

TSM Performance by Company

Avalon Advanced Materials



Avalon Advanced Materials is a Canadian mineral development company with a primary focus on niche market metals and minerals with growing demand in new technologies. The company has three advanced-stage projects across Canada, all 100% owned, which are focused on lithium, tin, indium, zirconium and the rare earth elements. Avalon is currently focusing on its Separation Rapids Lithium Project near Kenora, Ontario, and its East Kemptville Tin-Indium Project in Yarmouth, Nova Scotia.

Avalon believes that a strong sustainability framework is fundamental to its long-term success. The company has implemented the *TSM Guiding Principles* in order to meet or exceed industry best practices, and to continuously improve on its social, environmental, and health and safety performance. As Avalon is a development stage company, its annual TSM self-assessment is voluntary.

Avalon has demonstrated leadership among junior companies in the mineral development sector by producing an annual sustainability report compliant with the Global Reporting Initiative's (GRI) guidelines. Avalon reports on its activities to hold itself accountable, drive company performance and demonstrate the benefits of sustainable practices to its stakeholders.

In December 2016, Avalon published its fifth annual sustainability report and its third in accordance with GRI G4 guidelines. For two consecutive years (2015 and 2016), Avalon placed among Corporate Knights' Future 40 Responsible Corporate Leaders in Canada.

Highlights of Avalon's Voluntary 2016 TSM Self-Assessment

During the 2016 reporting period (September 1, 2015, to August 31, 2016), Avalon continued to advance its projects openly and transparently, with a commitment to the economic and social well-being of its projects' local communities.

SAFETY AND HEALTH

Avalon completed risk assessments and prepared safety management plans for special projects at the company's East Kemptville Tin-Indium Project site in Yarmouth County, Nova Scotia.



During the reporting period, Avalon largely completed due diligence on the East Kemptville project and an external study of the tailing management facility (TMF). The company also prepared a conceptual TMF for the Separation Rapids Lithium Project in northwestern Ontario.

ENERGY USE AND GHG EMISSIONS MANAGEMENT

Energy measurement continued during drilling at the East Kemptville project. Avalon also investigated clean energy options at the Separation Rapids project.

ABORIGINAL AND COMMUNITY OUTREACH

Outreach at Avalon's Separation Rapids project took priority during the reporting period, where discussions advanced with two Indigenous governments.

CRISIS MANAGEMENT AND COMMUNICATIONS PLANNING

Avalon updated its emergency response plan at the East Kemptville project and reviewed its Crisis Management Plan. Personnel at East Kemptville were updated and trained.

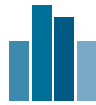
BIODIVERSITY CONSERVATION MANAGEMENT

Avalon completed a gap analysis for an Environmental Social Impact Assessment (ESIA), including biodiversity assessment, at the Separation Rapids project. The contract for the ESIA and the biodiversity work was initiated, but put on hold pending project financing.

🔗 For more information, please visit www.avalonadvancedmaterials.com



Avalon's senior geologist consultant, Chris Pedersen, speaks in front of a rack of core from the company's Separation Rapids Lithium Project near Kenora, Ontario.



2016 TSM Results

Avalon Advanced Materials



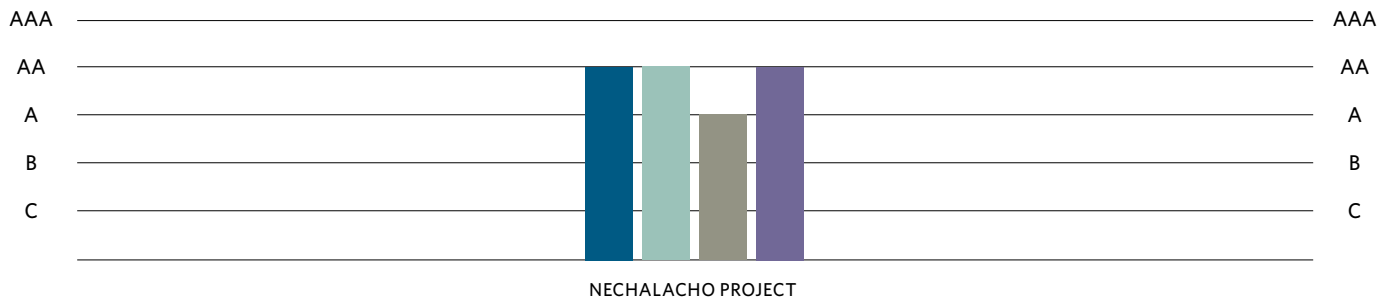
Crisis Management and Communications Planning Assessment

