



Richard Dwyer
Manager of Licencing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0B 1J0

August 23, 2024

Dear Mr. Dwyer,

Re: Application for a Type B Water Licence for Lupin Mine Winter Access

Lupin Mine Incorporated, a wholly owned subsidiary of Mandalay Resources, wishes to obtain water to construct and maintain a portion of the Tibbitt to Contwoyto Winter Road (TCWR), which will be used to mobilize and demobilize equipment and supplies for ongoing reclamation of the Lupin Mine (Lupin Mine) in the Kitikmeot Region of Nunavut (the Program).

In 2019 Nahanni Construction Ltd. (Nahanni) was contracted by Lupin Mines to obtain the necessary permits to construct a winter road to support reclamation work at the Lupin Mine. Nahanni began construction of the winter road in February 2020 with assistance from Maskwa Engineering.

To support winter road construction activities and the supply of equipment to the Lupin Mine in Nunavut, Nahanni positioned a mobile camp on the esker adjacent to Portage 55 of the TCWR. Mobilization and operations commenced on February 7, 2020 and after the mobilization of 135 loads, and operations concluded on March 22, 2020 with the demobilization of camp modules and equipment to either the Lupin Mine in Nunavut or south to Yellowknife.

No incidents were reported during construction, operation or decommissioning of the road. An inspection by the Northwest Territories Government on August 18, 2020 noted concerns that required Nahanni to clean-up all hydrocarbon impacted soils for proper off-site disposal, pick up all garbage and debris for disposal, and backfill the domestic wastewater sumps.

Lupin Mines wishes to obtain its own permits this year to reduce risk to the Program and therefore is submitting an application on its own behalf.

A Request for Proposal (RFP) is currently being distributed to a list of experienced contractors to complete the work this coming winter. Any contractor or sub-contractor selected will be required to operate in compliance with any relevant permits, licences and approvals. Contractor information will be provided to the Nunavut Water Board once available.

Please find enclosed the following documents in support of Lupin Mines's application to use water to construct the Nunavut portion winter road within the TCWR corridor extending from the Ekati Mine turnoff on Lac de Gras in the Northwest Territories to Lupin:



- Application form
- Figure 1 (map)
- Nunavut Planning Commission screening decision
- Nunavut Impact Review Board correspondence
- Effects assessment
- Security estimate
- Statement of financial responsibility
- List of officers
- Certificate of Incorporation
- Copy of cheques issued for Application Fees and Water Use Fee Deposit
- Spill Contingency Plan
- Abandonment and Restoration Plan
- Plain language summaries

The Program includes a land use application with the Mackenzie Valley Land Water Board (pending) in Northwest Territories, has been referred by the Nunavut Planning Commission (#151434), has been screened by the Nunavut Impact Review Board (19RN005), and both a Crown land use permit and a Kitikmeot Inuit Association land use licence are pending submission.

As this TCWR is both a historic and existing land use, Lupin Mine/Mandalay Resources respectfully requests that the Nunavut Water Board consider a reduced public comment period. Further, any efficiencies that may be realized throughout the review process are appreciated, as Lupin Mine/Mandalay Resources wished to commence road construction as early in the season as possible to maximize the duration of winter road use and the related on-time completion of reclamation works at Lupin.

Should you require further information to support your review of this application, please contact myself at kellie@falkirk.ca, an authorized agent to represent Lupin Mine/Mandalay Resources for the purposes of this application.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kellie Leedham', with a small horizontal line extending to the right.

Kellie Leedham

Encl.

cc.

Karén Kharatyan, Director of Technical Services, Nunavut Water Board

P.O. BOX 119
GJOA HAVEN, NUNAVUT
XOB 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

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NUNAVUT IMALIRIYIN KATIMAYIT
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT



General Water Licence Application
(Application for a new Water Licence)

Lupin Mine Winter Access Road
Lupin Mines Inc. c/o Mandalay Resource

Application Submission Date: August 22, 2024

DOCUMENT MANAGEMENT

Original Document Date: April 2010

DOCUMENT AMENDMENTS

	Description	Date
(1)	Updated for public distribution as separate document from NWB Guide 4	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)	Update NWB logo	April 2013
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		



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NUNAVUT WATER BOARD

NUNAVUT IMALIRIYIN KATIMAYIT

OFFICE DES EAUX DU NUNAVUT

GENERAL WATER LICENCE APPLICATION (APPLICATION FOR NEW WATER LICENCE)

The applicant is referred to the NWB's Guide 4: Guide to Completing and Submitting a Water Licence Application for a New Licence for more information about this application form.

LICENCE NO: (for NWB use only)	
1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address) Lupin Mines Incorporated c/o Mandalay Resources Corp. Suite 3720 – 155 University Avenue Toronto, ON M5H 3B7 Phone: (403) 808-1534 E-mail: kellie@falkirk.ca	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address) Phone: _____ Fax: _____ e-mail: _____ (Attach authorization letter.)
3. NAME OF PROJECT (including the name of the project location) Lupin Mine Winter Access Road	
4. LOCATION OF UNDERTAKING Project Extents Coordinates for start and end points of the road are provided. NW: Latitude: (-111.234159398 N) Longitude: (65.779171217 W) NE: Latitude: (° ' " N) Longitude: (° ' " W) SE: Latitude: (-109.719437488 N) Longitude: (65.030828286 W) SW: Latitude: (° ' " N) Longitude: (° ' " W) Camp Location(s) The camp location will be adjacent to Portage 55 of the TCWR in NWT. Latitude: (° ' " N) Longitude: (° ' " W)	
5. MAP - Attach a topographical map, indicating the main components of the undertaking. Refer to Appendix I.	

NTS Map Sheet No.: _____ Map Name: _____ Map Scale: _____

76E Contwoyto Lake 1:700,000

76F Nose Lake 1:700,000

Note that this is a transboundary project and will be licenced in the Northwest Territories (see Section 6 of this Application). One of the water sources, Pellatt Lake is a transboundary lake.

- 6. NATURE OF INTEREST IN THE LAND** - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)

Date (expected date) of issuance: _____ Date of expiry: _____

☐ Mineral Lease from Indian and Northern Affairs Canada (INAC)

Date (expected date) of issuance: _____ Date of expiry: _____

Surface

☒ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)

Date (expected date) of issuance: _____ Date of expiry: Application pending.

☒ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)

Date (expected date) of issuance: _____ Date of expiry: Application pending

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)

Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)

Date (expected date) of issuance: _____ Date of expiry: _____

☐ Commissioner's Land Use Authorization

Date (expected date) of issuance: _____ Date of expiry: _____

☒ Other: **Mackenzie Valley Land and Water Board**

Date (expected date) of issuance: _____ Date of expiry: Application pending

Name of entity(s) holding authorizations:

Lupin Mines Incorporated

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Indicate the land use planning area in which the project is located.

☐ North Baffin

☐ Keewatin

☐ South Baffin

☐ Sanikiluaq

☐ Akunnig

☒ West Kitikmeot

Is a land use plan conformity determination required?

☐ Yes

☒ No -Decision made by NPC on Oct.15

that previous conformity determination remains in place.

If Yes, indicate date issued and attach copy

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

See attached indications from the NPC from June 11, 2024 File # 15043 (Appendix K).

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Is an Article 12 Part 4 screening determination required?

☐ Yes

☒ No

If Yes, indicate date issued and attach copy _____

If No, provide written confirmation from NIRB confirming that a screening determination is not required. **Please refer to Appendix L**

9. DESCRIPTION OF UNDERTAKING – List and attach plans and drawings or project proposal.

The Applicant plans to construct and operate a portion of the existing Tibbitt to Contwoyto Winter Road from the Ekati turnoff in NWT to the Lupin Mine in NU, to support resupply for ongoing reclamation at the Lupin Mine.

To do so, the Applicant may withdraw up to a maximum of 299 m³/day of water for construction and maintenance of a winter road, and seasonal operation, including on-ice portions and portages. Portages may require snow fill and/or ice bridges.

Where necessary, water may be withdrawn from adjacent lakes and either applied directly to the work area, being the lake ice road surface and/or portages, or stored in a water truck (approx. 15,000 L) and then administered where needed on the ice road surface and/or at portages by crews of 2-3 people. Depending on site conditions, portages may be constructed by compacting snow with a snow cat or equivalent and applying water to create a durable surface.

Consultations with the Tibbitt to Contwoyto Winter Road Joint Venture have taken place to ensure access is permitted and there is no conflict in scheduling of work. The current work plan and route does not deviate from formerly permitted winter roads along this route by prior proponents.

10. OPTIONS – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.

No alternative locations have been considered. The project is located within an established transportation corridor.

Alternative methods include allowing the ice thickness to naturally increase without flooding, and to use only snowfills at portages. While these may be feasible, onsite conditions vary from year to year, and so the Applicant wishes to have the flexibility to use water to support ice road and portage construction as required.

11. CLASSIFICATION OF PRIMARY UNDERTAKING - Indicate the primary classification of undertaking by checking one of the following boxes.

☐ Industrial

☐ Agricultural

- | | |
|---|---|
| <input type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps) | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Conservation | <input checked="" type="checkbox"/> Miscellaneous (describe below): |
| <input type="checkbox"/> Municipal (includes camps/lodges) | |
| <input type="checkbox"/> Power | |

Winter road construction

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings.

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application.

- ☐ Hydrostatic Testing
- ☐ Tannery
- ☐ Tourist / Remote Camp
- ☐ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
- ☐ Onshore Oil and Gas Exploration Drilling
- ☐ Mineral Exploration / Remote Camp
- ☐ Advanced Exploration
- ☐ Mine Development
- ☐ Municipal
- ☒ General Water Works
- ☐ Power

12. WATER USE - Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

- | | |
|---|---|
| <input type="checkbox"/> To obtain water for camp/ municipal purposes | <input type="checkbox"/> To divert a watercourse |
| <input type="checkbox"/> To obtain water for industrial purposes | <input type="checkbox"/> To modify the bed or bank of a watercourse |
| <input type="checkbox"/> To cross a watercourse | <input type="checkbox"/> Flood control |
| <input type="checkbox"/> To alter the flow of, or store water | |
| <input checked="" type="checkbox"/> Other: Winter road construction. | |

13. QUANTITY AND QUALITY OF WATER INVOLVED - For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.

Name of water source(s) (show location(s) on map):

Contwoyto Lake, Pellatt Lake.

Describe the quality of the water source(s) and the available capacity:

Source water quality is expected to be characteristic of typical Arctic lakes. Source lakes are very large; withdrawal volumes will be <10% of the available water in each lake. Water used for ice road construction on lakes will remain on the lakes as ice cover.

Provide the overall estimated quantity of water to be used: **Up to 299 m³/day**

Provide the estimated quantity(s) of water to be used from each source:

Up to 299 m³/day, withdrawn intermittently as needed throughout construction.

Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)

Up to 299 m³/day for winter road construction.

	<p>Describe the method of extraction(s): pump with screened intake</p> <p>Estimated quantity(s) of water returned to source(s): up to 299 m3/day, when flooding lake surface.</p> <p>Describe the quality of water(s) returned to source(s): Pristine. Water used will be either applied directly back to the snow or ice surface, or, if stored temporarily before use, will be stored in a dedicated water truck.</p>																																	
14.	<p>WASTE – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Sewage x <input type="checkbox"/> Solid Waste x <input type="checkbox"/> Hazardous <input type="checkbox"/> Bulky Items/Scrap Metal <input type="checkbox"/> Animal Waste </div> <div style="width: 45%;"> <input type="checkbox"/> Waste oil <input type="checkbox"/> Greywater x <input type="checkbox"/> Sludges <input type="checkbox"/> Contaminated soil and/or water x </div> </div> <p>X Other (describe): In the event of a spill, spent spill response materials may be generated. Any other solid waste generated on site is expected to be minimal and will be disposed of offsite at authorized facilities such as the Lupin Mine (see Appendix S).</p>																																	
15.	<p>QUANTITY AND QUALITY OF WASTE INVOLVED – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 15%;">Type of Waste</th> <th style="width: 20%;">Composition</th> <th style="width: 15%;">Quantity Generated</th> <th style="width: 15%;">Treatment Method</th> <th style="width: 35%;">Disposal Method</th> </tr> </thead> <tbody> <tr> <td>Spent spill response materials</td> <td>Various absorbent materials</td> <td>Various</td> <td>n/a</td> <td>Backhaul for disposa at KBL, Yellowknife</td> </tr> <tr> <td>Treated sewage</td> <td></td> <td></td> <td></td> <td>Sump</td> </tr> <tr> <td>Greywater</td> <td></td> <td></td> <td></td> <td>Sump</td> </tr> <tr> <td>Food waste</td> <td></td> <td></td> <td></td> <td>Incinerate or haul</td> </tr> <tr> <td colspan="5">Please Appenix. R - Waste management plan</td> </tr> </tbody> </table>				Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method	Spent spill response materials	Various absorbent materials	Various	n/a	Backhaul for disposa at KBL, Yellowknife	Treated sewage				Sump	Greywater				Sump	Food waste				Incinerate or haul	Please Appenix. R - Waste management plan				
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Please Appenix. R - Waste management plan																																		
16.	<p>OTHER AUTHORIZATIONS – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking. For each provide the following:</p> <p>Authorization: Approval Without a Licence (in process)</p> <p>Administering Agency: Nunavut Water Board</p> <p>Project Activity: Early season withdrawal to support winter road construction in advance of receipt of Type B water licence.</p> <p>Date (expected date) of issuance: December 1, 2024 Date of expiry: November 30, 2029</p>																																	
17.	<p>PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES - Describe direct, indirect, and cumulative impacts related to water and waste.</p>																																	

[Refer to Appendix M.](#)

18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

[It is understood that the following water licenses have been issued for water use from Contwoyto Lake:](#)

- [2AM-LUP1520, water use for mine care and maintenance, Lupin Mines Inc. 76 Richmond Street East, Suite 330 Toronto, ON M5C 1P1](#)
- [2AM-JER1119, water use for winter road construction c/o CIRNAC, P.O.Box 2200 Iqaluit, NU X0A 0H0](#)

[It is understood that there are outpost camps located on Contwoyto Lake.](#)

[Given the volume of Contwoyto Lake and the nature and duration of the proposed water use, none of these users are expected to be adversely affected.](#)

19. INUIT WATER RIGHTS

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

20. CONSULTATION – Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

[Refer to Appendix N.](#)

21. SECURITY INFORMATION

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut*, Indian and Northern Affairs Canada, 2002.

[Refer to Appendix C.](#)

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility.

If the applicant is a business entity, provide a list of the officers of the company.

If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

Refer to Appendices A, D & E.

23. STUDIES UNDERTAKEN TO DATE - List and attach copies of studies, reports, research, etc.

n/a

24. PROPOSED TIME SCHEDULE – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction

Proposed Start Date: **Dec 2024** Proposed Completion Date: **March 2025**

Operation

Proposed Start Date: **Jan 2025** Proposed Completion Date: **May 2025**

Closure

Proposed Start Date: **Apr 2025** Proposed Completion Date: **May 2025**

Post - Closure

Proposed Start Date: _____ Proposed Completion Date: _____
(month/year) (month/year)

For each applicable phase of development indicate which season(s) activities occur.

Construction

☒ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Operation

☒ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Closure

☒ Winter ☒ Spring ☐ Summer ☐ Fall ☐ All season

Post - Closure

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

25. PROPOSED TERM OF LICENCE

Number of years (maximum of 25 years): **3 years**

Requested Date of Issuance: **December 2024** Requested Expiry Date: **December 2027**

(The requested date of issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use

planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

- 26. ANNUAL REPORTING** – If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

The Applicant will use the NWB's *Standardized Form for Annual Reporting* and any other conditions as per the approved licence.

- 27. CHECKLIST** – The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

☒ Yes ☐ No If no, date expected _____

Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.

☒ Yes ☐ No If no, date expected _____

Completed General Water Licence Application form.

☒ Yes ☐ No If no, date expected _____

Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)

☒ Yes ☐ No If no, date expected _____

English Summary of Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

☒ Yes ☐ No If no, date expected _____

Application Fee of \$30.00 CDN (Payee Receiver General for Canada).

☐ Yes ☒ No If no, date expected: [DATE]. Cheque has been sent by mail, and pdf copy of the cheque is attached (Appendix F).

Water Use Fee Deposit of \$30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

☐ Yes ☒ No If no, date expected: [DATE]. Cheque has been sent by mail, and pdf copy of the cheque is attached (Appendix F).

- 28. SIGNATURE**

Kellie Leedham	Regulatory Compliance Lead		August 22, 2024
Name (Print)	Title (Print)	Signature	Date

APPENDIX A. CERTIFICATE OF INCORPORATION AND LEGAL STRUCTURE

Ontario Corporation Number
Numéro de la société en Ontario



**Ministry of
Consumer and
Business Services**

**Ministère des Services
aux consommateurs
et aux entreprises**

1670727

CORRECTED CERTIFICATE

This is a Corrected certificate endorsed pursuant to Section 275 of the Business Corporations Act, and effective on

CERTIFICATE RECTIFIÉ

Le présent certificat rectifié est approuvé
conformément à l'article 275 de la Loi sur les
sociétés par actions; il entre en vigueur le

APRIL 28 AVRIL, 2006

Director / Directrice
Business Corporations Act / Loi sur les sociétés par actions

ARTICLES OF INCORPORATION STATUTS CONSTITUTIFS

1. The name of the corporation is: (Set out in BLOCK CAPITAL LETTERS)
Dénomination sociale de la société: (Écrire en LETTRES MAJUSCULES SEULEMENT)

[illegible]

2. The address of the registered office is:
Adresse du siège social:

1136 Alloy Drive

(Street & Number or R.R. Number & if Multi-Office Building give Room No.)
(Rue et numéro ou numéro de la R.R. et, s'il s'agit d'un édifice à bureaux, numéro du bureau)

Thunder Bay

(Name of Municipality or Post Office)
(Nom de la municipalité ou du bureau de poste)

ONTARIO

P	7	B	6	M	9
---	---	---	---	---	---

(Postal Code)
(Code postal)

- | | | |
|--|---|--|
| 3. Number (or minimum and maximum number) of directors is/are:
<i>Nombre (ou nombres minimal et maximal) d'administrateurs:</i> | minimum/minimal
1 | maximum/maximal
10 |
| 4. The first director(s) is/are:
<i>Premier(s) administrateur(s):</i> | Address for service, giving Street & No. or R.R. No.,
Municipality, Province, Country and Postal Code
<i>Domicile élu, y compris la rue et le numéro, le numéro de la
R.R. ou le nom de la municipalité, la province, le pays et le
code postal</i> | Resident Canadian?
Yes or No
<i>Résident canadien?
Oui/Non</i> |
| First name, middle names and surname
<i>Prénom, autres Prénoms et nom de famille</i> | | |

Roderick W. Johansen

**1136 Alloy Drive
Thunder Bay, ON P7B 6M9**

Yes

5. Restrictions, if any, on business the corporation may carry on or on powers the corporation may exercise.
Limites, s'il y a lieu, imposées aux activités commerciales ou aux pouvoirs de la société.

There are no such restrictions on the business the Corporation may carry on or on the powers the Corporation may exercise.

6. The classes and any maximum number of shares that the corporation is authorized to issue:
Catégories et nombre maximal, s'il y a lieu, d'actions que la société est autorisée à émettre:

1. An unlimited number of voting Class A Common shares;
2. An unlimited number of voting Class B Common shares;
3. An unlimited number of voting Class C Common shares;
4. An unlimited number of voting Class D Common shares;
5. An unlimited number of voting Class E Common shares;
6. An unlimited number of voting Class A Preference shares;
7. An unlimited number of non-voting Class B Preference shares;

7. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:
Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions qui peut être émise en série:

In these Articles:

1. The term "Redemption Amount", with respect to any class of preference shares, shall be an amount determined by a resolution of the Board of Directors, provided that the said Redemption Amount shall be fixed by the Board of Directors prior to the issuance of any class of preference share.

The class "A" common shares shall have attached thereto the following preferences, rights, conditions, restrictions, limitations and prohibitions:

1. The holders of the class "A" common shares shall be entitled to vote at all meetings of the shareholders except meetings at which only holders of a specified class of shares are entitled to vote.
2. Dividends may be declared on the class "A" common shares in the discretion of the directors without at the same time declaring any dividends on any other class of shares.
3. In the event of the liquidation, dissolution, or winding up of the corporation, whether voluntary or involuntary, or other distribution of its assets among its shareholders by way of repayment of capital, the net equity of the corporation shall be distributed among the holders of the class "A" common shares, the class "B" common shares, the class "C" common shares, the class "D" common shares and the Class "E" common shares without priority and on a share for share basis.

