

TSM Verification Summary Report

Facility Information

Name of company	Canadian Natural Upgrading Limited (Canadian Natural)
Name of facility	Albian
Address	Canadian Natural's Albian Facility is an oil sands mining and bitumen extraction plant located approximately 75 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	Key operations at Albian include oil sands mining operations and a bitumen extraction plant. Bitumen (heavy crude oil) produced at the site is then upgraded and refined off site at the Scotford upgrading and refining facilities located near Fort Saskatchewan (not included in the scope of the Verification)
Milling	
Smelting	
Hydrometallurgical	
Refining	
Other (please explain)	Ore Preparation, Slurry Conditioning, Extraction, Froth Treatment Note: No upgrading or refining takes place onsite.
Types of infrastructure included in scope:	
Roads	
Rails	
Ports	
Other (please explain)	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 at the Corporate Office in Calgary on November 10, 2023).
Verification period	31/12/2022 – 10/11/2023
Summary of the verification methodology	The Verification of Canadian Natural's Albian Facility's 2023 Self-Assessments was 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.
	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.
Summary of the verification activities	The in-person on-site Verification activities completed at the Albian Facility took place between Monday November 6 and Wednesday November 8, 2023.
	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.
	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 the week beginning November 6 2023, including a 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 on-site Verification activities.
	The Verifiers also completed some communication with selected COIs.
Was a site visit conducted?	Yes



Summary of Findings

	Rating C, B, A,		
Criterion	AA or AAA (unless otherwise indicated)	Examples of Evidence Consulted	
	Biodiversi	ty Conservation Management	
Corporate biodiversity conservation commitment, accountability, and communications	A	Albian met the requirements for Level A.	
2. Biodiversity conservation planning and implementation	AAA	Albian met the requirements for Level AAA.	
3. Biodiversity conservation reporting	AA	Albian met the requirements for Level AA. Sustainability Reporting (e.g., Canadian Natural's 2022 ESG/Sustainability Reporting) is available online at cnrl.com (e.g., https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf)	
	Climate Change		
Corporate climate change management	AAA	Albian met the requirements for Level AAA .	
Facility climate change management	A	Albian met the requirements for Level A.	
3. Facility performance targets and reporting	AAA	Albian 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., https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf)	



Crisis Managemer	nt and Com	munications Planning - CORPORATE (YES or NO)
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.
Crisis Managem	ent and Co	mmunications Planning - FACILITY (YES or NO)
Crisis Management and Communications Preparedness	YES	Albian met the requirements for a "Yes" under Indicator 1.
2. Review	YES	Albian met the requirements for a "Yes" under Indicator 2.
3. Training	YES	Albian met the requirements for a "Yes" under Indicator 3.
	Indigenous	s and Community Relationships
1. Community of Interest (COI) Identification	AAA	Albian met the requirements for Level AAA.
2. Effective COI Engagement and Dialogue	AAA	Albian met the requirements for Level AAA.
3. Effective Indigenous Engagement and Dialogue	AAA	Albian met the requirements for Level AAA.
4. Community Impact and Benefit Management	AAA	Albian met the requirements for Level AAA.
5. COI Response Mechanism	AAA	Albian met the requirements for Level AAA.
Preventing of Child and Forced Labour (Indicate YES or NO)		
Preventing Forced Labour	YES	There are processes in place to ensure forced labour is not used.
2. Preventing Child Labour	YES	There are processes in place to ensure child labour is not used.
Safety and Health		
Commitments and Accountability	AAA	Albian met the requirements for Level AAA.



2. Planning and Implementation	AAA	Albian met the requirements for Level AAA.
3. Training, Behaviour and Culture	AAA	Albian met the requirements for Level AAA.
4. Monitoring and Reporting	AAA	Albian met the requirements for Level AAA. Sustainability Reporting (e.g., Canadian Natural's 2022 ESG/Sustainability Reporting) is available online at cnrl.com (e.g., https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf)
5. Performance	AAA	Albian met the requirements for Level AAA.
	1	ailings Management
1. Tailings management policy and commitment	AAA	Albian 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 Protocol¹ - Note: 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: "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."
2. Tailings management system and emergency preparedness	AAA	Albian met the requirements for Level AAA based on the Verifiers' discussions with, and advice received from, MAC.

¹ 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 Albian 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...").



3. Assigned accountability and responsibility for tailings management	AAA	Albian met the requirements for Level AAA based on the Verifiers' discussions with, and advice received from, MAC.
4. Operation, maintenance, and surveillance	AAA	Albian met the requirements for Level AAA based on the Verifiers' discussions with, and advice received from, MAC.
5. Annual tailings management review	AAA	Albian met the requirements for Level AAA based on the Verifiers' discussions with, and advice received from, MAC.
Water Stewardship		
1. Water Governance	AAA	Albian met the requirements for Level AAA.
Operational Water Management	AA	Albian met the requirements for Level AA.
3. Watershed-scale Planning	AAA	Albian met the requirements for Level AAA.
4. Water Reporting	AAA	Albian met the requirements for Level AAA.
and Performance		Sustainability Reporting (e.g., Canadian Natural's 2022 ESG/Sustainability Reporting) is available online at cnrl.com (e.g., https://www.cnrl.com/content/uploads/2023/08/Content-Index_GRI-SASB-SDG-2022_Final.pdf)



Statement of Verification

Statement of Verification		
The external verification was conducted in accordance with the <i>Terms of Reference</i> for <i>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.	☐ The external verification was conducted in accordance with the TSM Verifier Terms of Reference.	
The scores indicated in this report are verified as being accurate based on the evidence reviewed during the external verification of this facility.		
Limitations	Envirochem Services Inc. relied on the information provided to the Verifiers during the Verification of the Facility. The accuracy of this information (or otherwise) was not independently verified.	
Additional comments	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.	
	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.	
	Envirochem's Verification team also appreciated the very high level of Management and Operational personnel support provided during the verification process.	
	The Facility was prepared for their verification, and their self-assessments were comprehensive and informative.	



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	Dalle