FACILITY	PREPAREDNESS	REVIEW	TRAINING
NECHALACHO PROJECT	✓	✓	✓



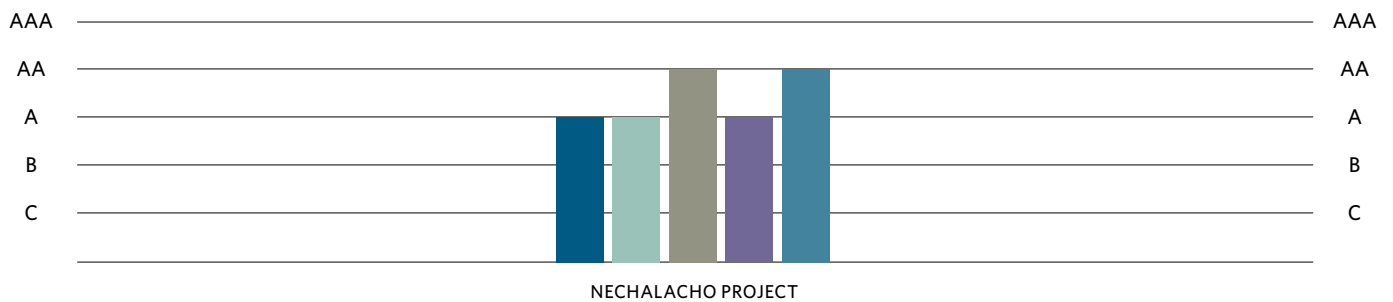
Aboriginal and Community Outreach Assessment

- COMMUNITY OF INTEREST (COI) IDENTIFICATION
- COI RESPONSE MECHANISM
- EFFECTIVE COI ENGAGEMENT AND DIALOGUE
- REPORTING



Safety and Health Assessment

- COMMITMENTS AND ACCOUNTABILITY
- PLANNING AND IMPLEMENTATION
- TRAINING, BEHAVIOUR AND CULTURE
- MONITORING AND REPORTING
- PERFORMANCE

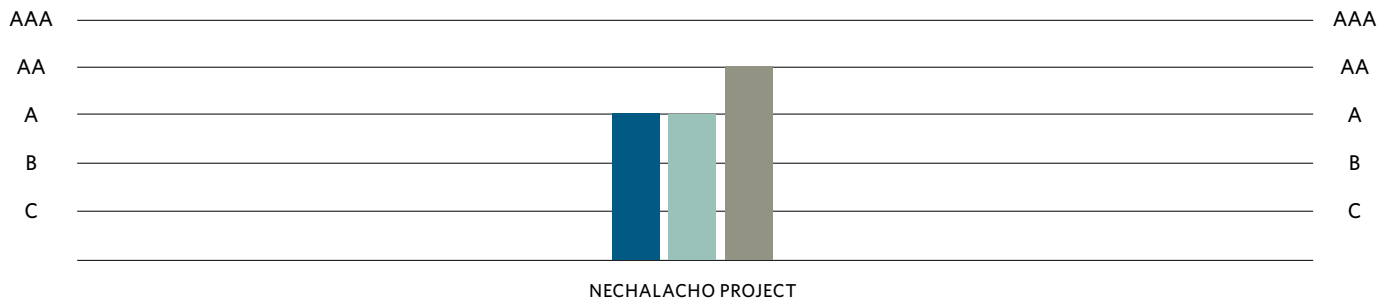


Voluntary self-assessment.



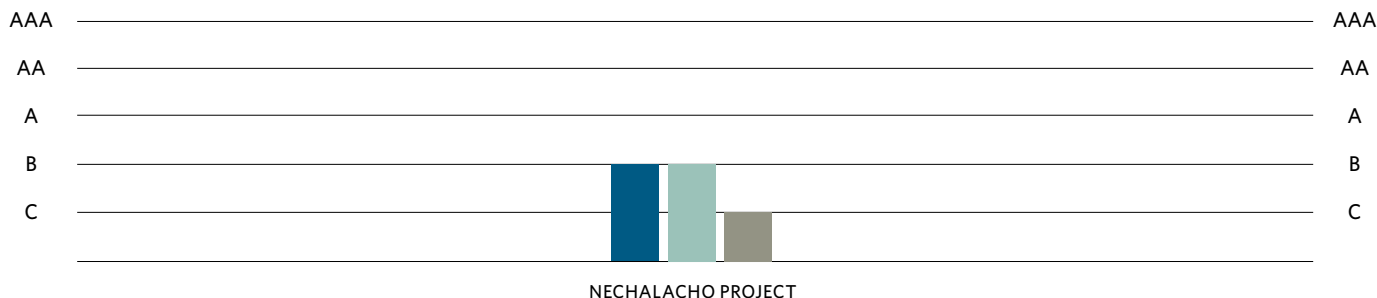
Biodiversity Conservation Management Assessment

- CORPORATE BIODIVERSITY CONSERVATION POLICY, ACCOUNTABILITY AND COMMUNICATIONS
- FACILITY-LEVEL BIODIVERSITY CONSERVATION PLANNING AND IMPLEMENTATION
- BIODIVERSITY CONSERVATION REPORTING



Energy Use and GHG Emissions Management Assessment

- ENERGY USE AND GHG EMISSIONS MANAGEMENT SYSTEMS
- ENERGY USE AND GHG EMISSIONS REPORTING SYSTEMS
- ENERGY AND GHG EMISSIONS PERFORMANCE TARGETS



Voluntary self-assessment.