The class "B" common shares shall have attached thereto the following preferences, rights, conditions, restrictions, limitations and prohibitions:

1. The holders of the class "B" common shares shall be entitled to vote at all meetings of the shareholders except meetings at which only holders of a specified class of shares are entitled to vote.
2. Dividends may be declared on the class "B" common shares in the discretion of the directors without at the same time declaring any dividends on any other class of shares.
3. In the event of the liquidation, dissolution, or winding up of the corporation, whether voluntary or involuntary, or other distribution of its assets among its shareholders by way of repayment of capital, the net equity of the corporation shall be distributed among the holders of the class "A" common shares, the class "B" common shares, the class "C" common shares, the class "D" common shares and the Class "E" common shares without priority and on a share for share basis.

The class "C" common shares shall have attached thereto the following preferences, rights, conditions, restrictions, limitations and prohibitions:

1. The holders of the class "C" common shares shall be entitled to vote at all meetings of the shareholders except meetings at which only holders of a specified class of shares are entitled to vote.
2. Dividends may be declared on the class "C" common shares in the discretion of the

7. continued

directors without at the same time declaring any dividends on any other class of shares.

3. In the event of the liquidation, dissolution, or winding up of the corporation, whether voluntary or involuntary, or other distribution of its assets among its shareholders by way of repayment of capital, the net equity of the corporation shall be distributed among the holders of the class "A" common shares, the class "B" common shares, the class "C" common shares, the class "D" common shares and the class "E" common shares, without priority and on a share for share basis.

The class "D" common shares shall have attached thereto the following preferences, rights, conditions, restrictions, limitations and prohibitions:

1. The holders of the class "D" common shares shall be entitled to vote at all meetings of the shareholders except meetings at which only holders of a specified class of shares are entitled to vote.

2. Dividends may be declared on the class "D" common shares in the discretion of the directors without at the same time declaring any dividends on any other class of shares.

3. In the event of the liquidation, dissolution, or winding up of the corporation, whether voluntary or involuntary, or other distribution of its assets among its shareholders by way of repayment of capital, the net equity of the corporation shall be distributed among the holders of the class "A" common shares, the class "B" common shares, the class "C" common shares, the class "D" common shares and the class "E" common shares, without priority and on a share for share basis.

The class "E" common shares shall have attached thereto the following preferences, rights, conditions, restrictions, limitations and prohibitions:

1. The holders of the class "E" common shares shall be entitled to vote at all meetings of the shareholders except meetings at which only holders of a specified class of shares are entitled to vote.

2. Dividends may be declared on the class "E" common shares in the discretion of the directors without at the same time declaring any dividends on any other class of shares.

3. In the event of the liquidation, dissolution, or winding up of the corporation, whether voluntary or involuntary, or other distribution of its assets among its shareholders by way of repayment of capital, the net equity of the corporation shall be distributed among the holders of the class "A" common shares, the class "B" common shares, the class "C" common shares, the class "D" common shares and the class "E" common shares, without priority and on a share for share basis.

The class "A" preference shares shall have attached thereto the following preferences, rights, conditions, restrictions, limitations and prohibitions:

1. The holders of the class "A" preference shares shall, in each year, in the discretion of the directors, be entitled out of the profits or surplus available for dividends, to non-cumulative dividends at a fixed percentage rate per annum of the Redemption Amount, such rate (the "Class "A" Preference Share Dividend Rate") to be determined by the directors by a resolution passed at the time the first class "A" preference shares are issued. The holders of the class "A" preference shares shall not be entitled to any dividends other than or in excess

7. continued

of the non-cumulative dividend hereinbefore provided for. The directors may declare dividends on any class of preference shares or any class of common shares without declaring dividends on the class "A" preference shares at the same time or at all.

2. In the event that the Corporation for any reason fails to redeem any of the class "A" preference shares of the Corporation when required to do so by the holder or holders thereof on the terms hereinafter set out, all of the class "A" preference shares of the Corporation shall, from the date of the said demand for redemption, be entitled to cumulative dividends at the Class "A" Preference Share Dividend Rate of the Redemption Amount, payable in priority to any dividends on any class of preference shares or any class of common shares of the Corporation.

3. No dividends shall be declared or paid on any class of preference shares or any class of common shares of the Corporation, nor shall any payments or distributions be made to the holders of any class of preference shares or common shares of the Corporation if the payment of such dividends or distributions would result in a reduction of the realizable value of the net assets of the Corporation to an amount less than the amount required to redeem all of the issued and outstanding class "A" preference shares in accordance with the rights attaching to such class "A" preference shares as set out in these Articles.

4. The class "A" preference shares or any part thereof shall be redeemable at the option of the Corporation without the consent of the holders thereof. Holders of the class "A" preference shares which are redeemed shall be paid the Redemption Amount for each class "A" preference share then owned by them together with any dividends declared thereon and unpaid and no more.

5. The class "A" preference shares or any part thereof shall be redeemable at the option of the holder without the consent of the Corporation. Holders of the class "A" preference shares which are redeemed shall be paid an amount equal to the Redemption Amount and any dividends declared thereon and unpaid and no more.

6. The Corporation may at any time purchase for cancellation the whole or any part of the class "A" preference shares at the lowest price at which a holder of such shares is prepared to offer the same, but not exceeding an amount equal to the Redemption Amount together with all dividends declared thereon and unpaid.

7. In the event of the liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, or other distribution of its assets among the shareholders by way of repayment of capital, the holder of the class "A" preference shares shall be entitled to receive, before any distribution of any part of the assets of the Corporation among the holders of any other shares, the Redemption Amount and any dividends declared thereon and unpaid and no more.

8. The holders of the class "A" preference shares shall be entitled to one (1) vote for each class "A" preference share held by them at all meetings of the shareholders of the Corporation.

The class "B" preference shares shall have attached thereto the following preferences, rights, conditions, restrictions, limitations and prohibitions:

1. The holders of the class "B" preference shares shall, in each year, in the discretion of the directors, be entitled out of the profits or surplus available for dividends, to non-

7. continued

cumulative dividends at a fixed percentage rate per annum of the Redemption Amount, such rate (the "Class "B" Preference Share Dividend Rate") to be determined by the directors by a resolution passed at the time the first class "B" preference shares are issued. The holders of the class "B" preference shares shall not be entitled to any dividends other than or in excess of the non-cumulative dividend hereinbefore provided for. The directors may declare dividends on any class of preference shares or any class of common shares without declaring dividends on the class "B" preference shares at the same time or at all.

2. In the event that the Corporation for any reason fails to redeem any of the class "B" preference shares of the Corporation when required to do so by the holder or holders thereof on the terms hereinafter set out, all of the class "B" preference shares of the Corporation shall, from the date of the said demand for redemption, be entitled to cumulative dividends at the Class "B" Preference Share Dividend Rate of the Redemption Amount, payable in priority to any dividends on any class of preference shares or any class of common shares of the Corporation.

3. No dividends shall be declared or paid on any class of preference shares or any class of common shares of the Corporation, nor shall any payments or distributions be made to the holders of any class of preference shares or common shares of the Corporation if the payment of such dividends or distributions would result in a reduction of the realizable value of the net assets of the Corporation to an amount less than the amount required to redeem all of the issued and outstanding class "B" preference shares in accordance with the rights attaching to such class "B" preference shares as set out in these Articles.

4. The class "B" preference shares or any part thereof shall be redeemable at the option of the Corporation without the consent of the holders thereof. Holders of the class "B" preference shares which are redeemed shall be paid the Redemption Amount for each class "B" preference share then owned by them together with any dividends declared thereon and unpaid and no more.

5. The class "B" preference shares or any part thereof shall be redeemable at the option of the holder without the consent of the Corporation. Holders of the class "B" preference shares which are redeemed shall be paid an amount equal to the Redemption Amount and any dividends declared thereon and unpaid and no more.

6. The Corporation may at any time purchase for cancellation the whole or any part of the class "B" preference shares at the lowest price at which a holder of such shares is prepared to offer the same, but not exceeding an amount equal to the Redemption Amount together with all dividends declared thereon and unpaid.

7. In the event of the liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, or other distribution of its assets among the shareholders by way of repayment of capital, the holder of the class "B" preference shares shall be entitled to receive, after payment of all amounts due to the holders of the class "A" preference shares, but before any distribution of any part of the assets of the Corporation among the holders of any other shares, the Redemption Amount and any dividends declared thereon and unpaid and no more.

8. The holders of the class "B" preference shares shall not be entitled to vote at any meetings of the shareholders of the Corporation except meetings at which only holders of a specified class of shares are entitled to vote but shall be entitled to notice of meetings of shareholders called for the purpose of authorizing the dissolution of the Corporation or the sale of its undertaking or a substantial part thereof.

8. The issue, transfer or ownership of shares is ~~is not~~ restricted and the restrictions (if any) are as follows:
L'émission, le transfert ou la propriété d'actions est /n'est pas restreint. Les restrictions, s'il y a lieu, sont les suivantes:

The right to transfer the shares of the Corporation shall be restricted in that no share shall be transferred without the express consent of a majority of the Directors, to be signified by a resolution passed by the Board of Directors, or by an instrument or instruments in writing signed by a majority of the Directors.

9. Other provisions if any:
Autres dispositions, s'il y a lieu:

- a) The number of Shareholders of the Corporation exclusive of persons who are in the employment of the Corporation and exclusive of persons who, having been formerly in the employment of the Corporation, were, while in that employment, and have continued after termination of that employment to be, Shareholders of the Corporation, is hereby limited to not more than fifty (50), two (2) or more persons who are the joint registered owners of one (1) or more shares being counted as one Shareholder;
- b) Any invitation to the public to subscribe for any shares or securities of the Corporation is hereby prohibited.

10. The names and addresses of the incorporators are:
Noms et adresses des fondateurs:

First name, middle names and surname or corporate name
*Prénom, autres prénoms et nom de famille ou
dénomination sociale*

Full address for service or address of registered office or
of principal place of business giving street & No. or R.R.
No., municipality and postal code
*Domicile élu au complet, adresse du siège social ou
adresse de l'établissement principal, y compris la rue et le
numéro ou le numéro de la R.R., le nom de la
municipalité et le code postal*

Roderick W. Johansen

**1136 Alloy Drive
Thunder Bay, ON P7B 6M9**

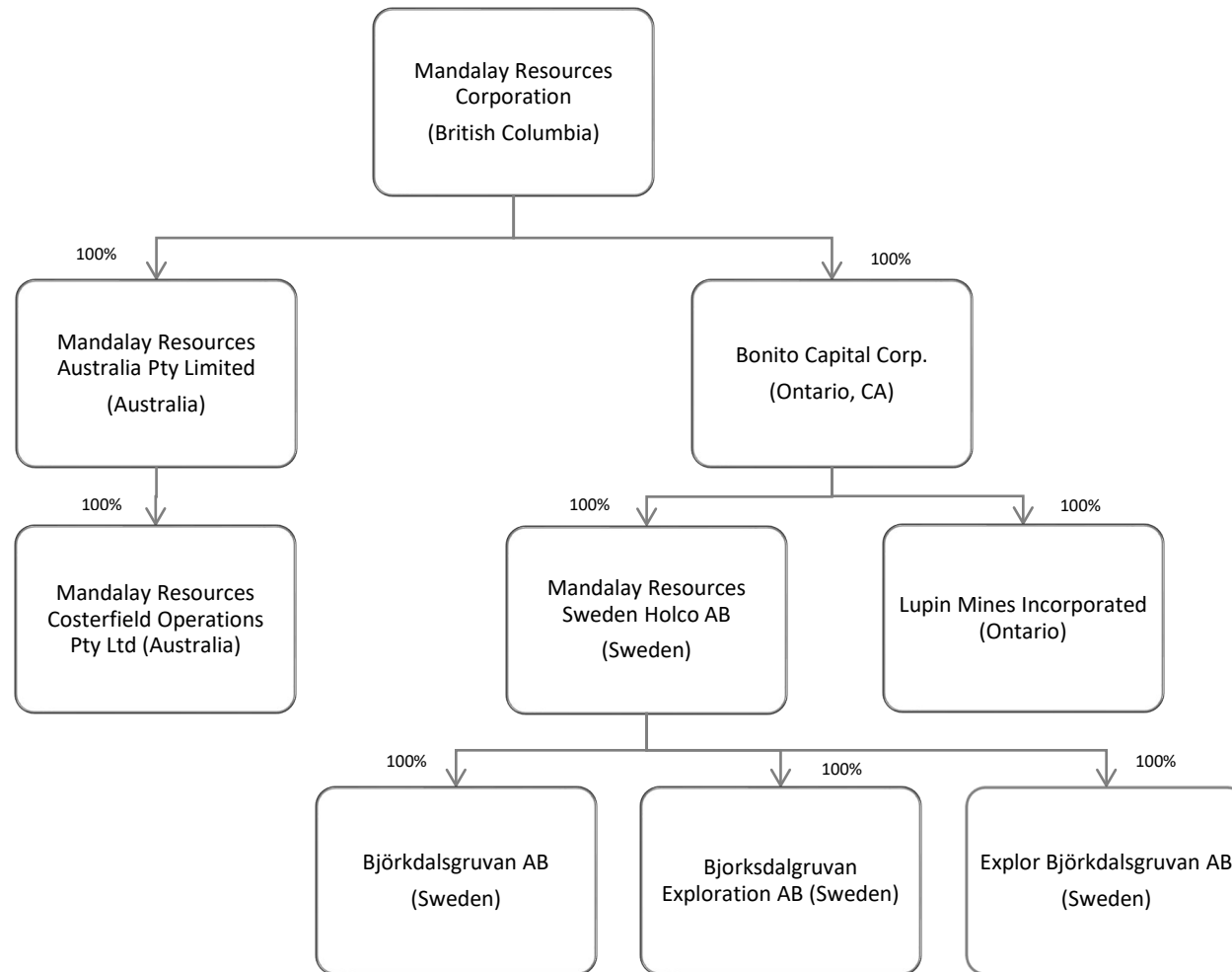
These articles are signed in duplicate.
Les présents statuts sont signés en double exemplaire.

Signatures of incorporator(s)/
Signatures des fondateurs


Roderick W. Johansen



Mandalay Resources Corp. – Legal & Project Structure



¹Minera Mandalay Limitada owns 100% of La Quebrada project.

²Effective Mar 31, 2016, Mandalay Elgin Holdings Inc. and Elgin Mining Inc. were amalgamated. Effective Feb 23, 2017, Mandalay Elgin Holdings Inc. and Bonito Capital Corp. were amalgamated.

³Effective May 26, 2017, MND entered into a farm-in and JV agreement with MRG Metals Ltd. for Norrilden Mining AB. The permit Norrilden K 1 is subject to interests claimed by third parties.

⁴Effective Dec 2, 2021, MND sold Cerro Bayo mine to Equus Mining Limited for 29,375,122 shares of Equus, 2.25% net smelter royalty and 50% of approved site closure costs.

⁵Effective Aug 11, 2022, MND sold Challacollo to Aftermath in exchange for C\$8 million in non-contingent consideration (C\$0.5 million plus interest in cash due on or before December 31, 2022) plus a 3% net smelter returns royalty on production at Challacollo, capped at US\$3.0 million.

Updated on June 14, 2024

APPENDIX B. TCJV SUPPORT LETTER



Nicole McLaren, Sustainability Lead
Falkirk Environmental Consultants
378 Esplanade E
North Vancouver, B.C. V7L 1A4

June 26, 2024

Ms McLaren

RE: Tibbitt to Contwoyto Winter Road

The Tibbitt to Contwoyto Winter Road has a license of occupation issued by the Mackenzie Valley Land and Water board to construct a winter road within the Northwest Territories and Nunavut. The TCWR currently construct the winter road from Tibbitt Lake to Lac de Gras for the purposes of haul freight and fuel to the diamond mines within the area. The TCWR will entertain entering into a third-party user agreement for companies wishing to mobilize freight, materials and equipment on our winter road providing they meet the following conditions:

- All equipment has been inspected and signed off as compliant by a journeymen mechanic.
- All carriers on the TCWR will need to complete and sign off our site orientation. Carriers shall adhere to all rules of the road.
- Any spur road leading from the TCWR shall have a QA QC program along with a third-party engineering firm of record.
- All overweight and oversized loads to be reviewed and signed off by the TCWR Engineers of Record - Alietum Inc. Payment for the review shall be invoiced directly from the TCWR Engineers of record to the Carriers.
- Use of the TCWR shall be charged at a rate of \$0.33 per tonne Kilometre. The registered third-party user shall provide a detailed list including:
 - Number of loads mobilizing northbound on the TCWR
 - Number of loads mobilizing southbound on the TCWR
 - Estimated weights per load.

- Follow up certified weight scale tickets to be provided for all northbound and southbound loads.
- Payment for use of the TCWR will be prepaid prior to mobilizing.
- A schedule to be provided listing all activities associated with the TCWR.

We trust these conditions are agreeable to you and will require you enter into a third-party agreement prior to any use of the TCWR.

Sincerely

Tibbitt to Contwoyto Winter Road Joint Venture

A handwritten signature in blue ink, appearing to read 'Barry Henkel', with a stylized flourish extending to the right.

Barry Henkel
Director

APPENDIX C. SECURITY ESTIMATE

Application Number:	Input Amount	Multiplier	Total
Camp (C1)			
Temporary Structures			
Input the number of tent frames or weatherhaven (3.5m x 4.2m)	0	\$ 200.00	\$ -
Input number of trailers (3.5m x 15.2m)	0	\$ 300.00	\$ -
Input total square metres of other temporary structures (i.e. core shacks)	0	\$ 2.50	\$ -
Fixed Structures			
Input total square metres of fixed structures	0	\$ 25.00	\$ -
Solid Waste			
For non-burnable materials, input # of person days per season	0	\$ 1.00	\$ -
For burnable materials, input # of person days per season	0	\$ 0.50	\$ -
Total C1			\$ -
Regulated / Hazardous Materials (R1)			
Based on site volume			
Explosives: up to 500 kg (~ pallet) dry explosives input 1, if non input 0	0	\$ 500.00	\$ -
Additional Explosives: input total kg >500	0	\$ 0.50	\$ -
Drilling Muds (oil based): enter number of 63 m ³ (or equivalent) containers	0	\$ 1,000.00	\$ -
Used Oil, Lubes and Antifreeze: enter number of pieces of heavy equipment	0	\$ 500.00	\$ -
Other:			
Total R1			\$ -
Hydrocarbon Storage and Transfer (H1)			
Based upon on site volume			
Gasoline and Diesel			
Enter total volume of gasoline & diesel <25,000 L	0	\$ 0.50	\$ -
Enter total volume of gasoline & diesel >25,000 L	0	\$ 0.25	\$ -
Total Gasoline and Diesel			\$ -
When fuel is within bermed site or has other safety feature, enter 1, otherwise 0	0	25%	
Aviation Fuel			
Enter total volume of aviation fuel <25,000 L	0	\$ 0.50	\$ -
Enter total volume of aviation fuel >25,000 L	0	\$ 0.25	\$ -
Total Aviation Fuel			\$ -
When fuel is within bermed site or has other safety feature, enter 1, otherwise 0	0	25%	\$ -
Total H1			\$ -
Land Disturbance (L1)			
Disturbed Surface Area			
<i>(Developed surface area that may require restoration through the use scarification, reseeding, fertilizing or other similar techniques)</i>			
Enter number of hectares disturbed	0	\$ 1,000.00	\$ -
Other Land Disturbances			
Creek Crossing: enter number of creek crossings	1	\$ 500.00	\$ 500.00
Off-Road Activities: if any activities are likely, enter 1	1	\$ 500.00	\$ 500.00
Sump Factor: enter total area occupied by sumps in m ²	0	\$ 10.00	\$ -
Well Factor: enter number of wells	0	\$ 25,000.00	\$ -
Total L1			\$ 1,000.00

Equipment (E1)				
Based upon type of equipment				
Enter number of pieces of heavy equipment (i.e. dozer, forklift, large gensets)	22	\$	1,000.00	\$ 22,000.00
Enter number of drills	0	\$	1,000.00	\$ -
Enter number of light vehicles (trucks, atvs, snowmobiles, boats)	18	\$	250.00	\$ 4,500.00
Enter number of small generators or pupms	8	\$	100.00	\$ 800.00
Enter number of empty fuel storage tanks	0	\$	500.00	\$ -
Total E1				\$ 27,300.00

Security Calculation				
Preliminary Calculation				
Enter amount from C1		\$		-
Enter amount from R1		\$		-
Enter amount from H1		\$		-
Enter amount from L1		\$	1,000.00	
Enter amount from E1		\$	27,300.00	
Preliminary Calculation, total of above	A			\$ 28,300.00
Multipliers				
Site Access Multiplier. If the project has all weather road access enter 1, if ice road access enter 1.5, if air access enter 2	B		1.5	
Performamnce Multiplier. If applicant has successfully completed the terms of a LUP enter 0.85, other enter 1	C		1.0	
Environmemtal Risk Factor. If location has high environmental value or unusual environmental risk enter 2. If location is previously disturbed enter 0.75. Otherwise enter 1.	D		0.75	
Calclator Security				
Multiply preliminary calculated (A) by performance multiplier (B, C, and D)	E			\$ 31,837.50
Existing Securities				
List existing associated permits and amount of overlapping security				
Permit:				
Permit:				
Permit:				
Permit:				
Ocverlapping Securities, total of above.	F		\$	-
Final Security Determination				
Subtracting overlapping securities (F) from calculated security (E)				\$ 31,837.50

Comments:	
The field pertaining to 'Creek Crossings' is considered here to address removal of snow fills and ice brides at each portage	

APPENDIX D. STATEMENT OF FINANCIAL RESPONSIBILITY

Consolidated financial statements of

Mandalay Resources Corporation

Years ended December 31, 2023 and 2022

Mandalay Resources Corporation

Years ended December 31, 2023 and 2022

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INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Mandalay Resources Corporation

Opinion

We have audited the consolidated financial statements of Mandalay Resources Corporation and its subsidiaries (the Entity), which comprise:

- the consolidated statement of financial position as at December 31, 2023
- the consolidated statement of income and comprehensive income for the year then ended
- the consolidated statement of changes in equity for the year then ended
- the consolidated statement of cash flows for the year then ended
- and notes to the consolidated financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the “financial statements”).

