the Horizon Facility took place between Monday November 6 and Wednesday November 8, 2023.</p> <p>The Verification also included an assessment of Canadian Natural's Corporate functions out of its Corporate office in Calgary on Friday November 10, 2023, however the Calgary office portion of the Verification was conducted 'virtually' using webex only and did not include an in-person site visit to the Calgary office.</p> <p>Activities for the external Verification included a 'virtual' Familiarization Tour of the Facility on October 23, 2023 via webex, as well as an in-person site visit week beginning November 6 2023, including a tour of tailings facilities, review of readily available documentation, in-person and webex- based interviews with key site and Corporate personnel responsible for operations at the Facility, and follow-up e-mails and telephone conversations with Facility and Corporate staff following the onsite Verification activities.</p> <p>The Verifiers also completed some communication with selected COIs.</p>
Was a site visit conducted?	Yes



## Summary of Findings

Criterion	Rating C, B, A, AA or AAA (unless otherwise indicated)	Examples of Evidence Consulted
<b>Biodiversity Conservation Management</b>		
1. Corporate biodiversity conservation commitment, accountability, and communications	A	Horizon met the requirements of Level A.
2. Biodiversity conservation planning and implementation	AAA	Horizon met the requirements of Level AAA.
3. Biodiversity conservation reporting	AA	Horizon met the requirements of Level AA.  Sustainability Reporting (e.g., Canadian Natural's 2022 ESG/Sustainability Reporting) is available online at cnrl.com (e.g., <a href="https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf">https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf</a> )
<b>Climate Change</b>		
1. Corporate climate change management	AAA	Horizon met the requirements for Level AAA.
2. Facility climate change management	A	Horizon met the requirements for Level A.
3. Facility performance targets and reporting	AAA	Horizon met the requirements needed for Level AAA under Indicator 3.  Sustainability Reporting (e.g., Canadian Natural's 2022 ESG/Sustainability Reporting) is available online at cnrl.com (e.g., <a href="https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf">https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf</a> )
<b>Crisis Management and Communications Planning - CORPORATE (YES or NO)</b>		
1. Crisis Management and Communications Preparedness	YES	Canadian Natural's Corporate office met the requirements for a "Yes" under Indicator 1.
2. Review	YES	Canadian Natural's Corporate office met the requirements for a "Yes" under Indicator 2.
3. Training	YES	Canadian Natural's Corporate office met the requirements for a "Yes" under Indicator 3.



<b>Crisis Management and Communications Planning - FACILITY (YES or NO)</b>		
1. Crisis Management and Communications Preparedness	YES	Horizon met the requirements for a “Yes” under Indicator 1.
2. Review	YES	Horizon met the requirements for a “Yes” under Indicator 2.
3. Training	YES	Horizon met the requirements for a “Yes” under Indicator 3.
<b>Indigenous and Community Relationships</b>		
1. Community of Interest (COI) Identification	AAA	Horizon met the requirements of Level AAA.
2. Effective COI Engagement and Dialogue	AAA	Horizon met the requirements of Level AAA.
3. Effective Indigenous Engagement and Dialogue	AAA	Horizon met the requirements of Level AAA.
4. Community Impact and Benefit Management	AAA	Horizon met the requirements of Level AAA.
5. COI Response Mechanism	AAA	Horizon met the requirements of Level AAA.
<b>Preventing of Child and Forced Labour (Indicate YES or NO)</b>		
1. Preventing Forced Labour	YES	Horizon has processes in place to prevent the use of Forced Labour.
2. Preventing Child Labour	YES	Horizon has processes in place to prevent the use of Forced Labour.
<b>Safety and Health</b>		
1. Commitments and Accountability	AAA	Horizon met the requirements of Level AAA.
2. Planning and Implementation	AAA	Horizon met the requirements of Level AAA.
3. Training, Behaviour and Culture	AAA	Horizon met the requirements of Level AAA.
4. Monitoring and Reporting	AAA	Horizon met the requirements of Level AAA. Sustainability Reporting (e.g., Canadian Natural’s 2022 ESG/Sustainability Reporting) is available online at <a href="https://www.cnrl.com">cnrl.com</a>