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated financial position of the Entity as at December 31, 2023, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the “**Auditor’s Responsibilities for the Audit of the Financial Statements**” section of our auditor’s report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Evaluation of Indicators of Impairment of Long-Lived Assets

Description of the matter

We draw attention to Notes 2(f), 2(s) and 6 to the financial statements. As at December 31, 2023, the carrying value of property, plant and equipment balance was \$195,230 thousand. The Entity reviews and evaluates its property, plant and equipment for indicators of impairment when events or changes in circumstances indicate that the related carrying amounts may not be recoverable or at least at the end of each reporting period. The primary external factor considered is the Entity’s market capitalization relative to its net asset carrying amount.



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Why the matter is a key audit matter

We identified the evaluation of indicators of impairment of long-lived assets as a key audit matter. This matter represented an area of significant risk of material misstatement. Significant auditor judgment was required to assess the Entity's determination of whether internal or external factors, including the Entity's market capitalization to net assets, resulted in an indicator of impairment. As such, professionals with specialized skills and knowledge were required.

How the matter was addressed in the audit

The primary procedure performed to address this key audit matter included the following:

We involved valuation professionals with specialized skills and knowledge, who assisted in evaluating the difference between the Entity's market capitalization and the carrying value of its net assets by assessing market available information.

Other Matters – Comparative Information

The financial statements for the year ended December 31, 2022 were audited by another auditor who expressed an unmodified opinion on those financial statements on February 23, 2023.

Other Information

Management is responsible for the other information. Other information comprises the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions as at the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditor's report.

We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.



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In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern.



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- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group Entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.
- Determine, from the matters communicated with those charged with governance, those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our auditor's report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this auditor's report is Todd Buchanan.

A handwritten signature in black ink that reads 'KPMG LLP'. The signature is written in a cursive, stylized font and is underlined with a single horizontal stroke.

Chartered Professional Accountants, Licensed Public Accountants

Toronto, Canada

February 22, 2024

Mandalay Resources Corporation

Consolidated statements of income and comprehensive income

Year ended December 31, 2023 and 2022

(Expressed in U.S. dollars)

	2023	2022
	(\$'000)	(\$'000)
Revenue (Note 14)	173,344	191,699
Cost of operations		
Cost of sales, excluding depletion and depreciation (Note 15)	105,923	94,904
Depletion and depreciation (Note 6)	33,210	33,874
	139,133	128,778
Income from mining operations	34,211	62,921
Expenses		
Administration (Note 16)	7,093	5,616
Share-based compensation (Note 12(a))	920	1,392
(Gain) loss on disposal of property, plant and equipment	(308)	334
Write-down of assets (Note 6)	724	651
Revision of reclamation liability (Note 10)	6,459	9,889
	14,888	17,882
Income from operations	19,323	45,039
Other expense (income)		
Finance costs (Note 17)	11,118	11,878
Gain on financial instruments (Note 18)	(4,448)	(5,247)
Interest and other income	(1,732)	(837)
Foreign exchange (gain) loss	(163)	791
Gain on sale of subsidiary (Note 6)	-	(1,828)
	4,775	4,757
Income before income taxes	14,548	40,282
Income tax expense (Note 13)		
Current	4,867	15,358
Deferred	1,820	1,418
Income tax expense	6,687	16,776
Net income for the year	7,861	23,506
Other comprehensive loss (gain), net of tax		
Item that may subsequently be reclassified to net income		
Foreign currency translation	3,889	(17,487)
Comprehensive income for the year	11,750	6,019
Net income per share		
Basic	0.08	0.26
Diluted	0.08	0.25
Weighted average number of common shares outstanding (Note 19)		
Basic ('000)	92,810	92,132
Diluted ('000)	94,986	94,091

See accompanying notes to the consolidated financial statements

Mandalay Resources Corporation

Consolidated statements of financial position

(Expressed in U.S. dollars)

	2023	2022
	(\$'000)	(\$'000)
Assets		
Current assets		
Cash and cash equivalents (Note 3)	26,855	38,377
Trade receivables and other assets (Note 4)	26,238	13,211
Marketable securities (Note 18(b))	1,922	2,749
Inventories (Note 5)	22,715	26,704
Prepaid expenses	2,104	1,209
Reclamation deposits (Note 10)	-	2,035
	79,834	84,285
Non-current assets		
Reclamation and other deposits (Note 10)	19,815	13,672
Trade receivables and other assets (Note 4)	369	359
Property, plant and equipment, net (Note 6)	195,230	183,908
	215,414	197,939
	295,248	282,224
Liabilities		
Current liabilities		
Trade and other payables (Note 8)	21,727	20,815
Borrowings (Note 9)	631	348
Lease liabilities (Note 7)	1,221	1,391
Reclamation and site closure costs provision (Note 10)	4,238	2,035
Other provisions (Note 11)	3,437	3,370
Financial instruments (Note 9)	651	5,740
Income taxes payable (Note 13)	-	3,526
	31,905	37,225
Non-current liabilities		
Borrowings (Note 9)	20,417	19,776
Lease liabilities (Note 7)	1,327	2,504
Reclamation and site closure costs provision (Note 10)	31,279	27,108
Other provisions (Note 11)	227	256
Deferred tax liability (Note 13)	13,161	11,201
	66,411	60,845
	98,316	98,070
Equity		
Share capital (Note 12)	231,485	231,166
Share option reserve (Note 12)	5,270	4,621
Foreign currency translation reserve	(54,473)	(58,362)
Retained earnings	14,650	6,729
	196,932	184,154
	295,248	282,224

Approved by the Board of Directors and authorized for issuance on February 22, 2024.

(Signed) Frazer Bouchier

Frazer Bouchier, Director, President and Chief Executive Officer

(Signed) Robert Doyle

Robert Doyle, Director

See accompanying notes to the consolidated financial statements

Mandalay Resources Corporation

Consolidated statements of changes in equity

Year ended December 31, 2023 and 2022

(Expressed in U.S. dollars, except number of shares)

	Number of shares issued	Share capital	Share option reserve	Foreign currency translation reserve	Retained earnings	Total equity
	('000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Balance, December 31, 2021	91,763	230,405	3,934	(40,875)	(16,777)	176,687
Net income for the year	-	-	-	-	23,506	23,506
Other comprehensive loss for the year	-	-	-	(17,487)	-	(17,487)
Total comprehensive income	-	-	-	(17,487)	23,506	6,019
Stock options exercised (Note 12(b))	233	397	(151)	-	-	246
Share-based compensation (Note 12(a))	-	-	1,202	-	-	1,202
Redemption of RSUs, PSUs and DSUs (Notes 12(c), (d) and (e))	461	364	(364)	-	-	-
Balance, December 31, 2022	92,457	231,166	4,621	(58,362)	6,729	184,154
Net income for the year	-	-	-	-	7,861	7,861
Other comprehensive gain for the year	-	-	-	3,889	-	3,889
Total comprehensive income (loss)	-	-	-	3,889	7,861	11,750
Stock options exercised (Note 12(b))	13	11	(5)	-	-	6
Share-based compensation (Note 12(a))	-	-	1,316	-	-	1,316
Redemption of RSUs, PSUs and DSUs (Notes 12(c), (d) and (e))	581	662	(662)	-	-	-
Share repurchase commitment under normal course issuer bid (Note 12(f))	(167)	(354)	-	-	60	(294)
Balance, December 31, 2023	92,884	231,485	5,270	(54,473)	14,650	196,932

See accompanying notes to the consolidated financial statements

Mandalay Resources Corporation

Consolidated statements of cash flows

Year ended December 31, 2023 and 2022

(Expressed in U.S. dollars)

	2023	2022
	(\$'000)	(\$'000)
Operating activities		
Net income for the year	7,861	23,506
Adjustments to reconcile net income to net cash flows from operating activities		
Depletion and depreciation (Note 6)	33,210	33,874
Share-based compensation (Note 12(a))	920	1,392
(Gain) loss on disposal of property, plant and equipment	(308)	334
Finance costs (Note 17)	11,118	11,878
Gain on sale of subsidiary	-	(1,828)
Gain on financial instruments (Note 18)	(4,448)	(5,247)
Interest and other income	(1,732)	(837)
Unrealized foreign exchange (gain) loss	(272)	1,286
Income tax expense	6,687	16,776
Reclamation expenditures (Note 10)	(776)	(7,435)
Revision of reclamation liability (Note 10)	6,459	9,889
Write-down of assets (Note 6)	724	651
Changes in non-cash operating working capital items		
Trade receivables and other assets	(12,465)	27,532
Inventories	4,092	(3,833)
Prepaid expenses	(774)	259
Trade and other payables	4,298	(1,314)
Other provisions	27	(268)
Cash generated from operations	54,621	106,615
Interest and other income received	1,732	837
Interest and bank charges paid	(1,981)	(2,305)
Income tax paid	(11,081)	(25,105)
Net cash flows from operating activities	43,291	80,042
Investing activities		
Expenditures on property, plant and equipment	(41,739)	(39,670)
Proceeds from sale of assets (Note 6)	489	-
(Deposit) receipt from reclamation deposits (Note 10)	(3,611)	2,376
Proceeds from sale of marketable securities	253	303
Net cash flows used in investing activities	(44,608)	(36,991)
Financing activities		
Proceeds from borrowings (Note 9)	2,084	34,690
Repayments of borrowings	(1,231)	(59,188)
Lease payments (Note 7)	(2,037)	(2,834)
Payment of gold derivative contracts (Note 9)	(8,776)	(7,610)
Purchase of common shares for cancellation	(293)	-
Shares issued for cash	6	246
Net cash flows used in financing activities	(10,247)	(34,696)
Effects of exchange rate changes on the balance of cash and cash equivalents held in foreign currencies	42	(716)
Net (decrease) increase in cash and cash equivalents	(11,522)	7,639
Cash and cash equivalents, beginning of the year	38,377	30,738
Cash and cash equivalents, end of the year	26,855	38,377
Cash and cash equivalents consist of		
Cash	26,855	38,377
	26,855	38,377

See accompanying notes to the consolidated financial statements

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

1. Description of business and nature of operations

Mandalay Resources Corporation ("Mandalay" or the "Company"), together with its wholly owned subsidiaries, is a gold and antimony producer engaged in mining and related activities, including acquisition, exploration, extraction, processing and reclamation. Mandalay's assets consist of the Costerfield gold and antimony mine in Australia, the Björkdal gold mine in Sweden, as well as other exploration and care and maintenance projects in Chile and Canada.

Mandalay is incorporated in the Province of British Columbia, Canada. The Company's shares are listed on the Toronto Stock Exchange ("TSX"). The head office and principal address of the Company is 76 Richmond Street East, Suite 330, Toronto, Canada, M5C 1P1. The Company's registered office is located at 1900-355 Burrard Street, Vancouver, British Columbia, V6C 2G8.

2. Summary of material accounting policies

These consolidated financial statements have been prepared using accounting policies in accordance with IFRS Accounting Standards as issued by the International Accounting Standard Board effective for the year ended December 31, 2023, using the material accounting policies outlined below.

These consolidated financial statements have been prepared on a historical cost basis, except for certain financial instruments, which are measured at fair values as explained in the accounting policies set out below.

a) Basis of consolidation

The consolidated financial statements of the Company include the results of entities (including structured entities) controlled by the Company. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power over the investee to affect its returns.

The Company reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

The principal subsidiaries of the Company as at December 31, 2023 and 2022 are as follows:

Subsidiary	Interest	Interest
	2023	2022
	%	%
Mandalay Resources Australia Pty Ltd. ¹	100	100
<u>Björkdalsgruvan AB.²</u>	<u>100</u>	<u>100</u>

¹ Mandalay Resources Australia Pty Ltd. ("MRA") owns the Costerfield gold and antimony mine in Australia.

² Bonito Capital Corp owns the Björkdal gold mine in Sweden through its subsidiary, Björkdalsgruvan AB ("Björkdal"), and exploration projects in Canada.

b) Functional currency and foreign currency transactions

The Company's functional currency is the Canadian dollar as this is the principal currency of the economic environment in which it operates. The determination of the Company's functional currency requires analyzing facts that are considered primary factors, and if the result is not conclusive, the secondary factors. The analysis requires the Company to apply significant judgment since primary and secondary factors may be mixed. In determining its functional currency, the Company analyzed both the primary and secondary factors, including the currency of the Company's revenues, operating costs in the countries that it operates in, and sources of debt and equity financing.

MRA and Björkdal have functional currencies of the Australian dollar and Swedish krona, respectively.

Transactions in foreign currencies are initially recorded in the respective entity's functional currency at the exchange rate at the date of the transaction. Monetary assets and liabilities that are denominated in foreign currencies are translated at the rates prevailing at each reporting date.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

b) *Functional currency and foreign currency transactions (continued)*

The translation gain/loss is recognized in the consolidated statements of income and comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated at the exchange rate on the date of the transaction. On consolidation, each respective entity's financial statements are translated into the presentation currency as outlined below.

The consolidated financial statements are presented in U.S. dollars. For presentation purposes, the assets and liabilities of the Company and its subsidiaries, including fair value adjustments arising on acquisition, are translated into U.S. dollars at exchange rates at the reporting date. The income and expenses of foreign operations are translated into U.S. dollars at the average exchange rate for the period in which the transaction arose. Exchange differences arising are recognized as a separate component of equity titled "foreign currency translation reserve." The consolidated financial statements have been presented in a currency other than the parent's functional currency as management has determined that the U.S. dollar is the common currency in which the Company's peers, being multi-jurisdictional mining companies, present their financial statements.

c) *Cash and cash equivalents*

The Company considers all the closing balances at bank and of highly liquid investments with remaining maturities of three months or less at the date of acquisition to be cash equivalents.

d) *Inventories*

Finished goods, work-in-process and stockpiled ore are valued at the lower of average production cost or net realizable value. Production costs include the cost of raw materials, direct labour, mine-site overhead expenses and depreciation and depletion of mining interests. Net realizable value is calculated based on actual closing metal price for the period less estimated future production costs to convert the inventories into saleable form and the costs necessary to make the sale.

In-process inventories represent materials that are currently in the process of being converted into finished goods. The average production cost of finished goods represents the average cost of in-process inventories incurred prior to the refining process, plus applicable refining costs and associated royalties.

Supplies are valued at the lower of average cost and net realizable value.

e) *Property, plant and equipment*

(i) Exploration and evaluation

Once a license to explore an area has been secured, expenditures on exploration and evaluation activities are capitalized within property, plant and equipment.

The Company records its capitalized exploration and evaluation at cost. The capitalized cost is based on cash paid, the value of share consideration and exploration costs incurred. The recoverable values are not always readily determinable and are dependent on the development program, the nature of the mineral deposit, commodity prices, adequate funding and the ability of the Company to bring its projects into production.

All costs related to the acquisition, exploration and evaluation of these interests are capitalized on the basis of specific claim blocks or areas of geological interest until the properties to which they relate are moved into development or production, sold or management has determined there to be an impairment of the value.

Management reviews the carrying value of capitalized exploration and evaluation costs for indicators of impairment at each reporting date. In the case of undeveloped projects, there may be only inferred resources to form a basis for the impairment review. The review is based on a status report regarding the Company's intentions for development of the undeveloped property.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

e) *Property, plant and equipment (continued)*

(i) Exploration and evaluation (continued)

Once an economically viable reserve has been determined for an area and the decision to proceed with development has been approved, exploration and evaluation assets attributable to that area are first tested for impairment and then reclassified to mining interests within property, plant and equipment.

(ii) Mining interests

Mining interests represent capitalized expenditures related to the development of mining properties, acquisition costs, capitalized borrowing costs (Note 2(i)), expenditures related to exploration and evaluation transferred in, and estimated site closure and reclamation costs.

Capitalized costs are depleted over the estimated economic life of the mine using the method as explained in depletion and depreciation (Note 2(f)(iv)) below.

(iii) Plant and equipment

Plant and equipment are recorded at cost less accumulated depreciation, depletion and impairment charges.

Where an item of plant and equipment comprises major components with different useful lives, the components are accounted for as separate items of plant and equipment.

Expenditures incurred to replace a component of an item of plant and equipment that is accounted for separately, including major inspection and overhaul expenditures, are capitalized. Any remaining book value associated with the component being replaced is derecognized upon its replacement. Directly attributable costs incurred for major capital projects and site preparation are capitalized until the asset is brought to a working condition for its intended use. These costs include dismantling and site restoration costs to the extent these are recognized as a provision.

(iv) Depletion and depreciation

Depletion

Mining interests are depleted to estimated residual value using the unit-of-production method based on the estimated total saleable metal ounces contained in a life of mine plan that includes Proven and Probable Reserves, as well as any Measured, Indicated and Inferred Resources that are not yet converted to Reserves but that Management believes are highly likely to be converted to Reserves and eventually mined.

Depreciation

Management reviews the estimated useful lives, residual values and depreciation methods of the Company's property, plant and equipment at the end of each reporting period and when events and circumstances indicate that such a review should be made. Changes to estimated useful lives, residual values or depreciation methods resulting from such review are accounted for prospectively.

Plant and equipment cost is depreciated, using the straight-line method over their estimated useful lives, if shorter than the mine life, otherwise they are depleted on the unit-of-production basis, as outlined above.

Plant and equipment include building, plant and equipment, vehicles, furniture and fixtures and computer equipment, and their estimated useful lives range from 2.5 years to 10 years.

Assets under construction are not depreciated until their construction is substantially complete and they are available for their intended use. In the case of projects involving the development of mineral properties, this is when the property has achieved commercial production.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

f) *Impairment of long-lived assets*

The Company reviews and evaluates its property, plant and equipment for indicators of impairment when events or changes in circumstances indicate that the related carrying amounts may not be recoverable or at least at the end of each reporting period. The primary external factor considered is the Company's market capitalization relative to its net asset carrying amount. If an indication of impairment exists, the asset's recoverable amount is estimated.

An impairment loss is recognized when the carrying amount of an asset exceeds its recoverable amount. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Future cash flows are estimated based on expected future production, commodity prices, operating costs and capital costs.

The recoverable amount is the greater of the asset's fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

Impairment losses are recognized in statement of income (loss).

g) *Leases*

At inception of a contract, the Company determines whether a contract is or contains a lease. A contract is, or contains, a lease, if the contract gives the Company the right to control the use of an identified asset for the duration of the lease term in exchange for consideration. The Company has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Company recognizes a right-of-use asset and a lease liability based on the present value of future lease payments when the lessor makes the leased asset available for use by the Company. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and estimated decommissioning costs, less any lease incentives received. The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the Company's incremental borrowing rate. The measurement of lease liabilities includes the fixed (and in-substance fixed) payments, and variable lease payments that depend on an index or a rate, less any lease incentives receivable. If applicable, lease liabilities will also include a purchase option exercise price if the Company is reasonably certain to exercise that option, termination penalties if the lease term also reflects the termination option and amounts expected to be payable under a residual value guarantee. Variable lease payments are recognized as an expense as they are incurred. Subsequent to initial measurement, the Company measures lease liabilities at amortized cost using the effective interest method. Lease liabilities are remeasured when there is a change in the lease term, change in the future lease payments resulting from a change in an index or rate, or a change in the assessment of an option to purchase the underlying asset.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

h) Leases (continued)

Lease terms applied are the contractual non-cancellable periods of the leases, plus periods covered by an option to renew the leases if the Company is reasonably certain to exercise that option and the periods covered by an option to terminate the leases if the Company is reasonably certain not to exercise that option.

The Company has elected not to recognize right-of-use assets and lease liabilities for leases of low-value assets. The lease payments associated with these leases are recognized as an expense on a straight-line basis over the lease term.

i) Borrowing costs

Borrowing costs related to the costs of developing mining properties and constructing new facilities are capitalized and included in the carrying amounts of the related assets until mining properties reach commercial production and facilities are ready for their intended use.

The amount of borrowing costs capitalized (before effects of income tax) during the year is determined by applying the interest rate applicable to appropriate borrowings outstanding during the year to the average amount of capitalized expenditures for the qualifying assets during the year. Where any borrowing costs are incurred specifically in relation to a qualifying asset, they are allocated directly to the asset to which they relate and are excluded from the aforementioned calculation.

All other borrowing costs are recognized as an expense in the period in which they are incurred.

j) Site closure and reclamation cost obligations

The Company records a liability based on the best estimate of costs for site closure and reclamation activities that the Company is legally or constructively required to remediate. The liability is recognized at the time the environmental disturbance occurs and the resulting costs are capitalized to the corresponding asset. The provision for site closure and reclamation liabilities is estimated using expected cash flows based on engineering and environmental reports prepared by third-party industry specialists and discounted at a pre-tax rate specific to the liability. The capitalized amount is amortized on the same basis as the related asset. The liability is adjusted for the accretion of the discounted obligation and any changes in the amount or timing of the underlying future cash flows or the discount rate. Significant judgments and estimates are involved in forming expectations of the amounts and timing of future closure and reclamation cash flows.

Changes in site closure and reclamation estimates are accounted for as a change in the corresponding capitalized cost, if there are no assets at site then it will be charged to the statement of income (loss).

Costs of site closure and reclamation projects for which a provision has been recorded are recorded directly against the provision as incurred, most of which are incurred at the end of the life of the mine.

k) Income taxes

The Company uses the liability method of accounting for income taxes. Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable income and on the carry forward of tax losses and tax credits. Deferred tax liabilities are generally recognized for all taxable temporary differences, except to the extent that the deferred tax liability arises from the initial recognition of an asset or liability in a transaction that affects neither accounting nor taxable income at the time of the transaction. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable income will be available against which those deductible temporary differences can be utilized.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

k) *Income taxes (continued)*

The Company recognizes a deferred tax asset for deductible temporary differences arising from investments in subsidiaries only to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable income will be available against which the temporary difference can be utilized. The Company recognizes a deferred tax liability for taxable temporary differences associated with investments in subsidiaries, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply when the asset is realized or the liability settled.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

Current and deferred tax are recognized as an expense or recovery in income or loss, except when they relate to items that are recognized outside of income or loss (whether in other comprehensive income or directly in equity), in which case the tax is also recognized outside income or loss, or where they arise from the initial accounting for a business combination. In the case of a business combination, the tax effect is included in the accounting for the business combination.

Judgment is required to determine which arrangements are considered to be a tax on income as opposed to an operating cost. Judgment is also required to determine whether deferred tax assets are recognized in the consolidated statements of financial position. Deferred tax assets, including those arising from unutilized tax losses, require the Company to assess the likelihood that the group will generate sufficient taxable income in future periods in order to utilize recognized deferred tax assets. Judgment is also required about the application of existing tax laws in each jurisdiction.

Assumptions about the generation of future taxable income depend on management's estimates of future cash flows. These estimates of future taxable income are based on forecasted cash flows from operations (which are impacted by production and sales volumes, commodity prices, reserves, operating costs, closure and rehabilitation costs, capital expenditures, dividends and other capital management transactions).

To the extent that future cash flows and taxable income differ significantly from these estimates, the ability of the Company to realize the net deferred tax assets recorded at the reporting date could be impacted. In addition, future changes in tax laws in the jurisdictions in which the Company operates could limit the ability of the Company to obtain tax deductions in future periods.

l) *Employee benefits*

A liability is recognized for benefits accruing to employees in respect of wages and salaries, annual leave and long service leave when it is probable that settlement will be required, and it is capable of being measured reliably. Liabilities recognized in respect of employee benefits due to be settled within 12 months are measured using the remuneration rate expected to apply at the time of settlement.

Liabilities recognized in respect of employee benefits that are not due to be settled within one year are measured at the present value of the estimated future cash outflows to be made by the Company in respect of services provided by employees up to the reporting date.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

m) *Revenue*

The Company is principally engaged in the business of producing metal concentrate. Revenue from contracts with customers is recognized when control of the goods is transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods. The Company has generally concluded that it is the principal in its revenue contracts because it typically controls the goods or services before transferring them to the customer.

Sales of certain commodities are provisionally priced such that the price is not settled until a predetermined future date based on the market price at that time. Revenue on these sales is initially recognized at the current market price. The receivables relating to provisionally priced sales are marked to market at each reporting date using the forward price for the period equivalent to that outlined in the contract at MRA and by using the current market price at the end of each reporting period at Björkdal. This mark to market adjustment is recognized in revenue but is not considered to be revenue from contracts with customers.

n) *Share-based payments*

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. Details regarding the determination of the fair value of equity-settled share-based transactions are set out in Note 12(b) to (e).

The fair value determined using a valuation technique (e.g., Black-Scholes option pricing model) at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Company's estimate of equity instruments that will eventually vest. At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in income or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the share option reserve.

Equity-settled share-based payment transactions with non-employees are measured at the fair value of the goods or services received, except where that fair value cannot be estimated reliably, in which case they are measured at the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders the service.

Cash-settled transactions

The cost of cash-settled transactions is measured initially at fair value at the grant date using the Black-Scholes option pricing model. This fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The liability is remeasured to fair value at each reporting date up to and including the settlement date, with changes in fair value recognized in share-based compensation.

o) *Financial Instruments*

Financial assets and liabilities

Financial assets are classified, at initial recognition, and subsequently measured at amortized cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL").

The classification of financial assets at initial recognition that are debt instruments depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient, the Company initially measures a financial asset at its fair value plus, in the case of a financial asset not at FVTPL, transaction costs. Trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient for contracts that have a maturity of one year or less, are measured at the transaction price determined under IFRS 15, *Revenue from Contracts with Customers* (see Note 2(m)).

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

o) Financial Instruments (continued)

In order for a financial asset to be classified and measured at amortized cost or FVOCI, it needs to give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding. This assessment is referred to as the solely payments of principal and interest ("SPPI") test and is performed at an instrument level.

The Company's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognized on the trade date (i.e., the date that the Company commits to purchase or sell the asset).

The Company classifies its financial assets into the following categories:

- Financial assets at amortized cost (debt instruments)
- Financial assets at FVTPL

Financial assets at amortized cost (debt instruments)

The Company measures financial assets at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortized cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Interest received is recognized as part of interest and other income. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

The Company's financial assets at amortized cost include trade receivables (not subject to provisional pricing), other receivables. Refer below to *Financial assets at FVTPL* for a discussion of trade receivables that are subject to provisional pricing.

Financial assets at FVTPL

Financial assets at FVTPL include financial assets held for trading (e.g., derivative instruments), financial assets designated upon initial recognition at FVTPL (e.g., debt or equity instruments), or financial assets mandatorily required to be measured at fair value (i.e., where they fail the SPPI test). Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that do not pass the SPPI test are required to be classified and measured at FVTPL, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortized cost or at FVOCI, as described above, debt instruments may be designated at FVTPL on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

(o) *Financial Instruments (continued)*

Financial assets at FVTPL are carried in the consolidated statements of financial position at fair value with net changes in fair value recognized in profit or loss.

As IFRS 9, *Financial Instruments* ("IFRS 9") now has the SPPI test for financial assets, the requirements relating to the separation of embedded derivatives is no longer needed for financial assets. An embedded derivative will often make a financial asset fail the SPPI test, thereby requiring the instrument to be measured at FVTPL in its entirety. This is applicable to the Company's trade receivables (subject to provisional pricing). These receivables relate to sales contracts where the selling price is determined after delivery to the customer, based on the market price at the relevant Qualified Person stipulated in the contract. This exposure to the commodity price causes such trade receivables to fail the SPPI test. As a result, these receivables are measured at FVTPL from the date of recognition of the corresponding sale, with subsequent movements being recognized in revenue in the consolidated statements of income and comprehensive income.

Derecognition

A financial asset is derecognized when the rights to receive cash flows from the asset have expired or when the Company has transferred its rights to receive cash flows from the asset.

Impairment of financial assets

For trade receivables and contract assets, the Company applies a simplified approach in calculating expected credit losses ("ECLs") and recognizes a loss allowance based on lifetime ECLs at each reporting date. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

Financial liabilities

Financial liabilities are classified, at initial recognition, as financial liabilities at FVTPL, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Company's financial liabilities include derivative gold hedge contracts, trade and other payables and borrowings.

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at FVTPL

Financial liabilities at FVTPL include financial liabilities held for trading and financial liabilities designated upon initial recognition as at FVTPL.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the consolidated statements of income and comprehensive income.

Derivatives

The Company uses derivative financial instruments to manage exposure to fluctuations in gold prices and may use derivatives to manage exposure to interest rates, foreign currency exchange rates and input costs. The Company does not employ derivative financial instruments for trading purposes or for speculative purposes.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

(o) *Financial Instruments (continued)*

The Company initially recognises all derivative financial instruments at fair value and on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each period with the fair value remeasurements recorded in the profit or loss. Derivatives are classified as current or non-current based on contractual maturity.

Loans and borrowings and trade and other payables

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in the consolidated statements of income and comprehensive income when the liabilities are derecognized, as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated statements of income and comprehensive income.

This category generally applies to interest-bearing loans and borrowings and trade and other payables.

Derecognition

A financial liability is derecognized when the associated obligation is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in profit or loss.

p) *Income per share*

Basic loss per share is computed by dividing the net income attributable to common shareholders by the weighted average number of common shares outstanding during the reporting period.

Diluted income per share is computed similar to basic income per share except that the weighted average number of common shares outstanding is increased to include additional shares for the assumed exercise of stock options.

The number of additional shares is calculated by assuming that outstanding dilutive stock options were exercised and that the proceeds from such exercise (after adjustment of any unvested portion of stock options) were used to acquire common shares at the average market price during the reporting period.

q) *Provisions*

Provisions are recorded when a present legal or constructive obligation exists as a result of past events, where it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and when a reliable estimate of the amount of the obligation can be made.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation estimated at the end of each reporting period, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows. When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognized as an asset if it is virtually certain that reimbursement will be received, and the amount receivable can be measured reliably.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

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2. Summary of material accounting policies (continued)

r) *Fair value measures*

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level of input that is significant to the fair value measurement as a whole:

- Level 1 – Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- Level 2 – Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 – Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognized in the consolidated financial statements on a recurring basis, the group determines whether transfers have occurred between the levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

s) *Critical judgments and accounting estimates*

In the application of the Company's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

Following is the item involving significant judgments:

- Indicator of impairment (Note 2(f)).

Following are the items involving significant estimates:

- Impairment of long-lived assets (Note 2(f));
- The anticipated cost of reclamation and closure cost obligations (Notes 2(j) and 10); and
- Unit-of-production depreciation (Notes 2(f)(iv) and 6).

Mineralization estimates

The Company estimates its ore reserves and mineral resources based on information compiled by Qualified Persons as defined in accordance with Canadian Securities Administrators National Instrument 43-101, *Standards for Disclosure of Mineral Projects*. Reserves are used in the calculation of depreciation and depletion, impairment assessment, assessment of life-of-mine stripping ratios and for forecasting the timing of payment of mine closure, reclamation and rehabilitation costs.

There are numerous uncertainties inherent in estimating ore reserves, and assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of reserves and may, ultimately, result in the reserves being updated.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

(s) *Critical judgments and accounting estimates (continued)*

Mineralization estimates (continued)

Estimated recoverable saleable metal ounces contained in the life-of-mine plan are used in determining the depreciation and/or amortization of mine-specific assets. This results in a depreciation charge proportional to the depletion of the anticipated remaining life-of-mine production. The life of each item, which is assessed at least annually, has regard to both its physical life limitations and present assessments of economically recoverable reserves of the mine property at which the asset is located. These depletion calculations require the use of estimates and assumptions, including the amount of recoverable reserves and estimates of future capital expenditure.

t) *Changes in Material Accounting Policies*

On January 1, 2023, the Company adopted amendments to IAS 1 that requires companies to disclose material accounting policies instead of significant accounting policies. The adoption of these amendments resulted in certain changes to the Company's accounting policy disclosures.

On January 1, 2023, the Company adopted amendments to IAS 8 which provide greater clarity in the definition of accounting estimates to distinguish changes in accounting estimates from changes in accounting policies. The Company is now applying this definition of accounting estimates when assessing such changes. As a result, the adoption of the amendments did not have an immediate impact on the Company's financial statements.

On January 1, 2023, the Company adopted amendments to IAS 12 to specify how companies should account for deferred tax on transactions such as leases and decommissioning obligations. The amendments require companies to recognize deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences. The amendments did not have a significant impact on the Company's financial statements.

On May 23, 2023, the IASB issued amendments to IAS 12 which introduce a temporary exception from accounting for deferred taxes arising from the implementation of the Organization for Economic Co-operation and Development ("OECD") Pillar Two model rules. The amendments provide relief from recognizing deferred taxes related to the OECD Pillar two income taxes. The amendments did not have a significant impact on the Company's financial statements.

u) *Recent Accounting Pronouncements*

On January 23, 2020 and October 31, 2022, the IASB issued amendments to IAS 1 to clarify that the classification of liabilities as current or non-current should be based on rights that exist at the end of the reporting period and that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability. For liabilities with covenants, the amendments clarify that only covenants with which an entity is required to comply on or before the reporting date affect the classification as current or non-current. The Company will adopt the amendments to IAS 1 on January 1, 2024. These amendments are not expected to have a significant impact on the Company's statement of financial position on the date of adoption.

On September 22, 2022, the IASB issued amendments to IFRS 16 to add subsequent measurement requirements for sale and leaseback transactions, particularly those with variable lease payments. The amendments require the seller-lessee to subsequently measure lease liabilities in a way such that it does not recognize any gain or loss relating to the right of use it retains. The amendments are effective on January 1, 2024 and are not expected to have a impact on the Company's financial statements.

On May 25, 2023, the IASB issued amendments to IAS 7 requiring entities to provide qualitative and quantitative information about their supplier finance arrangements. In connection with the amendments to IAS 7, the IASB also issued amendments to IFRS 7 requiring entities to disclose

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

2. Summary of material accounting policies (continued)

(u) *Recent Accounting Pronouncements (continued)*

whether they have accessed, or have access to, supplier finance arrangements that would provide the entity with extended payment terms or the suppliers with early payment terms. These amendments are effective on January 1, 2024, and are not expected to have a significant impact on the Company's financial statements.

On August 15, 2023, the IASB issued amendments to IAS 21 to specify how to assess whether a currency is exchangeable and how to determine the exchange rate when it is not exchangeable. The amendments specify that a currency is exchangeable when it can be exchanged through market or exchange mechanisms that create enforceable rights and obligations without undue delay at the measurement date and the specified purpose. For non-exchangeable currencies, an entity is required to estimate the spot exchange rate as the rate that would have applied to an orderly exchange transaction between market participants at the measurement date under prevailing economic conditions. The amendments are effective on January 1, 2025 and are not expected to have a significant impact on the Company's financial statements.

Mandalay Resources Corporation

Notes to the consolidated financial statements

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(Expressed in U.S. dollars, except where otherwise noted)

3. Cash and cash equivalents

As at December 31, 2023, the Company had a cash balance of \$26,855,000 (December 31, 2022 – \$38,377,000). The Company had no cash equivalents as at December 31, 2023 (December 31, 2022 – \$nil).

4. Trade receivables and other assets

Trade receivables and other assets consist of the following:

	2023	2022
	(\$'000)	(\$'000)
Trade receivables	20,853	10,555
Other receivables and assets	3,905	532
VAT and other indirect tax receivables	1,277	1,186
Provisional pricing adjustment	572	-
Restricted cash	-	1,297
	26,607	13,570
Less: non-current portion	369	359
Total current portion	26,238	13,211

There was allowance for doubtful accounts for \$196,000 recognized as at December 31, 2023. (2022 – \$nil).

5. Inventories

Inventories consist of the following:

	2023	2022
	(\$'000)	(\$'000)
Finished goods	8,621	7,437
Work-in-progress and stockpiled ore	7,296	13,182
Consumables	6,798	6,085
	22,715	26,704

The amount of inventories recognized in cost of operations for the year ended December 31, 2023 was \$139,133,000 (2022 – \$128,778,000).

During the year ended December 31, 2023, there was no write-down of consumables (2022 – \$nil).

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

6. Property, plant and equipment

	Mining interests	Plant and equipment	Exploration and evaluation	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Cost				
As at January 1, 2022	240,662	129,933	45,461	416,056
Additions	13,906	17,720	11,280	42,906
Disposals	-	(3,808)	-	(3,808)
Write-down of assets	-	(651)	-	(651)
Reclassification to mining interest	2,946	(1,991)	(689)	266
Sale of subsidiary	-	(107)	(52)	(159)
Foreign exchange	(24,619)	(15,990)	(2,411)	(43,020)
As at December 31, 2022	232,895	125,106	53,589	411,590
Additions	12,166	18,739	11,802	42,707
Disposals	-	(1,668)	-	(1,668)
Write-down of assets	-	-	(724)	(724)
Reclassification to mining interest	2,029	-	(2,029)	-
Revision of reclamation liability	(703)	-	-	(703)
Foreign exchange	4,728	3,851	843	9,422
As at December 31, 2023	251,115	146,028	63,481	460,624
Accumulated depreciation				
As at January 1, 2022	155,003	67,322	-	222,325
Expense	18,056	15,496	-	33,552
Disposals	-	(2,969)	-	(2,969)
Sale of subsidiary	-	(107)	-	(107)
Foreign exchange	(16,770)	(8,349)	-	(25,119)
As at December 31, 2022	156,289	71,393	-	227,682
Expense	17,212	16,292	-	33,504
Disposals	-	(1,486)	-	(1,486)
Foreign exchange	3,454	2,240	-	5,694
As at December 31, 2023	176,955	88,439	-	265,394
Net book value				
As at January 1, 2022	85,659	62,611	45,461	193,731
As at December 31, 2022	76,606	53,713	53,589	183,908
As at December 31, 2023	74,160	57,589	63,481	195,230

Carrying amounts by sites

	Mining interests	Plant and equipment	Exploration and evaluation	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
As at December 31, 2023				
Costerfield	28,194	13,654	22,477	64,325
Björkdal	45,966	43,935	30,306	120,207
La Quebrada	-	-	10,698	10,698
	74,160	57,589	63,481	195,230

	Mining interests	Plant and equipment	Exploration and evaluation	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
As at December 31, 2022				
Costerfield	32,332	14,604	15,240	62,176
Björkdal	44,274	39,109	27,678	111,061
La Quebrada	-	-	10,671	10,671
	76,606	53,713	53,589	183,908

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

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6. Property, plant and equipment (continued)

For the year ended December 31, 2023, there was \$334,000 of plant and equipment depreciation capitalized to mining interests (2022 – \$321,000). As at December 31, 2023, the Company had right-of-use assets of \$2,506,000 included in property, plant and equipment, of which \$209,000 is at Costerfield and \$2,297,000 is at Björkdal (2022 – Costerfield: \$1,168,000 and Björkdal: \$2,958,000).

The following table details the write down of assets for the Company for the year ended December 31, 2023 and 2022:

	2023	2022
	(\$'000)	(\$'000)
Costerfield	724	-
Björkdal	-	651
Total write down of assets	724	651

For the year ended December 31, 2023, there was a write down of \$724,000 of exploration assets at Costerfield (2022 – \$nil) relating to exploration areas which will not be mined. For the year ended December 31, 2022, there was a write down of \$651,000 of plant and equipment assets at Björkdal relating to capitalized mill studies.

Details of exploration and evaluation assets – others

(i) Challacollo

On August 10, 2022, the Company completed the sale of Challacollo to Aftermath Silver Ltd. ("Aftermath") and received a payment of C\$1,000,000 in cash and 6,122,448 Aftermath shares with a fair value of C\$0.245 per share. On November 24, 2022, the Company received a final payment of C\$500,000 plus interest of C\$17,000 in cash. The Company also received a 3% net smelter returns royalty on production at Challacollo, capped at US\$3,000,000. The Company recognised a gain of US\$1,828,000 related to sale of Challacollo for the year ended December 31, 2022.