		(e.g., <a href="https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf">https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf</a> )
5. Performance	AAA	Horizon met the requirements of Level AAA.
<b>Tailings Management</b>		
1. Tailings management policy and commitment	AAA	<p>Horizon met the requirements for Level AAA based on the Verifiers’ discussions with, and advice received from, MAC concerning the internal and external audit requirements of level AA and AAA under the current June 2022 version of the Tailings Management Protocol<sup>1</sup> .</p> <p><b>Note:</b> FAQ #5, page 31 of “Appendix 2: Frequently Asked Questions” of the ‘new’, yet to be officially released, March 2023 version of the Protocol which, at the advice of MAC, has been applied to the 2023 Verification (this report) completed against the June 2022 version of the Tailings Management Protocol, notes the following:</p> <p><i>“...Internal and external audits both have an important role to play, and may focus on different aspects, or at different levels of detail. An internal audit should be done first, to achieve a Level A, before conducting an external audit with the goal of achieving a Level AA....Once a Level AA or AAA has been achieved, an internal audit is not required for subsequent TSM reporting cycles, although the ongoing conduct of internal audits is encouraged.”</i></p>
2. Tailings management system and emergency preparedness	AAA	Horizon met the requirements for Level AAA based on the Verifiers’ discussions with, and advice received from, MAC.
3. Assigned accountability and responsibility for tailings management	AAA	Horizon met the requirements for Level AAA based on the Verifiers’ discussions with, and advice received from, MAC.
4. Operation, maintenance, and surveillance	AAA	Horizon met the requirements for Level AAA based on the Verifiers’ discussions with, and advice received from, MAC.

<sup>1</sup> i.e., with respect to the present (2023) Verification against the June 2022 version of the Tailings Management Protocol, the Verifiers were advised to follow the clarifications noted under FAQ #5, page 31 of “Appendix 2: Frequently Asked Questions” of the ‘new’, yet to be officially released, March 2023 version of the Protocol as it currently applies to Canadian Natural (i.e., Canadian Natural’s Horizon Facility achieved “a Level....AAA...” for indicators 1 to 5 in its previous Verification so “...an internal audit is not required for [meeting Level AAA in the 2023]....TSM reporting cycle...”).



5. Annual tailings management review	AAA	Horizon met the requirements for Level AAA based on the Verifiers' discussions with, and advice received from, MAC.
<b>Water Stewardship</b>		
1. Water Governance	AAA	Horizon met the requirements for Level AAA.
2. Operational Water Management	AA	Horizon met the requirements for Level AA.
3. Watershed-scale Planning	AAA	Horizon met the requirements for Level AAA.
4. Water Reporting and Performance	AAA	<p>Horizon met the requirements for Level AAA.</p> <p><b>Note:</b> Although the Horizon Facility did <u>not</u> meet its "...water-related objectives or Targets... in the reporting year" as required by Criterion 1 of Indicator 4, Level AA, it has identified and started implementing corrective actions related to addressing its missed targets as per the "OR" requirement of Criterion 1 of Indicator 4, Level AA, as well as all of the remaining Level AAA requirements under Indicator 4<sup>2</sup> .</p> <p>Sustainability Reporting (e.g., Canadian Natural's 2022 ESG/Sustainability Reporting) is available online at cnrl.com (e.g., <a href="https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf">https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf</a> )</p>

<sup>2</sup> i.e., Criterion 1 of Level AA of Indicator 4, notes that even if a Facility was not able to / did not meet its "...water-related objectives or Targets... in the reporting year" it may still meet the requirements of Criterion 1 of Indicator 4, Level AA provided that: "corrective actions [for any missed objectives or targets have] been identified and [that those identified corrective actions related to addressing the reasons for the missed objectives or targets] are...being implemented..."



## Statement of Verification

<b>Statement of Verification</b>	
The external verification was conducted in accordance with the <i>Terms of Reference for Verifiers</i> and, accordingly, consisted primarily of interviews, data analysis, and examination (on a sample basis) of other evidence relevant to management's assertion of conformance to the requirements of the TSM performance indicators.	<input checked="" type="checkbox"/> The external verification was conducted in accordance with the <i>TSM Verifier Terms of Reference</i> .
The scores indicated in this report are verified as being accurate based on the evidence reviewed during the external verification of this facility.	<input checked="" type="checkbox"/> The scores in this report are considered accurate based on this verification.
Limitations	<p>Envirochem Services Inc. relied on the information provided to the Verifiers during the Verification of the Facility.</p> <p>The accuracy of this information (or otherwise) was not independently verified.</p>
Additional comments	<p>The Facility demonstrated a strong commitment to the MAC-TSM program, and demonstrated a high level of transparency and commitment toward achieving the highest level possible for each indicator.</p> <p>For example, the Facility showed excellence by achieving AAA ranking for all indicators for the Indigenous and Community Relationships protocol and the Safety and Health protocol and the Tailings Management protocol, and Level AAA for all but one indicator (Indicator 2) of the Water Stewardship protocol.</p> <p>Envirochem's Verification team also appreciated the very high level of Management and Operational personnel support provided during the verification process.</p> <p>The Facility was prepared for their verification, and their self-assessments were comprehensive and informative.</p>
Has an additional assurance statement been provided by the verifier?	No



Name of lead verifier	Neil Allen, M.Sc., P.G.Dip.Env.Mngt, P.Ag., EP(EMSLA), EP(CEA), COR and CHSMSA  Senior Auditor - EHS Assurance and Management Systems  Envirochem Services Inc.
Date of statement of verification	December 4, 2023
Signature of lead verifier	