(a) Royalties

(i) Costerfield – payable

The Company is required to pay a 2.75% net smelter royalty ("NSR") to the government in Australia for its gold and antimony sales. During the year ended December 31, 2023, the Company accrued a NSR in the amount of \$2,354,000 (2022 – \$3,054,000), which is recorded as part of cost of sales.

(ii) Björkdal – payable

The Company is required to pay NSR of 0.2% of the average gold price of the production; one-fourth of that amount is to be paid to the Swedish government and the remainder to the owners of the land. During the year ended December 31, 2023, the Company accrued a NSR in the amount of \$126,000 (2022 – \$201,000), which is recorded as part of cost of sales.

Mandalay Resources Corporation

Notes to the consolidated financial statements

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7. Lease liabilities

			2023
	Less than 1 year	Between 1- 4 years	Total
	(\$'000)	(\$'000)	(\$'000)
Costerfield	220	-	220
Björkdal	1,001	1,327	2,328
Total lease liabilities	1,221	1,327	2,548

			2022
	Less than 1 year	Between 1- 4 years	Total
	(\$'000)	(\$'000)	(\$'000)
Costerfield	220	1,012	1,232
Björkdal	1,171	1,492	2,663
Total lease liabilities	1,391	2,504	3,895

The following are the amounts recognized in the consolidated statement of income and comprehensive income:

			2023
	Costerfield	Björkdal	Total
	(\$'000)	(\$'000)	(\$'000)
Depreciation expense for right-of-use assets	681	990	1,671
Interest expense on lease liabilities	32	77	109
Expenses relating to short-term leases	-	620	620
Variable lease payments	-	3,163	3,163
	713	4,850	5,563

			2022
	Costerfield	Björkdal	Total
	(\$'000)	(\$'000)	(\$'000)
Depreciation expense for right-of-use assets	869	1,394	2,263
Interest expense on lease liabilities	74	79	153
Expenses relating to short-term leases	-	791	791
Variable lease payments	-	3,447	3,447
	943	5,711	6,654

Björkdal's equipment leases are 80%-90% financed of its purchase cost, bear interest at 2.50%-6.00% per annum and require monthly lease payments. These leases are payable within three to five years of initial borrowing. Certain leases also have an equipment buy-out option at the end of the lease terms equal to 10% of the original equipment purchase cost. These leases are due to be repaid during the year ending February 28, 2028.

Costerfield equipment leases bear interest at 3.64% per annum and require monthly lease payments. These leases are due to be repaid during the year ending May 31, 2024.

Mandalay Resources Corporation

Notes to the consolidated financial statements

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8. Trade and other payables

	2023	2022
	(\$'000)	(\$'000)
Trade payables	7,859	7,771
Accrued liabilities	11,380	10,884
Payroll and other taxes payable	2,458	1,733
Cash election option (Note 12(b))	30	427
	21,727	20,815

Trade payables are non-interest bearing and are normally settled on one-month terms. The Company has financial risk management policies in place to ensure that all payables are paid within the pre-agreed credit terms.

9. Borrowings

	2023	2022
	(\$'000)	(\$'000)
Revolving Credit Facility	19,605	19,562
Equipment Facilities	1,443	562
	21,048	20,124
Less: current portion of total borrowings	631	348
Non-current portion of total borrowings	20,417	19,776

Revolving Credit Facility

On December 1, 2022, the Company entered into a credit agreement with the Bank of Nova Scotia ("Scotia"), providing for a senior secured revolving credit facility in an aggregate amount up to \$35,000,000 (the "Revolving Credit Facility").

The initial drawdown under the Revolving Credit Facility was used to repay the Company's existing Syndicated Facility with HSBC Bank Canada and Macquarie Bank Limited (the "Existing Facility"), which had \$32,600,000 outstanding before repayment in full. The residual proceeds from the Revolving Credit Facility were used for general corporate and working capital purposes. The hedge arrangements entered into in connection with the Syndicated Facility, it expired in June 2023.

The Revolving Credit Facility has the following financial covenants:

- Interest Coverage Ratio of not less than 4.00:1.00 at all times;
- Total Net Leverage Ratio of not more than 3.50:1.00 at all times; and
- Adjusted Tangible Net Worth of not less than \$135,739,000 plus 50% of net income (cumulative) earned after the Closing Date, less any write-downs related to non-core assets (including La Quebrada and Lupin) and add/less any fair value loss/gain related to the gold derivative contracts.

As at December 31, 2023, the Company was in compliance with all financial covenants under the Revolving Credit Facility.

Mandalay Resources Corporation

Notes to the consolidated financial statements

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9. Borrowings (continued)

The Revolving Credit Facility has a term of three years with no hedging requirements and has a maturity date of December 1, 2025. The Company may cancel any unused portion of the Revolving Credit Facility without penalty at any time and may also repay any portion of the loan without penalty, subject to certain exceptions. The Company can repay the outstanding principal amount on or before maturity date. In connection with the Revolving Credit Facility, Scotia Bank will hold security over the majority of the Company's material assets.

The Revolving Credit Facility has an effective interest rate of 9.42%. The nominal interest rate of SOFR as at December 31, 2023 was 5.35% plus 2.85% margin.

During the year ended December 31, 2023, the outstanding principal value was \$20,000,000 for the Revolving Credit Facility, with \$15,000,000 undrawn.

Syndicated Facility

On March 17, 2020, the Company entered into a credit agreement with HSBC Bank Canada ("HSBC") and Macquarie Bank Limited ("Macquarie") providing for:

- A senior secured Revolver Credit Facility in an aggregate amount of up to \$25,000,000; and
- A senior secured Term Credit Facility in an aggregate amount of up to \$40,000,000 (together the "Syndicated Facility").

The Syndicated Facility had a three-year term and it was due for the maturity date, March 16, 2023.

As at December 31, 2023, there was no outstanding balance of Syndicated Facility.

Syndicated Facility – Gold Derivative Contracts

In conjunction with the Syndicated Facility, Mandalay entered into two separate gold derivative programs with HSBC and Macquarie for a total of 150,000 ounces of saleable gold over the Syndicated Facility's three-year term commencing monthly in July 2020, or 50,000 ounces of saleable gold per year. These programs consist of a zero-cost collar contract for 75,000 ounces of saleable gold with a floor price of US\$1,550 per ounce and a ceiling of US\$1,617 per ounce; and an Australian dollar gold forward contract for the remaining 75,000 ounces of saleable gold at AU\$2,390 per ounce. The US dollar collar contracts with HSBC and The Australian dollar contract with Macquarie were completed and settled as on June 30, 2023 and July 4, 2023 respectively. There were no contracts open as on December 31, 2023.

During the year ended December 31, 2023, the Company paid \$8,776,000 as settlement of expired gold derivatives contracts (2022 – \$7,610,000).

Equipment Facilities

As at December 31, 2023, the Company's Björkdal mine in Sweden had a balance of \$1,443,000 (December 31, 2022 – \$562,000) for the equipment loan facilities (the "Equipment Facilities") with several Swedish banks to finance mining equipment. The Equipment Facilities bear variable interest at the 30 or 90 days STIBOR plus 1.54% - 3.33% per annum and are repayable in monthly installments plus interest and are due to be repaid by December 31, 2027. The Equipment Facilities are secured by the underlying equipment.

Hedge contracts

Refer Note 18 Gain (loss) on financial instruments, for foreign exchange derivative contracts entered during year ended December 31, 2023.

Mandalay Resources Corporation

Notes to the consolidated financial statements

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10. Reclamation and site closure costs

The Company's site closure reclamation obligations consist of costs for the mines at Costerfield, Björkdal and Lupin. Significant site closure and reclamation activities include land rehabilitation, demolition of buildings and mine facilities, ongoing care and maintenance and other costs.

Changes to the site closure and reclamation cost balance are as follows:

	(\$'000)
Balance at December 31, 2021	23,140
Expenditure for reclamation	(4,965)
Change in estimated future cash outflows	12,284
Accretion	403
Foreign exchange	(1,719)
Balance at December 31, 2022	29,143
Expenditure for reclamation	(731)
Change in estimated future cash outflows	5,804
Accretion	716
Foreign exchange	585
Balance at December 31, 2023	35,517
Less: current portion	4,238
Total non-current portion	31,279

At each reporting period, the Company reviews cost estimates and other assumptions used in the valuation of reclamation and closure costs to reflect events, changes in circumstances and new information available. Changes in these cost estimates and assumptions have a corresponding impact on the best estimate of the site closure and reclamation obligation costs.

The total undiscounted amount of estimated cash flows required to settle the retirement obligations for the Company is \$38,424,000 (2022 – \$30,793,000). The deposits relating to these obligations amounted to \$19,815,000 (2022 – \$15,707,000) is recorded in reclamation and other deposits.

The present value of the site closure and reclamation cost obligations for the Costerfield mine at December 31, 2023, is \$6,365,000 (2022 – \$6,517,000), calculated using a discount rate of 3.84% (2022 – 3.25%). The obligations are expected to be settled by 2027. The regulatory body in Australia requires reclamation deposits from the Company.

Mandalay Resources Corporation

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10. Reclamation and site closure costs (continued)

During the year ended December 31, 2023, the Company increased the reclamation deposit at Costerfield by \$3,533,000. As at December 31, 2023, the deposit amounted to \$6,586,000 (2022 – \$2,906,000) and is recorded in reclamation and other deposits.

The present value of the site closure and reclamation cost obligations for the Björkdal mine as at December 31, 2023 is \$4,115,000 (2022 – \$4,238,000), calculated using a discount rate of 2.21%. As at December 31, 2023, the deposit amounted to \$4,552,000 (2022 – \$4,317,000) and is recorded in reclamation and other deposits.

The present value of the site closure and reclamation cost obligations for the Lupin mine as at December 31, 2023 is \$19,381,000 (2022 – \$12,732,000), calculated using a discount rate of 3.67% (2022 – 3.37%). Restricted cash at December 31, 2023 amounting to \$8,677,000 (2022 – \$8,483,000) stands as a deposit against reclamation cost obligations. As a result of a review of the reclamation costs, the reclamation liability was revised by \$6,459,000 (2022 – \$9,889,000) as at December 31, 2023. The Company spent \$731,000 (2022 – \$4,965,000) for reclamation work at the Lupin mine during the year ended December 31, 2023, using the funds in bonding. As at December 31, 2023, the Company has recognized \$4,238,000 as current for the liability for reclamation spend, which represents the value of the expected work during the year ended December 31, 2024 (2022 – \$2,035,000). The vast majority of the reclamation activities are expected to be completed by the end of 2025.

11. Other provisions

The Company's Costerfield mine provide for a vacation provision for their current employees, in accordance with local statutory requirements.

	Employee benefits
	(\$'000)
Balance, December 31, 2021	4,155
Additions	2,407
Amounts paid	(2,666)
Foreign exchange	(270)
Balance, December 31, 2022	3,626
Additions	2,800
Amounts paid	(2,768)
Foreign exchange	6
Balance, December 31, 2023	3,664
Less: current portion	3,437
Total non-current portion	227

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12. Share capital

As at December 31, 2023, the Company had an unlimited number of authorized common shares without par value and 92,883,925 common shares outstanding (December 31, 2022 – 92,456,701 common shares). All outstanding common shares are fully paid.

(a) Share-based compensation

	2023	2022
	(\$'000)	(\$'000)
Share-based compensation on options	440	422
Change in fair value for cash election option	(502)	105
Share unit amortization	982	865
	920	1,392

(b) Stock options

Stock options – equity based

340,731 stock options were granted at an exercise price of C\$2.58 during the year ended December 31, 2023 (2022 – 295,175 at C\$2.65). The value of options granted was determined using the Black-Scholes option pricing model. A weighted average grant date fair value of C\$2.01 (2022 – C\$1.92) was calculated using the following weighted average assumptions. Expected stock price volatility and option life are based on the Company's historical share price volatility and option life.

	2023	2022
Risk free interest rate	4.25%	1.68%
Expected dividend yield	0.00%	0.00%
Expected life of options in years	7.00	7.00
Expected stock price volatility	80.63%	81.92%
Expected forfeiture rate	0.00%	0.00%

On May 20, 2020, the shareholders of the Company approved an Omnibus Equity Incentive Plan (the "Omnibus Plan"), which provides flexibility to the Company to grant equity-based incentive awards in the form of stock options, restricted share units, performance share units and deferred share units as described in the Company's Management Information Circular dated April 3, 2020. The Omnibus Plan replaced the Company's Stock Option Plan and RSU Plan, which remain in effect with respect to stock options and RSUs issued prior to the adoption of the Omnibus Plan, but no further stock options and RSUs will be issued thereunder. The total number of common shares reserved for issuance pursuant to awards granted under the Omnibus Plan and all other security-based compensation outstanding under the Stock Option Plan and RSU Plan shall not exceed 10% of the issued and outstanding common shares from time to time.

Options issued until December 31, 2016 had a maximum term of five years, and thereafter have a maximum term of up to seven years.

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12. Share capital (continued)

(b) Stock options (continued)

	Number of options	Weighted average exercise price C\$
Balance, December 31, 2021	1,874,007	1.58
Granted	295,175	2.65
Exercised	(231,760)	1.36
Balance, December 31, 2022	1,937,422	1.77
Granted	340,731	2.58
Exercised	(13,334)	0.61
Balance, December 31, 2023	2,264,819	1.90

The following table summarizes information about the stock options outstanding and exercisable as at December 31, 2023:

Number of stock options outstanding	Grant Date	Options outstanding		Options exercisable	
		Weighted average remaining contractual life (years)	Weighted average exercise price C\$	Number of options exercisable	Weighted average exercise price C\$
140,000	March 27, 2017	0.50	6.00	140,000	6.00
199,500	April 2, 2018	1.50	2.00	199,500	2.00
280,000	April 8, 2019	2.50	1.10	280,000	1.10
714,666	March 20, 2020	3.50	0.61	714,666	0.61
294,747	February 25, 2021	4.50	2.14	196,498	2.14
295,175	February 25, 2022	5.50	2.65	98,392	2.65
252,688	February 23, 2023	6.50	2.63	-	-
88,043	May 12, 2023	6.50	2.43	-	-
2,264,819		3.86	1.90	1,629,056	1.64

Stock options – cash election based

Option holders resident in Australia have a choice of receiving cash in the amount equal to the differences between the exercise price and the market price of the Company's shares at the date of exercise. The cash election option expires two days after the vesting date. The share purchase option remains exercisable until the end of the term, which is generally five years from the date of grant. The liability, recorded in trade and other payables, is remeasured at fair value at each reporting date. As at December 31, 2023, the liability was \$30,000 (2022 – \$427,000). For the year ended December 31, 2023, the Company recognized a fair value measurement gain of \$500,000 (2022 – loss of \$105,000), which is included in the share-based compensation expense.

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12. Share capital (continued)

(b) Stock options (continued)

The fair value of a cash election option is determined by using the Black-Scholes option pricing model using the following weighted average assumptions as at December 31, 2023 and 2022. The fair value is determined based on Level 1 and 2 inputs as follows:

	2023	2022
Risk free interest rate	3.91%	4.07%
Expected dividend yield	0.00%	0.00%
Expected life of options in years	2.15	2.16
Expected stock price volatility	70.33%	71.14%
Expected forfeiture rate	0.00%	0.00%

As at December 31, 2023, 315,228 (2022 – 399,012) stock options with the cash election option were outstanding.

(c) Restricted stock units (“RSUs”)

The Company has a RSU Plan and has granted RSUs to certain directors. Under the RSU Plan, those directors granted RSUs will receive the Company’s common shares at no cost at the end of the vesting period, which are based on graded vesting over three years. Each RSU entitles the holder to one common share. The number of granted RSUs is subject to an upward adjustment based on the Company’s dividend declarations during the vesting period. The RSU value is determined based on the fair value of the Company’s share at the grant date and amortized over the vesting period, which is recorded in share-based compensation and share option reserve.

The number of RSUs as at December 31, 2023 and 2022, is as follows:

	Number of RSU awards
Balance, December 31, 2021	475,958
Granted	118,337
Redeemed	(240,664)
Balance, December 31, 2022	353,631
Granted	153,752
Redeemed	(225,343)
Balance, December 31, 2023	282,040

For the year ended December 31, 2023, the Company recorded \$252,000 (2022 – \$236,000), respectively, as a share-based compensation expense relating to RSUs.

(d) Performance stock units (“PSUs”)

The Company has granted PSUs to certain employees. Under the Omnibus Plan, those employees granted PSUs will receive the Company’s common shares at no cost upon the achievement of certain performance goals during the specified vesting period. Each PSU entitles the holder to one common share. The number of granted PSUs is subject to an upward adjustment based on the Company’s dividend declarations during the vesting period. The PSU value is determined based on the fair value of the Company’s common shares at the grant date and amortized over the vesting period, which is recorded in share-based compensation and share option reserve.

The number of PSUs outstanding as at December 31, 2023 and 2022, is as follows:

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12. Share capital (continued)

(d) Performance stock units ("PSUs") (continued)

	Number of PSU awards
Balance, December 31, 2021	296,049
Granted	236,673
Redeemed	(98,683)
Balance, December 31, 2022	434,039
Granted	532,503
Redeemed	(177,574)
Balance, December 31, 2023	788,968

For the year ended December 31, 2023, the Company recorded \$482,000 (2022 – \$467,000) as a share-based compensation expense relating to PSUs.

(e) Deferred stock units ("DSUs")

Commencing in 2021, non-executive directors were granted part of their compensation in the form of DSUs, rather than RSUs. Under the Omnibus Plan, those directors granted DSUs receive the Company's common shares at no cost following their departure from the board. Each DSU entitles the holder to one common share. The number of granted DSUs is subject to an upward adjustment based on the Company's dividend declarations during the vesting period. The DSU value is determined based on the fair value of the Company's common shares at the grant date, which is recorded in share-based compensation and share option reserve.

The number of DSUs outstanding as at December 31, 2023 and 2022, is as follows:

	Number of DSU awards
Balance, December 31, 2021	150,148
Granted	136,044
Redeemed	(23,364)
Balance, December 31, 2022	262,828
Granted	159,999
Balance, December 31, 2023	422,827

For the year ended December 31, 2023, the Company recorded \$248,000 (2022 – \$162,000) as a share-based compensation expense relating to DSUs.

(f) Normal Course Issuer Bid

On January 16, 2023, the Toronto Stock Exchange (the "TSX") approved the Company's notice of intention to make a normal course issuer bid ("NCIB") for a portion of the Company's common share. The NCIB was made in accordance with the requirements of the TSX.

The following table summarizes the NCIB transactions during the year ended December 31, 2023. Purchases are made at the discretion of the Company and the shares acquired under the NCIB are cancelled upon purchase.

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12. Share capital (continued)

(f) Normal Course Issuer Bid (continued)

	Number of shares repurchased	Average price of repurchase	Cost of repurchase
		C\$	C\$
Year ended December 31, 2023			
2023 NCIB	166,600	2.37	395,433
	166,600		395,433

	Life of plan		Maximum number of securities to be purchased over life of plan	Maximum number of securities to be purchased on a daily basis
	From	To		
2023 NCIB	January 18, 2023	January 17, 2024	4,622,835 common shares	6,723 common shares

13. Income taxes

Income tax expense consists of the following:

	2023	2022
	(\$'000)	(\$'000)
Current tax		
Adjustment in respect of prior periods	(643)	(101)
Income tax	5,510	15,459
	4,867	15,358
Deferred tax		
Origination and reversal of temporary differences	(8)	(1,897)
Increase in unrecognized losses	1,828	3,315
	1,820	1,418
Total income tax expense	6,687	16,776

Income tax expense differs from the amount that would result from applying the Canadian federal and provincial income tax rates to income before income taxes. These differences result from the following items:

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(Expressed in U.S. dollars, except where otherwise noted)

13. Income taxes (continued)

	2023	2022
	(\$'000)	(\$'000)
Income before income taxes	14,548	40,282
Canadian federal and provincial income tax rates	26.5%	26.5%
Income tax expense based on above rates	3,855	10,675
Increase (decrease) due to:		
Non-deductible expenditures	966	403
Effect of different foreign tax rates on earnings of subsidiaries	661	2,011
Increase in unrecognized losses	1,801	3,314
Adjustment in respect of prior periods	(643)	(101)
Others	47	474
	6,687	16,776

The tax rates used for the reconciliations above are the corporate tax rates applicable to Mandalay in Canadian jurisdictions. The applicable tax rate charged was 26.5% in 2023 and 2022.

The components of deferred income taxes are as follows:

	2023	2022
	(\$'000)	(\$'000)
Deferred tax assets		
Tax losses carried forward	855	728
Deductible temporary differences and other:		
Unrealised losses on derivatives	342	2,979
Provisions and accruals	1,512	3,613
Deferred tax assets	2,709	7,320
Deferred tax liabilities		
Property, plant and equipment	(15,034)	(14,738)
Finance leases	-	(72)
Unrealised foreign exchange losses	(1,165)	(1,195)
Unrealised gain on derivatives	-	(1,521)
Other	329	(995)
Deferred tax liabilities	(15,870)	(18,521)
Deferred tax liability, net	(13,161)	(11,201)
Deferred tax liability	(13,161)	(11,201)
Deferred tax liability, net	(13,161)	(11,201)

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13. Income taxes (continued)

Changes in the Company's net deferred income tax liabilities are as follows:

	2023	2022
	(\$'000)	(\$'000)
Opening net deferred tax liabilities	(11,201)	(10,330)
Income tax expense charged to earnings during the year	(1,820)	(1,418)
Foreign exchange	(140)	547
Ending net deferred tax liabilities	(13,161)	(11,201)

Deferred tax assets not recognized at the reporting date are summarized as follows:

	2023	2022
	(\$'000)	(\$'000)
Deferred tax assets		
Tax losses carried forward	30,890	31,402
Deductible temporary differences:		
Financing costs	175	416
Unrecognized deferred tax assets	31,065	31,818

As at December 31, 2023, the Company had unrecognized Canadian income tax losses of approximately \$134,899,000 (2022 – \$135,389,000). Of these losses, \$98,236,000 (2022 – \$100,522,000) will expire from 2026 through 2042.

The aggregate amount of taxable temporary differences associated with investments in subsidiaries, for which deferred tax liabilities have not been recognized as at December 31, 2023 is \$161.3 million (December 31, 2022 – \$155.7 million). No deferred tax liabilities are recognized on the temporary differences associated with investment in subsidiaries because the Company controls the timing of reversal and it is not probable that they will reverse in the foreseeable future.

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14. Revenue

Disaggregation of revenue

In the following table, the Company's revenue is disaggregated by primary geographical market, major products and service lines. The table also includes a reconciliation of the disaggregated revenue with the Company's reportable segments (see Note 20).

Year ended December 31	Costerfield		Björkdal		Total	
	2023	2022	2023	2022	2023	2022
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Primary geographical markets						
Australia	90,802	117,513	-	-	90,802	117,513
Sweden	-	-	80,171	71,869	80,171	71,869
Revenue from contracts with customers	90,802	117,513	80,171	71,869	170,973	189,382
Provisional pricing adjustments	557	(710)	1,814	3,027	2,371	2,317
Total revenue from mining operations	91,359	116,803	81,985	74,896	173,344	191,699
Commodities						
Gold	67,918	86,898	80,171	71,869	148,089	158,767
Antimony	22,884	30,615	-	-	22,884	30,615
Revenue from contracts with customers	90,802	117,513	80,171	71,869	170,973	189,382
Provisional pricing adjustments	557	(710)	1,814	3,027	2,371	2,317
Total revenue from mining operations	91,359	116,803	81,985	74,896	173,344	191,699

15. Cost of sales

The cost of sales for the years ended December 31, 2023 and 2022, consists of:

	2023	2022
	(\$'000)	(\$'000)
Raw materials and consumables	27,924	30,358
Salary and employee benefits	37,265	37,464
Contractors	20,620	15,546
Change in inventories	4,702	(3,086)
Royalties	2,480	3,255
Other	12,932	11,367
	105,923	94,904

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16. Administration expenses

The administration expenses for the years ended December 31, 2023 and 2022 consist of the following:

	2023	2022
	(\$'000)	(\$'000)
Salaries, short-term incentives, and other benefits	4,523	2,787
Legal and accounting	921	1,343
Administrative and office	452	795
Travel	375	322
Expected credit loss	215	-
Other	607	369
	7,093	5,616

17. Finance costs

The finance costs for the years ended December 31, 2023 and 2022 consist of the following:

	2023	2022
	(\$'000)	(\$'000)
Loan Facility		
Interest on Revolver Credit Facility	1,878	232
Realised loss on gold derivative contracts	8,291	7,948
Interest on Syndicated Facility	-	2,332
Accelerated finance cost for repayment of loan	-	601
Other		
Interest on other borrowings and other charges	233	362
Accretion of reclamation and site closure costs	716	403
	11,118	11,878

18. Gain (loss) on financial instruments

The Company has recognized a net change in liabilities related to financial instruments of \$4,448,000 for the year ended December 31, 2023 (2022 – gain of \$5,247,000). Details of this are given below:

(a) FX derivative contracts

On December 20th, 2023, the Company entered into FX derivative contracts with the Bank of Nova Scotia ("Scotia"). These consist of AUD/USD contracts where Mandalay sells \$3,400,000 per month, buys AUD within a 0.6795 by 0.7000 costless collar; and USD/SEK contracts where Mandalay sells \$3,400,000 per month, buys SEK within a 9.50 x 10.25 costless collar, with monthly average rate settlements until December 2024. These derivatives are measured at fair value through profit or loss at the end of each reporting period. The Company recorded an unrealized fair value loss of \$651,000 for the year ended December 31, 2023.

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18. Gain (loss) on financial instruments (continued)

(b) Gold derivative contracts

The US dollar collar contracts with HSBC and the Australia dollar contracts with Macquarie were completed and settled as on June 30, 2023 and July 4, 2023 respectively. There were no contracts open as on December 31, 2023.

The contracts were classified as Level 2, fair value through profit or loss financial instruments with fair value determined using the pricing models that utilize a variety of observable inputs that are a combination of quoted prices, applicable yield curves and credit spreads.

(c) Marketable securities

On May 5, 2021, the Company received 2,054,794 shares of Aftermath with a fair value of C\$0.73 per share as part of the compensation under the Challacollo sale agreement.

On August 10, 2022, the Company further received 6,122,448 shares from Aftermath with a fair value of C\$0.245 per share as part of the compensation. For the year ended December 31, 2023, the Company sold 1,424,148 shares at an average of C\$0.24 per share (2022 – 1,376,000 shares at average price of C\$0.31 per share). The value of securities as at December 31, 2023 is \$921,000 (2022 – \$1,173,000).

These securities are stated at fair value with any resulting gain or loss recognised in the consolidated statements of income and comprehensive income under loss (gain) on financial instruments. The Company recorded an unrealized fair value loss of \$30,000 (2022 – loss of \$87,000) and recorded a realized fair value gain of \$3,000 (2022 – gain of \$60,000) for the year ended December 31, 2023, using Level 1 assumptions.

On December 18, 2021, the Company received 29,375,121 shares (after consolidation of 20 shares into 1 share) of Equus Mining Ltd with a fair value of A\$0.18 per share as part of the compensation under the Cerro Bayo sale agreement. The value of securities as at December 31, 2023 is \$1,001,000 (2022 – \$1,576,000). Equus securities are stated at fair value with any resulting gain or loss recognised in the consolidated statements of income and comprehensive income under loss (gain) on financial instruments. The Company recorded an unrealized fair value loss of \$600,000 (2022 – loss of \$1,267,000) for the year ended December 31, 2023, using Level 1 assumptions.

19. Income per share

As at December 31, 2023 and 2022, the weighted average number of common shares for the purpose of calculating diluted income per share reconciles to the weighted average number of common shares used in the calculation of basic income per share as follows:

	2023	2022
	('000)	('000)
Net income for the year	7,861	23,506
Basic weighted average number of shares outstanding	92,810	92,132
Effect of dilutive securities:		
Stock options	682	908
RSU	282	354
PSU	789	434
DSU	423	263
Diluted weighted average number of shares outstanding	94,986	94,091

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19. Income per share (continued)

For the purposes of determining the diluted weighted average number of shares for the year ended December 31, 2023, 776,000 options were considered anti-dilutive and therefore excluded from the calculation (2022 – 140,000 options).

	2023	2022
	('000)	('000)
Anti-dilutive securities		
Stock options	776	140

20. Segmented information

The Company manages its operations by geographical location. These reportable operating segments are summarized in the table below ("Canada" is the provision of corporate services and administrative support and also includes non-core assets held in Canada):

	Year ended December 31, 2023				
	Australia	Sweden	Chile	Canada	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Revenue	91,359	81,985	-	-	173,344
Cost of sales, excluding depletion and depreciation	(49,880)	(56,043)	-	-	(105,923)
Depletion and depreciation	(12,580)	(20,630)	-	-	(33,210)
Income from mining operations	28,899	5,312	-	-	34,211
Other operating expenses	(3,450)	(2,979)	(158)	(1,118)	(7,705)
Write-off of assets (Note 10)	(724)	-	-	-	(724)
Revision of reclamation liability	-	-	-	(6,459)	(6,459)
Other expenses, except for fair value adjustment	(3,341)	(5,117)	(641)	(124)	(9,223)
Gain (loss) on financial instruments	2,923	2,803	-	(1,278)	4,448
Income (loss) before income taxes	24,307	19	(799)	(8,979)	14,548
Current tax expense	(4,867)	-	-	-	(4,867)
Deferred tax recovery (expense)	(1,799)	(21)	-	-	(1,820)
Net income (loss) for the period	17,641	(2)	(799)	(8,979)	7,861
Cash expenditure for property, plant and equipment	15,696	25,977	66	-	41,739
Total non-current assets as at December 31, 2023	70,910	124,879	11,012	8,613	215,414
Total assets as at December 31, 2023	116,718	152,984	11,091	14,455	295,248
Total liabilities as at December 31, 2023	27,057	23,740	-	47,519	98,316

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20. Segmented information (continued)

	Year ended December 31, 2022				
	Australia	Sweden	Chile	Canada	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Revenue	116,803	74,896	-	-	191,699
Cost of sales, excluding depletion and depreciation	(41,153)	(53,751)	-	-	(94,904)
Depletion and depreciation	(14,446)	(19,426)	-	(2)	(33,874)
Income (loss) from mining operations	61,204	1,719	-	(2)	62,921
Other operating expenses	(3,616)	(2,177)	(319)	(1,230)	(7,342)
Write-off of assets (Note 10)	-	(651)	-	-	(651)
Revision of reclamation liability (Note 6)	-	-	-	(9,889)	(9,889)
Other income (expenses), except for fair value adjustment	3,350	(12,336)	(682)	(2,164)	(11,832)
Gain on sale of subsidiary	-	-	-	1,828	1,828
Gain (loss) on financial instruments	931	5,609	-	(1,293)	5,247
Income (loss) before income taxes	61,869	(7,836)	(1,001)	(12,750)	40,282
Current tax expense	(15,358)	-	-	-	(15,358)
Deferred tax recovery (expense)	(3,303)	1,885	-	-	(1,418)
Net income	43,208	(5,951)	(1,001)	(12,750)	23,506
Cash expenditure for property, plant and equipment	16,639	22,717	314	-	39,670
Total non-current assets as at December 31, 2022	65,088	115,443	10,943	6,465	197,939
Total assets as at December 31, 2022	116,110	136,704	10,993	18,417	282,224
Total liabilities as at December 31, 2022	32,167	25,588	(3)	40,318	98,070

For the year ended December 31, 2023, the Company had five customers from which it earned more than 10% of its total revenue (2022 – three customers).

Revenue from these customers is summarized as follows:

	2023	2022
	(\$'000)	(\$'000)
Costerfield (gold and antimony)		
Customer 1	23,729	42,754
Customer 2	44,820	58,556
Customer 3	16,769	-
	85,318	101,310
Björkdal (gold)		
Customer 4	64,540	58,632
Customer 5	17,445	-
	81,985	58,632
	167,303	159,942

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(Expressed in U.S. dollars, except where otherwise noted)

21. Capital management

The Company manages its capital to ensure that it will be able to continue as a going concern while maximizing the return to stakeholders through the optimization of the debt and equity balance. In the management of capital, the Company includes the components of equity, long-term debt, net of cash and cash equivalents.

Capital, as defined above, as at December 31, 2023 and 2022 is summarized in the following table:

	2023	2022
	(\$'000)	(\$'000)
Equity	196,932	184,154
Non-current borrowings	20,417	19,776
Non-current lease liabilities	1,327	2,504
	218,676	206,434
Cash and cash equivalents	(26,855)	(38,377)
	191,821	168,057

The Company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue new shares or purchase existing shares under Normal Course Issuer Bid arrangements, issue new debt or pay down existing debt, or acquire or dispose of assets.

In order to facilitate the management of its capital requirements, the Company prepares annual budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The annual budget and quarterly updated forecasts are approved by the Company's Board of Directors.

22. Financial risk management

The Company thoroughly examines the various financial instrument risks to which it is exposed and assesses the impact and likelihood of those risks. These risks may include credit risk, liquidity risk, currency risk, interest rate risk and commodity price risk. Where material, these risks are reviewed and monitored by the Company's Board of Directors.

(a) Credit risk

Credit risk is the risk of an unexpected loss if a counter party to its financial instrument fails to meet its contractual obligations.

The Company's financial assets are primarily comprised of cash and cash equivalents, trade and other receivables, derivative financial instruments and reclamation and other deposits. Credit risk is primarily associated with trade receivables; however, it also arises on cash and cash equivalents.

To mitigate exposure to credit risk, the Company has established policies to limit the concentration of credit risk, to ensure counterparties demonstrate minimum acceptable creditworthiness, and to ensure liquidity of available funds.

The Company closely monitors its financial assets and does not have any significant concentration of credit risk. The Company sells its antimony and gold exclusively to large international organizations with strong credit ratings.

The historical level of customer defaults is minimal and, as a result, the credit risk associated with gold and antimony trade receivables as at December 31, 2023 is not considered to be high.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

22. Financial risk management (continued)

(a) Credit risk (continued)

The Company's maximum exposure to credit risk as at December 31, 2023 and 2022, is as follows:

	2023	2022
	(\$'000)	(\$'000)
Cash and cash equivalents	26,855	38,377
Trade and other receivables	26,607	13,570
Reclamation and other deposits	19,815	15,707
	73,277	67,654

(b) Aging of past due but not impaired receivables

The Company receives 90%-95% of the estimated gold and antimony revenue after the date of the provisional invoice. The provisional invoice is issued close to the shipment delivery date. The final selling price is determined up to 180 days after the delivery when smelting and refining are complete. The remaining 5%-10% receivable balance is settled with an adjustment once the final selling price is determined. The Company has financial risk management policies in place to ensure that all receivables are received within the pre-agreed credit terms.

For the year ended December 31, 2023, substantially all of the Company's gold and antimony production was sold to five customers (2022 – three) and there was no significant change in the credit quality of these customers over that time. There are neither past due amounts nor impaired trade receivables as at December 31, 2023 and 2022. The Company's trade debtors as at December 31, 2023 includes a relatively higher than normal number of provisional invoices due to shipment availability at the end of the year ended December 31, 2023.

(c) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company manages liquidity risk through the management of its capital structure.

The following are the contractual maturities of commitments. The amounts presented represent the future undiscounted principal and interest cash flows and therefore do not necessarily equate to the carrying amounts on the Company's consolidated statements of financial position.

	2023				2022
	Less than 1 year	1-3 years	4-5 years	After 5 years	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Trade and other payables	21,727	-	-	-	21,727
Borrowings	631	20,417	-	-	21,048
Lease liabilities	1,221	1,327	-	-	2,548
Reclamation and site closure costs provision	4,394	20,367	7,647	6,015	38,424
Income taxes payable	-	-	-	-	-
Financial instruments	651	-	-	-	651
	28,624	42,111	7,647	6,015	84,397
					84,893

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

22. Financial risk management (continued)

(d) Currency risk

The Company operates in Canada, Australia, Chile and Sweden. As a result, the Company has foreign currency exposure with respect to items not denominated in U.S. dollars.

(i) Exposure to currency risk

The Company is exposed to currency risk through the following assets and liabilities denominated in currencies other than the U.S. dollar: cash and cash equivalents, trade and other receivables, reclamation and other deposits, trade and other payables and borrowings.

(ii) Translation exposure

The Company's presentation currency is U.S. dollars. The Company's foreign operations translate their operating results from their respective functional currency to U.S. dollars. Therefore, exchange rate movements in the Australian dollar, Canadian dollar, Chilean peso and Swedish krona can have a significant impact on the Company's consolidated financial position, as reported in U.S. dollars.

The following tables demonstrate the sensitivity to a reasonably possible change in AUD, SEK and CAD exchange rates, with all other variables held constant. The impact on the Company's profit is due to changes in the fair value of monetary assets and liabilities in place at the consolidated statements of financial position date. The Company's exposure to foreign currency changes for all other currencies is not material.

		Change in USD rate	Effect on profit before tax		Effect on pre-tax equity	
			2023	2022	2023	2022
5%	Australia	±5%	1,215	3,093	4,483	4,197
5%	Sweden	±5%	(1)	392	6,462	5,556
5%	Canada	±5%	449	638	1,621	1,095

(e) Interest rate risk

Interest rate risk is the risk that the fair value or the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to interest rate changes is primarily related to the borrowings under the Revolving Credit Facility as at December 31, 2023. Interest to be paid on the Revolving Credit Facility is the SOFR rate plus the applicable margin, which is based on Company's leverage ratio. The variable interest rates are on the equipment loan facility of Björkdal bearing interest at the 30 or 90 days STIBOR plus 1.54% - 3.33% per annum and equipment leases of Björkdal bearing interest calculated at 2.50%-6.00% per annum.

(f) Commodity price risk

The Company's income and cash flows are subject to price risk due to fluctuations in the market price of gold and antimony. World metal prices have historically fluctuated widely.

The Company is subject to price risk for fluctuations in the cost of energy, principally electricity and purchased petroleum products. The Company's production costs are also affected by the prices of materials it consumes or uses in its operations, such as lime, reagents and explosives. The prices of such commodities are influenced by supply and demand trends affecting the mining industry in general and other factors outside the Company's control.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

23. Fair value measurement

The fair values of cash and cash equivalents, trade and other receivables (non-provisional pricing portion), reclamation and other deposits, and trade and other payables approximate their carrying value due to the nature of these items.

The Company defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In assessing the fair value of a particular contract, the market participant would consider the credit risk of the counterparty to the contract. Consequently, when it is appropriate to do so, the Company adjusts the valuation models to incorporate a measure of credit risk. Fair value represents management's estimates of the current market value at a given point in time.

As at December 31, 2023 and 2022, the Company's financial assets and liabilities are categorized as follows:

	2023			
	FVTPL	Loans and receivables	Other financial liabilities	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Financial assets				
Cash and cash equivalents	-	26,855	-	26,855
Trade receivables	-	21,425	-	21,425
Reclamation and other deposits	-	19,815	-	19,815
Other receivables	-	5,182	-	5,182
Marketable securities	1,922	-	-	1,922
Financial liabilities				
Trade and other payables	30	-	21,697	21,727
Borrowings	-	-	20,972	20,972
Lease liabilities	-	-	2,548	2,548
Derivative financial instruments	651	-	-	651
	2022			
	FVTPL	Loans and receivables	Other financial liabilities	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Financial assets				
Cash and cash equivalents	-	38,377	-	38,377
Trade receivables	-	10,555	-	10,555
Reclamation and other deposits	-	15,707	-	15,707
Other receivables	-	3,015	-	3,015
Marketable securities	2,749	-	-	2,749
Financial liabilities				
Trade and other payables	427	-	20,388	20,815
Borrowings	-	-	20,006	20,006
Lease liabilities	-	-	3,895	3,895
Derivative financial instruments	5,740	-	-	5,740

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

23. Fair value measurement (continued)

	2023		2022	
	Carrying value	Fair value	Carrying value	Fair value
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Financial assets				
Cash and cash equivalents	26,855	26,855	38,377	38,377
Reclamation and other deposits	19,815	19,815	15,707	15,707
Trade receivable	21,425	21,425	10,555	10,555
Other receivables	5,182	5,182	3,015	3,015
Marketable securities	1,922	1,922	2,749	2,749
Financial liabilities				
Borrowings	20,972	43,889	20,006	43,889
Trade and other payables	21,727	21,727	20,815	20,815
Lease liabilities	2,548	2,548	3,895	3,895
Derivative financial instruments	651	651	5,740	5,740

The Company has certain financial assets and liabilities that are measured at fair value or fair value is disclosed. The fair value hierarchy establishes three levels to classify the inputs to valuation techniques used to measure fair value. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, inputs other than quoted prices that are observable for the asset or liability (for example, interest rate and yield curves observable at commonly quoted intervals, forward pricing curves used to value currency and commodity contracts and volatility measurements used to value option contracts), or inputs that are derived principally from or corroborated by observable market data or other means. Level 3 inputs are unobservable (supported by little or no market activity). The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to the Level 3 inputs.

As at December 31, 2023, other receivables and marketable securities valued using Level 1 inputs. Provisional pricing feature included in trade and other payables and derivative financial instruments are based on Level 1 inputs. Reclamation and other deposits and long-term debt are based on Level 2 inputs. The Company constantly monitors events or changes in circumstances that may cause transfers between the levels of the fair value hierarchy.

24. Commitments and contingencies

The Company is involved in legal proceedings from time to time arising in the ordinary course of business. Typically, the amount of the ultimate liability with respect to these actions will not materially affect the Company's consolidated financial position and financial performance.

The Company's Björkdal and Costerfield mines have entered into several equipment leases and the detailed future minimum payments relating to these leases are outlined in Note 7.

Mandalay Resources Corporation

Notes to the consolidated financial statements

December 31, 2023 and 2022

(Expressed in U.S. dollars, except where otherwise noted)

25. Related party transactions

Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Company as a whole. The Company has determined that key management personnel consist of members of the Company's Board of Directors and its executive officers.

During the year ended December 31, 2023 and 2022, the following compensation was incurred:

	2023	2022
	(\$'000)	(\$'000)
Directors and officer's compensation (current and former)	1,978	1,605
Share-based compensation (current and former)	744	719
	2,722	2,324

26. Expenses by nature

The following employee benefits expenses are included in cost of sales and administrative expenses.

	2023	2022
	(\$'000)	(\$'000)
Salaries, short-term incentives, and other benefits	41,788	40,251
Share-based compensation	920	1,392
	42,708	41,643

27. Subsequent events

On February 12, 2024, the Company entered into gold derivative contracts with the Macquarie Bank Ltd for a total of 25,008 ounces of saleable gold commencing from March-24 to December-24. These contracts are costless collar hedges with a floor price of US\$1,980.00 per ounce and a ceiling of US\$2,121.50 per ounce.

On February 15, 2024, the Company sought the approval of the Toronto Stock Exchange to make a normal course issuer bid ("NCIB") for up to 5% of its outstanding common shares.



Condensed consolidated interim financial statements

For the three months ended

March 31, 2024 and 2023

(Unaudited)

Mandalay Resources Corporation

March 31, 2024

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Mandalay Resources Corporation

Condensed consolidated interim statements of income and comprehensive income (loss) Three months ended March 31, 2024 and 2023

(Expressed in U.S. dollars)

(Unaudited)

	Three months ended March 31,	
	2024	2023
	(\$'000)	(\$'000)
Revenue (Note 7)	55,511	42,179
Cost of operations		
Cost of sales, excluding depletion and depreciation	27,031	26,606
Depletion and depreciation	10,708	8,037
	37,739	34,643
Income from mining operations	17,772	7,536
Expenses		
Administration	1,745	2,628
Share-based compensation (Note 6(a))	391	336
Gain on disposal of property, plant and equipment	(40)	(4)
Write-off of assets	290	-
	2,386	2,960
Income from operations	15,386	4,576
Other expense (income)		
Finance costs (Note 9)	778	3,605
Loss (gain) on financial instruments (Note 8)	5,974	(36)
Interest and other income	(487)	(301)
Foreign exchange gain	(698)	(504)
	5,567	2,764
Income before income taxes	9,819	1,812
Income tax expense (recovery)		
Current	3,040	2,930
Deferred	891	(1,672)
Income tax expense	3,931	1,258
Net income for the period	5,888	554
Other comprehensive loss, net of tax		
Item that may subsequently be reclassified to net income		
Foreign currency translation	(8,934)	(342)
Comprehensive (loss) income for the period	(3,046)	212
Net income per share		
Basic	0.06	0.01
Diluted	0.06	0.01
Weighted average number of common shares outstanding (Note 10)		
Basic ('000)	92,924	92,561
Diluted ('000)	95,708	94,581

See accompanying notes to the condensed consolidated interim financial statements

Mandalay Resources Corporation

Condensed consolidated interim statements of financial position

(Expressed in U.S. dollars)

(Unaudited)

	March 31, 2024	December 31, 2023
	(\$'000)	(\$'000)
Assets		
Current assets		
Cash and cash equivalents	47,112	26,855
Trade receivables and other assets	18,930	26,238
Marketable securities (Note 8(c))	1,720	1,922
Inventories	22,330	22,715
Prepaid expenses	1,400	2,104
	91,492	79,834
Non-current assets		
Reclamation and other deposits	19,024	19,815
Trade receivables and other assets	364	369
Property, plant and equipment, net	189,474	195,230
	208,862	215,414
	300,354	295,248
Liabilities		
Current liabilities		
Trade and other payables	19,824	21,727
Borrowings (Note 4)	1,751	631
Lease liabilities	938	1,221
Reclamation and site closure costs provision (Note 5)	7,793	4,238
Other provisions	3,429	3,437
Financial instruments (Note 8)	5,897	651
	39,632	31,905
Non-current liabilities		
Borrowings (Note 4)	23,993	20,417
Lease liabilities	1,055	1,327
Reclamation and site closure costs provision (Note 5)	27,454	31,279
Other provisions	336	227
Deferred tax liability	13,579	13,161
	66,417	66,411
	106,049	98,316
Equity		
Share capital (Note 6)	231,736	231,485
Share option reserve (Note 6)	5,438	5,270
Foreign currency translation reserve	(63,407)	(54,473)
Retained earnings	20,538	14,650
	194,305	196,932
	300,354	295,248

Approved by the Board of Directors and authorized for issuance on May 8, 2024.

(Signed) Frazer Bouchier

Frazer Bouchier, Director, President and Chief Executive Officer

(Signed) Robert Doyle

Robert Doyle, Director

See accompanying notes to the condensed consolidated interim financial statements

Mandalay Resources Corporation

Condensed consolidated interim statements of changes in equity Three months ended March 31, 2024 and 2023

(Expressed in U.S. dollars, except number of shares)

(Unaudited)

	Number of shares issued	Share capital	Share option reserve	Foreign currency translation reserve	Retained earnings	Total equity
	('000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Balance, December 31, 2023	92,884	231,485	5,270	(54,473)	14,650	196,932
Net income for the period	-	-	-	-	5,888	5,888
Other comprehensive loss for the period	-	-	-	(8,934)	-	(8,934)
Total comprehensive loss	-	-	-	(8,934)	5,888	(3,046)
Stock options exercised (Note 6(b))	40	32	(14)	-	-	18
Share-based compensation (Note 6(a))	-	-	401	-	-	401
Redemption of RSUs, PSUs and DSUs (Notes 6(c), (d) and (e))	121	219	(219)	-	-	-
Share repurchase commitment under normal course issuer bid (Note 6(f))	-	-	-	-	-	-
Balance, March 31, 2024	93,045	231,736	5,438	(63,407)	20,538	194,305

	Number of shares issued	Share capital	Share option reserve	Foreign currency translation reserve	Retained earnings	Total equity
	('000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Balance, December 31, 2022	92,457	231,166	4,621	(58,362)	6,729	184,154
Net income for the period	-	-	-	-	554	554
Other comprehensive loss for the period	-	-	-	(342)	-	(342)
Total comprehensive income	-	-	-	(342)	554	212
Stock options exercised (Note 6(b))	13	11	(5)	-	-	6
Share-based compensation (Note 6(a))	-	-	312	-	-	312
Redemption of RSUs, PSUs and DSUs (Notes 6(c), (d) and (e))	444	592	(592)	-	-	-
Share repurchase commitment under normal course issuer bid (Note 6(f))	(97)	(205)	-	-	27	(178)
Balance, March 31, 2023	92,817	231,564	4,336	(58,704)	7,310	184,506

See accompanying notes to the condensed consolidated interim financial statement

Mandalay Resources Corporation

Condensed consolidated interim statements of cash flows Three months ended March 31, 2024 and 2023

(Expressed in U.S. dollars)

(Unaudited)

	Three months ended March 31,	
	2024	2023
	(\$'000)	(\$'000)
Operating activities		
Net income for the period	5,888	554
Adjustments to reconcile net income to net cash flows from operating activities		
Depletion and depreciation	10,708	8,037
Share-based compensation (Note 6(a))	391	336
Gain on disposal of property, plant and equipment	(40)	(4)
Finance costs (Note 9)	778	3,605
Loss (gain) on financial instruments (Note 8)	5,974	(36)
Interest and other income	(487)	(301)
Unrealized foreign exchange gain	(629)	(462)
Income tax expense	3,931	1,258
Write-off of assets	290	-
Changes in non-cash operating working capital items		
Trade receivables and other assets	6,458	(2,153)
Inventories	95	1,290
Prepaid expenses	625	(350)
Trade and other payables	(1,764)	(698)
Other provisions	263	(51)
Cash generated from operations	32,481	11,025
Interest and other income received	487	301
Interest and bank charges paid	(482)	(532)
Income tax paid	(2,596)	(2,855)
Reclamation expenditures (Note 5)	(105)	(64)
Payment of derivative hedge contracts	(310)	-
Net cash flows from operating activities	29,475	7,875
Investing activities		
Expenditures on property, plant and equipment	(13,145)	(8,624)
Receipt from reclamation deposits	79	-
Proceeds from sale of marketable securities	-	77
Net cash flows used in investing activities	(13,066)	(8,547)
Financing activities		
Proceeds from borrowings (Note 4)	4,966	-
Repayments of borrowings	(221)	(110)
Lease payments	(368)	(466)
Payment of gold derivative hedge contracts under Syndicated Facility	-	(2,977)
Purchase of common shares for cancellation	-	(178)
Shares issued for cash	18	6
Net cash flows used in financing activities	4,395	(3,725)
Effects of exchange rate changes on the balance of cash and cash equivalents held in foreign currencies	(547)	232
Net increase (decrease) in cash and cash equivalents	20,257	(4,165)
Cash and cash equivalents, beginning of the period	26,855	38,377
Cash and cash equivalents, end of the period	47,112	34,212
Cash and cash equivalents consist of		
Cash	47,112	34,212
	47,112	34,212

See accompanying notes to the condensed consolidated interim financial statements

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements
as at March 31, 2024 and December 31, 2023
(Expressed in U.S. dollars, except where otherwise noted)
(Unaudited)

1. Description of business and nature of operations

Mandalay Resources Corporation (“Mandalay” or the “Company”), together with its wholly owned subsidiaries, is a gold and antimony producer engaged in mining and related activities including acquisition, exploration, extraction, processing and reclamation. Mandalay’s assets consist of the Costerfield gold and antimony mine in Australia, the Björkdal gold mine in Sweden, as well as other exploration and care and maintenance projects in Chile and Canada.

Mandalay is incorporated in the province of British Columbia, Canada. The Company’s shares are listed on the Toronto Stock Exchange (“TSX”). The head office and principal address of the Company is 76 Richmond Street East, Suite 330, Toronto, Canada, M5C 1P1. The Company’s registered office is located at 1900-355 Burrard Street, Vancouver, British Columbia, V6C 2G8.

2. Basis of preparation

These unaudited condensed consolidated interim financial statements, including comparatives, have been prepared in accordance with International Accounting Standard 34, *Interim Financial Reporting*.

The preparation of these unaudited condensed consolidated interim financial statements requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, and revenue and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the review affects both current and future periods.

Judgments made by management in the application of International Financial Reporting Standards (“IFRS”) that have a significant effect on the financial statements and estimates with a significant risk of material adjustment in the current and following fiscal years are discussed in the Company’s audited annual consolidated financial statements as at and for the year ended December 31, 2023.

3. Summary of material accounting policies

The preparation of financial data is based on accounting principles and practices consistent with those used in the preparation of the audited annual consolidated financial statements as at and for the year ended December 31, 2023. The accompanying unaudited condensed consolidated interim financial statements should be read in conjunction with the Company’s annual audited consolidated financial statements as at and for the year ended December 31, 2023.

a) Changes in Material Accounting Policies

On January 1, 2024, the Company adopted amendments to IAS 1 to clarify that the classification of liabilities as current or non-current should be based on rights that exist at the end of the reporting period and that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability. For liabilities with covenants, the amendments clarify that only covenants with which an entity is required to comply on or before the reporting date affect the classification as current or non-current. The amendments did not have a significant impact on the Company’s financial statements.

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements
as at March 31, 2024 and December 31, 2023
(Expressed in U.S. dollars, except where otherwise noted)
(Unaudited)

3. Summary of material accounting policies (continued)

a) *Changes in Material Accounting Policies (continued)*

On January 1, 2024, the Company adopted amendments to IFRS 16 to add subsequent measurement requirements for sale and leaseback transactions, particularly those with variable lease payments. The amendments require the seller-lessee to subsequently measure lease liabilities in a way such that it does not recognize any gain or loss relating to the right of use it retains. The amendments did not have a significant impact on the Company's financial statements.

On January 1, 2024, the Company adopted amendments to IAS 7 requiring entities to provide qualitative and quantitative information about their supplier finance arrangements. In connection with the amendments to IAS 7, the IASB also issued amendments to IFRS 7 requiring entities to disclose whether they have accessed, or have access to, supplier finance arrangements that would provide the entity with extended payment terms or the suppliers with early payment terms. The amendments did not have a significant impact on the Company's financial statements.

b) *Recent Accounting Pronouncements*

On August 15, 2023, the IASB issued amendments to IAS 21 to specify how to assess whether a currency is exchangeable and how to determine the exchange rate when it is not exchangeable. The amendments specify that a currency is exchangeable when it can be exchanged through market or exchange mechanisms that create enforceable rights and obligations without undue delay at the measurement date and the specified purpose. For non-exchangeable currencies, an entity is required to estimate the spot exchange rate as the rate that would have applied to an orderly exchange transaction between market participants at the measurement date under prevailing economic conditions. The amendments are effective on January 1, 2025 and are not expected to have a significant impact on the Company's financial statements.

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements
as at March 31, 2024 and December 31, 2023
(Expressed in U.S. dollars, except where otherwise noted)
(Unaudited)

4. Borrowings

	March 31, 2024	December 31, 2023
	(\$'000)	(\$'000)
Revolving Credit Facility	19,662	19,605
Equipment Facilities	6,081	1,443
	25,744	21,048
Less: current portion of total borrowings	1,751	631
Non-current portion of total borrowings	23,993	20,417

Revolving Credit Facility

On December 1, 2022, the Company entered into a credit agreement with the Bank of Nova Scotia ("Scotia"), providing for a senior secured Revolving Credit Facility in an aggregate principal amount of up to \$35,000,000 (the "Revolving Credit Facility"). As at March 31, 2024, the Company was in compliance with all financial covenants under the Revolving Credit Facility.

The Revolving Credit Facility has an effective annual interest rate of 9.40%. The nominal interest rate of SOFR as at March 31, 2024 was 5.32% plus 2.85% margin.

As at March 31, 2024, the outstanding principal under the Revolving Credit Facility was \$20,000,000 with \$15,000,000 undrawn.

Syndicated Facility – Gold Derivative Contracts

In conjunction with the Company's previous senior secured credit facility (the "Syndicated Facility"), Mandalay entered into two separate gold derivative programs with HSBC Bank Canada ("HSBC") and Macquarie Bank Limited ("Macquarie") for a total of 150,000 ounces of saleable gold over the Syndicated Facility's three-year term commencing monthly in July 2020, or 50,000 ounces of saleable gold per year. These programs consisted of a zero-cost collar contract for 75,000 ounces of saleable gold with a floor price of US\$1,550 per ounce and a ceiling of US\$1,617 per ounce; and an Australian dollar gold forward contract for the remaining 75,000 ounces of saleable gold at AU\$2,390 per ounce. The US dollar collar contracts with HSBC and the Australian dollar contract with Macquarie were completed and settled as at June 30, 2023 and July 4, 2023 respectively. There were no contracts open under these programs as at March 31, 2024.

There were other hedging contacts in place at March 31, 2024 (See note 8).

Equipment Facilities

As at March 31, 2024, the Company's Björkdal mine in Sweden had a balance of \$1,816,000 (December 31, 2023 – \$1,443,000) for the equipment loan facilities (the "Equipment Facilities") with several Swedish banks to finance mining equipment. The Equipment Facilities bear variable interest at the 30 or 90 days Stockholm Interbank Offered Rate ("STIBOR") plus 1.54% - 3.25% per annum and are repayable in monthly instalments plus interest and are due to be repaid by March 2028. The Equipment Facilities are secured by the underlying equipment.

Mandalay Resources Corporation

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(Expressed in U.S. dollars, except where otherwise noted)
(Unaudited)

4. Borrowings (continued)

On February 28, 2024, the Company purchased trucks and excavators for Lupin reclamation activities under an equipment loan facility (the "Equipment Facility"). The Equipment Facility bears interest at 4.49% per annum and zero interest respectively, for trucks and Excavators. The loan is repayable in equal monthly instalments ending March 2028. The loan balance as at March 31, 2024 was \$4,265,000.

5. Reclamation and site closure costs

The Company's site closure reclamation obligations consist of costs for the mines at Costerfield, Björkdal and Lupin. Significant site closure and reclamation activities include land rehabilitation, demolition of buildings and mine facilities, ongoing care and maintenance and other costs.

Balances and changes to the site closure and reclamation cost balance are as follows:

	(\$'000)
Balance at December 31, 2022	29,143
Expenditure for reclamation	(731)
Change in estimated future cash outflows	5,804
Accretion	716
Foreign exchange	585
Balance at December 31, 2023	35,517
Expenditure for reclamation	(197)
Change in estimated future cash outflows	599
Accretion	241
Foreign exchange	(913)
Balance at March 31, 2024	35,247
Less: current portion	7,793
Total non-current portion	27,454

During the three months ended March 31, 2024, the Company has incurred reclamation expenditures of \$197,000 (three months ended March 31, 2023 – \$17,000) on reclamation work at the Lupin site in Canada.

6. Share capital

As at March 31, 2024, the Company had an unlimited number of authorized common shares without par value and 93,044,551 common shares outstanding (December 31, 2023 – 92,883,925 common shares). All outstanding common shares are fully paid.

Mandalay Resources Corporation

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(Unaudited)

6. Share capital (continued)

(a) Share-based compensation

	Three months ended	
	2024	March 31, 2023
	(\$'000)	(\$'000)
Share-based compensation on options	138	102
Change in fair value for cash election option	(34)	1
Share unit amortization	287	233
	391	336

(b) Stock options

The number of options outstanding as at March 31, 2024 is as follows:

	Number of options	Weighted average exercise price C\$
Balance, December 31, 2022	1,937,422	1.77
Granted	340,731	2.58
Exercised	(13,334)	0.61
Balance, December 31, 2023	2,264,819	1.90
Granted	1,099,452	1.47
Exercised	(40,000)	0.61
Balance, March 31, 2024	3,324,271	1.77

The following table summarizes information about the stock options outstanding and exercisable as at March 31, 2024:

Mandalay Resources Corporation

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(Unaudited)

6. Share capital (continued)

(b) Stock options (continued)

Number of stock options outstanding	Grant Date	Options outstanding		Options exercisable	
		Weighted average remaining contractual life (years)	Weighted average exercise price C\$	Number of options exercisable	Weighted average exercise price C\$
140,000	March 27, 2017	0.25	6.00	140,000	6.00
199,500	April 2, 2018	1.25	2.00	199,500	2.00
280,000	April 8, 2019	2.25	1.10	280,000	1.10
674,666	March 20, 2020	3.25	0.61	674,666	0.61
294,747	February 25, 2021	4.25	2.14	294,747	2.14
295,175	February 25, 2022	5.25	2.65	196,783	2.65
252,688	February 23, 2023	6.25	2.63	84,229	2.63
88,043	May 12, 2023	6.25	2.43	-	-
1,099,452	February 26, 2024	7.25	1.47	-	-
3,324,271		4.82	1.77	1,869,925	1.78

(c) Restricted stock units ("RSUs")

The number of RSUs outstanding as at March 31, 2024 is as follows:

	Number of RSU awards
Balance, December 31, 2022	353,631
Granted	153,752
Redeemed	(225,343)
Balance, December 31, 2023	282,041
Granted	911,400
Redeemed	(120,627)
Balance, March 31, 2024	1,072,814

For the three months ended March 31, 2024, the Company recorded \$113,000 (three months ended March 31, 2023 – \$56,000) as a share-based compensation expense relating to RSUs.

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements
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(Expressed in U.S. dollars, except where otherwise noted)
(Unaudited)

6. Share capital (continued)

(d) Performance stock units ("PSUs")

The number of PSUs outstanding as at March 31, 2024 is as follows:

	Number of PSU awards
Balance, December 31, 2022	434,039
Granted	532,503
Redeemed	(177,574)
Balance, December 31, 2023	788,968
Redeemed	(241,192)
Balance, March 31, 2024	547,776

For the three months ended March 31, 2024, the Company recorded \$106,000 (three months ended March 31, 2023 – \$93,000) as a share-based compensation expense relating to PSUs. While 241,192 PSUs (three months ended March 31, 2023 – 117,574 PSUs) were redeemed, the payout in the Company's common shares was nil as the performance vesting condition of the PSUs was not satisfied.

(e) Deferred stock units ("DSUs")

The number of DSUs outstanding as at March 31, 2024 is as follows:

	Number of DSU awards
Balance, December 31, 2022	262,828
Granted	159,999
Balance, December 31, 2023	422,827
Granted	244,398
Balance, March 31, 2024	667,225

For the three months ended March 31, 2024, the Company recorded \$67,000 (three months ended March 31, 2023 – \$50,000) as a share-based compensation expense relating to DSUs.

(f) Normal Course Issuer Bid

2024 NCIB

On February 23, 2024, the Toronto Stock Exchange (the "TSX") approved the Company's notice of intention to make a normal course issuer bid ("NCIB") for a portion of the Company's common shares. Purchases under the NCIB will be made in accordance with the requirements of the TSX.

Mandalay Resources Corporation

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as at March 31, 2024 and December 31, 2023
(Expressed in U.S. dollars, except where otherwise noted)
(Unaudited)

6. Share capital (continued)

(f) *Normal Course Issuer Bid (continued)*

2024 NCIB (Continued)

For the three months ended March 31, 2024, no NCIB transactions were executed by the Company. Any purchases made under the NCIB are made at the discretion of the Company and the shares acquired under the NCIB are cancelled upon purchase.

	Life of plan		Maximum number of securities to be purchased over life of plan	Maximum number of securities to be purchased on a daily basis
	From	To		
2024 NCIB	February 27, 2024	February 26, 2025	4,646,196 common shares	3,531 common shares

2023 NCIB

	Number of shares repurchased	Average price of repurchase	Cost of repurchase
		C\$	C\$
Three months ended March 31, 2023			
2023 NCIB	96,900	2.48	240,576
	96,900		240,576

	Life of plan		Maximum number of securities to be purchased over life of plan	Maximum number of securities to be purchased on a daily basis
	From	To		
2023 NCIB	January 18, 2023	January 17, 2024	4,622,835 common shares	6,723 common shares

7. Revenue

Disaggregation of revenue

In the following table, the Company's revenue is disaggregated by primary geographical market, major products. The table also includes a reconciliation of the disaggregated revenue with the Company's reportable segments (see Note 11).

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements

as at March 31, 2024 and December 31, 2023

(Expressed in U.S. dollars, except where otherwise noted)

(Unaudited)

7. Revenue (continued)

Three months ended March 31	Costerfield		Björkdal		Total	
	2024	2023	2024	2023	2024	2023
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Primary geographical markets						
Australia	30,232	22,808	-	-	30,232	22,808
Sweden	-	-	23,054	17,657	23,054	17,657
Revenue from contracts with customers	30,232	22,808	23,054	17,657	53,286	40,465
Provisional pricing adjustments	374	468	1,851	1,246	2,225	1,714
Total revenue from mining operations	30,606	23,276	24,905	18,903	55,511	42,179
Commodities						
Gold	25,943	15,770	23,054	17,657	48,997	33,427
Antimony	4,289	7,038	-	-	4,289	7,038
Revenue from contracts with customers	30,232	22,808	23,054	17,657	53,286	40,465
Provisional pricing adjustments	374	468	1,851	1,246	2,225	1,714
Total revenue from mining operations	30,606	23,276	24,905	18,903	55,511	42,179

8. Financial instruments

The Company has recognized a net change in liabilities related to financial instruments of \$5,974,000 for the three months ended March 31, 2024 (three months ended March 31, 2023 – gain of \$36,000). Details of these are given below:

(a) Foreign exchange derivative contracts

On December 20th, 2023, the Company entered into foreign exchange derivative contracts with the Bank of Nova Scotia ("Scotia"). These consist of (i) AUD/USD contracts where Mandalay sells \$3,400,000 per month, buys AUD within a 0.6795 by 0.7000 costless collar and (ii) USD/SEK contracts where Mandalay sells \$3,400,000 per month, buys SEK within a 9.50 x 10.25 costless collar, with monthly average rate settlements until December 2024. These derivatives are measured at fair value through profit or loss at the end of each reporting period. The Company recorded an unrealized fair value loss of \$1,890,000 for the three months ended March 31, 2024. The fair value of these liabilities as at March 31, 2024 was \$2,567,000 (December 31, 2023 – \$651,000).

During the three months ended March 31, 2024, the Company incurred a realized loss of \$477,000 for settlement of expired foreign exchange derivatives contracts (three months ended March 31, 2023 – \$nil)

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements

as at March 31, 2024 and December 31, 2023

(Expressed in U.S. dollars, except where otherwise noted)

(Unaudited)

8. Financial instruments (continued)

(b) Gold derivative contracts

On February 12, 2024, the Company entered into gold derivative contracts with the Macquarie Bank Ltd. for a total of 25,008 ounces of saleable gold over the period March 2024 to December 2024. These contracts are costless collar hedges with a floor price of US\$1,980.00 per ounce and a ceiling of US\$2,121.50 per ounce. These derivatives are measured at fair value through profit or loss at the end of each reporting period. The Company recorded an unrealized fair value loss of \$3,343,000 for the three months ended March 31, 2024. The fair value of these liabilities as at March 31, 2024 was \$3,330,000 (December 31, 2023 – Nil).

During the three months ended March 31, 2024, the Company incurred a realized loss of \$102,000 for settlement of expired gold derivatives contracts (three months ended March 31, 2023 – \$nil).

(c) Marketable securities – assets

Aftermath shares

For the three months ended March 31, 2024, the Company did not sell any shares of Aftermath Silver Ltd. (three months ended March 31, 2023 – 400,500 shares). The value of these securities as at March 31, 2024 was \$763,000 or C\$0.22 per share (December 31, 2023 – \$921,000 or C\$0.26 per share).

These shares are stated at fair value with any resulting gain or loss recognised in the condensed consolidated interim statements of income and comprehensive income under loss (gain) on financial instruments. The Company recorded an unrealized fair value loss of \$139,000 for the three months ended March 31, 2024, using Level 1 assumptions (three months ended March 31, 2023 – gain of \$169,000).

Equus shares

The value of shares of Equus Mining Ltd. (“Equus”) held by Mandalay as at March 31, 2024 was \$957,000 (December 31, 2023 – \$1,001,000). Equus shares are stated at fair value with any resulting gain or loss recognised in the condensed consolidated interim statements of income and comprehensive income under loss (gain) on financial instruments. The Company recorded an unrealized fair value loss of \$23,000 for the three months ended March 31, 2024, using Level 1 assumptions (three months ended March 31, 2023 – loss of \$597,000).

(d) Syndicated Facility – Gold Derivative Contracts

The US dollar collar contracts with HSBC and the Australia dollar contracts with Macquarie were completed and settled as at June 30, 2023 and July 4, 2023 respectively. There were no contracts open under this arrangement as at March 31, 2024. The Company recorded an unrealized fair value gain of \$464,000 for the three months ended March 31, 2023.

The contracts were classified as Level 2, fair value through profit or loss financial instruments with fair value determined using the pricing models that utilize a variety of observable inputs that are a combination of quoted prices, applicable yield curves and credit spreads.

Mandalay Resources Corporation

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9. Finance costs

The finance costs for the three months ended March 31, 2024, and 2023 consist of the following:

	Three months ended March 31,	
	2024	2023
	(\$'000)	(\$'000)
Loan Facility		
Interest on Revolver Credit Facility	491	450
Realised loss on gold derivative contracts under Syndicated Facility	-	2,991
Other		
Interest on other borrowings and other charges	46	54
Accretion of reclamation and site closure costs	241	110
	778	3,605

10. Net income per share

For the three months ended March 31, 2024, the weighted average number of common shares of calculating diluted income per share is shown in the table below:

	Three months ended March 31,	
	2024	2023
	(\$'000)	(\$'000)
Net income for the period	5,888	554
Basic weighted average number of shares outstanding	92,924	92,561
Effect of dilutive securities:		
Stock options	496	790
RSU	1,073	360
PSU	548	447
DSU	667	423
Diluted weighted average number of shares outstanding	95,708	94,581

The table below shows number of anti-dilutive securities which are excluded from the calculation of diluted weighted average number of shares:

	Three months ended March 31,	
	2024	2023
	('000)	('000)
Anti-dilutive securities		
Stock options	2,370	688

Mandalay Resources Corporation

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(Unaudited)

11. Segmented information

The Company manages its operations by geographical location. These reportable operating segments are summarized in the table below ("Canada" is the provision of corporate services and administrative support and also includes non-core assets held in Canada):

	Three months ended March 31, 2024				
	Australia	Sweden	Chile	Canada	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Revenue	30,606	24,905	-	-	55,511
Cost of sales, excluding depletion and depreciation	(11,947)	(15,084)	-	-	(27,031)
Depletion and depreciation	(4,635)	(6,073)	-	-	(10,708)
Income from mining operations	14,024	3,748	-	-	17,772
Other operating expenses	(1,074)	(877)	(33)	(112)	(2,096)
Write-off of assets	(290)	-	-	-	(290)
Other income (expenses), except for fair value adjustment	1,398	(3,569)	(174)	2,752	407
Loss on financial instruments	-	-	-	(5,974)	(5,974)
Income (loss) before income taxes	14,058	(698)	(207)	(3,334)	9,819
Current tax expense	(3,040)	-	-	-	(3,040)
Deferred tax recovery	(1,006)	115	-	-	(891)
Net income (loss) for the period	10,012	(583)	(207)	(3,334)	5,888
Cash expenditure for property, plant and equipment	3,655	4,688	56	4,746	13,145
Total non-current assets as at March 31, 2024	66,622	118,031	11,069	13,140	208,862
Total assets as at March 31, 2024	120,533	149,908	11,147	18,766	300,354
Total liabilities as at March 31, 2024	27,166	22,843	-	56,040	106,049

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements
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(Unaudited)

11. Segmented information (continued)

	Three Months ended on March 31, 2023				
	Australia	Sweden	Chile	Canada	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Revenue	23,276	18,903	-	-	42,179
Cost of sales, excluding depletion and depreciation	(11,757)	(14,849)	-	-	(26,606)
Depletion and depreciation	(3,238)	(4,799)	-	-	(8,037)
Income (loss) from mining operations	8,281	(745)	-	-	7,536
Other operating expenses	(1,623)	(1,225)	(61)	(51)	(2,960)
Other expenses, except for fair value adjustment	(629)	(1,880)	(158)	(133)	(2,800)
Gain (loss) on financial instruments	(82)	546	-	(428)	36
Income (loss) before income taxes	5,947	(3,304)	(219)	(612)	1,812
Current tax expense	(2,930)	-	-	-	(2,930)
Deferred tax recovery	1,051	621	-	-	1,672
Net income (loss) for the period	4,068	(2,683)	(219)	(612)	554
Cash expenditure for property, plant and equipment	3,524	5,033	67	-	8,624
Total non-current assets as at March 31, 2023	64,354	116,572	11,009	8,479	200,414
Total assets as at March 31, 2023	113,237	138,844	11,061	16,271	279,413
Total liabilities as at March 31, 2023	31,094	24,463	-	39,350	94,907

For the three months ended March 31, 2024, the Company had four customers from whom it earned more than 10% of its total revenue (three months ended March 31, 2023 – five customers).

Revenue from these customers is summarized as follows:

	Three months ended March 31,	
	2024	2023
	(\$'000)	(\$'000)
Costerfield (gold and antimony)		
Customer 1	5,560	4,917
Customer 2	20,347	10,240
Customer 3	-	5,932
	25,907	21,089
Björkdal (gold)		
Customer 4	19,346	14,714
Customer 5	5,559	4,189
	24,905	18,903
	50,812	39,992

Mandalay Resources Corporation

Notes to the condensed consolidated interim financial statements

as at March 31, 2024 and December 31, 2023

(Expressed in U.S. dollars, except where otherwise noted)

(Unaudited)

12. Fair value measurement

The fair values of cash and cash equivalents, trade and other receivables (non-provisional pricing portion), reclamation and other deposits, and trade and other payables approximate their carrying values due to the nature of these items.

The Company defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In assessing the fair value of a particular contract, the market participant would consider the credit risk of the counterparty to the contract. Consequently, when it is appropriate to do so, the Company adjusts the valuation models to incorporate a measure of credit risk. Fair value represents management's estimates of the current market value at a given point in time.

The Company has certain financial assets and liabilities that are measured at fair value or fair value is disclosed. The fair value hierarchy establishes three levels to classify the inputs to valuation techniques used to measure fair value. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, inputs other than quoted prices that are observable for the asset or liability (for example, interest rate and yield curves observable at commonly quoted intervals, forward pricing curves used to value currency and commodity contracts and volatility measurements used to value option contracts), or inputs that are derived principally from or corroborated by observable market data or other means. Level 3 inputs are unobservable (supported by little or no market activity). The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to the Level 3 inputs.

As at March 31, 2024, other receivables are based on Level 1 inputs. Provisional pricing feature included in trade and other payables and derivative financial instruments are based on Level 1 inputs. Reclamation and other deposits and long-term debt are based on Level 2 inputs. The Company constantly monitors events or changes in circumstances, which may cause transfers between the levels of the fair value hierarchy.

13. Financial liabilities and other commitments

The following are the contractual maturities of commitments. The amounts presented represent the future undiscounted principal and interest cash flows and therefore do not necessarily equate to the carrying amount on the Company's condensed consolidated interim financial position.

	2024				2023
	Less than 1 year	1-3 years	4-5 years	After 5 years	Total
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Trade and other payables	19,824	-	-	-	19,824
Borrowings	1,751	23,993	-	-	25,744
Lease liabilities	938	1,055	-	-	1,993
Reclamation and site closure costs provision	7,793	15,267	7,046	5,141	35,247
Financial instruments	5,897	-	-	-	5,897
	36,203	40,315	7,046	5,141	88,705

Mandalay Resources Corporation

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(Unaudited)

14. Subsequent events

On April 11, 2024, the Company restructured certain gold derivative contracts entered into on February 12, 2024, with Macquarie Bank Ltd by rolling forward the contracts originally set to mature in April, May and June 2024. The rolled forward contracts of a total of 7,498 ounces of gold are set to mature in January, February and March 2025. These contracts are costless collar hedges with a floor price of US\$1,980.00 per ounce and a ceiling of US\$2,189 per ounce.

On May 7, 2024, the Company extended the maturity date of the Revolving Credit Facility from December 1, 2025 to December 31, 2026, at which point the principal amount of the facility will be reduced to \$20,000,000 with an expiry date of June 30, 2027.

In April 2024, the Company completed the sale of 3,095,500 shares of Aftermath, generating proceeds of \$739,000. After the sale of shares, the Company is still holding 1,602,800 shares valued at \$260,000.

APPENDIX E. LIST OF CORPORATE DIRECTORS AND OFFICERS



Mandalay Resources Corp. – Directors and Officers

Table 1: Lupin Mines Inc.- Director Register

Name	Elected (YYYY-MM-DD)	Ceased (YYYY-MM-DD)
Roderick W. Johansen	2006-04-28	2006-04-28
Ewan Downie	2006-04-28	2008-10-20
John Francis Cook	2006-04-28	2007-09-13
John Seaman	2006-04-28	2007-09-13
John Begeman	2006-04-28	2008-08-18
Lance Dyll	2008-08-18	2009-01-09
Peter Lester	2008-10-20	2009-06-11
Michael Myers	2008-10-20	2011-07-08
Martin McFarlane	2009-01-09	2011-07-08
Ian Neill	2009-02-02	2011-07-08
Brett Fletcher	2009-06-11	2011-02-25
Steven James Ryan	2011-03-16	2011-07-08
Patrick Downey	2011-07-08	2014-09-10
Brian Morales	2011-07-08	2012-01-16
Peter Tam	2012-01-16	2014-09-10
Mark Sander	2014-09-10	2018-05-14
Sanjay Swarup	2014-09-10	2018-08-15
Belinda Labatte	2014-09-10	2021-07-15
Dominic Duffy	2018-05-14	2023-04-03
Karyn Lewis	2021-07-15	2024-03-01
Frazer Bouchier	2023-04-03	
Hashim Ahmed	2024-03-01	

Updated on August 8, 2024



Mandalay Resources Corp. – Directors and Officers

Table 2: Lupin Mines Inc Officers Register

Name	Office	Appointed (YYYY-MM-DD)	Ceased (YYYY-MM-DD)
Ewan Downie	President	2006-04-28	2008-10-20
John Seaman	Secretary - Treasurer	2006-04-28	2007-09-13
John Begeman	Secretary - Treasurer	2007-09-13	2008-08-18
Lance Dyll	Secretary - Treasurer	2008-08-18	2009-01-09
Peter Lester	President	2008-10-20	2009-07-11
Martin McFarlane	Secretary - Treasurer	2009-01-09	2011-07-08
Brett Fletcher	President	2009-07-11	2011-02-25
Steven James Ryan	President	2011-03-16	2011-07-08
Patrick Downey	President	2011-07-08	2015-01-01
Brian Morales	Secretary - Treasurer	2011-07-08	2012-01-16
Peter Tam	Secretary	2012-01-16	2012-05-18
Peter Tam	Treasurer	2012-01-16	2015-01-01
Michele Jones	Secretary	2012-05-18	2014-09-10
James A. Currie	Chief Operating Officer	2012-08-31	2014-03-31
Mark Sander	Secretary	2014-09-10	2015-01-01
Mark Sander	President	2015-01-01	2018-05-14
Sanjay Swarup	Chief Financial Officer	2015-01-01	2018-08-15

Updated on August 8, 2024

APPENDIX F. COPY OF CHEQUE FOR FEES

APPENDIX G. PROJECT DESCRIPTION AND SUMMARY



Project Description: Lupin Mine Winter Access Road

Purpose:

In 2019, Lupin Mines Incorporated (Lupin Mines), a wholly owned subsidiary of Mandalay Resources Corporation, contracted Nahanni Construction Ltd. to permit and construct a winter access road to a portion of the Tibbitt to Contwoyto Winter Road (TCWR) route from the Ekati Mine turnoff on Lac de Gras in the Northwest Territories (NT; Lac de Gras) to the Lupin Mine in Nunavut (NU; Lupin) in order to construct and operate this portion of the TCWR to mobilize and demobilize equipment and supplies that may be used for ongoing reclamation and closure of Lupin in the Kitikmeot Region of Nunavut (the Program).

Authorizations for this work were a Type A Land Use Permit MV2019F0026 in Northwest Territories and a Class A Land Use Permit N2019F0001 in Nunavut.

Lupin Mines plans to continue its reclamation work during the 2024, 2025 and 2026 field seasons. To complete this work, Lupin Mines must transport equipment from Yellowknife to the Lupin Mine during the 2024 and 2025 winter seasons.

To ensure on-time execution of the reclamation and closure planning approved by the Nunavut Water Board (NWB) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Lupin Mines is requesting new authorization under a Type A Land Use Permit to include additional supporting activities in Northwest Territories, and is applying for a Type B water licence in Nunavut.

It is understood that the Tibbitt to Contwoyto Joint Venture (TCJV) currently holds a licence of occupation for the entire winter road route; conversations with TCJV personnel are underway to discuss current plans to construct the segment of the TCWR extending from Lac de Gras to Lupin.

Location:

The Program will extend from Lac de Gras to Lupin along the existing TCWR route, traversing 95 km in NT and 118 km in NU (213 km in total).

Mobilization to construct and operate this portion of the winter road will occur from the existing seasonally constructed portion of the TCWR from Yellowknife to Lac De Gras, and/or from Lupin.

As the route crosses the NT/NU border, this is a transboundary project.

Timing:

Use is expected to be seasonal for two (2) years, commencing in January 2025 and recurring in 2026, however, as a contingency, use over a five (5) year period is being sought in the event of unforeseen delays or schedule changes.

Construction is expected to occur in December and January each year.

Operations are expected to occur from January to April, depending on ice conditions.

Closure will occur seasonally once ice conditions are such that ice travel is deemed unsafe. Typically, this will occur in April.

Scope:

To execute the Program, authorization of the following activities is being sought:

- Construction, operation and closure of a winter road occurring within the existing corridor for the TCWR from Lac de Gras to Lupin;
- Use of up to two temporary mobile construction camps in Northwest Territories;
- Establishment of temporary fuel caches in Northwest Territories for up to 43,850 L diesel 2,550 L gas, 25 gallons of various lubricants and 1000 lbs of propane;
- Staging equipment and fuel year-round in Northwest Territories;
- Withdrawal of up to 299 m³/day of water in Nunavut.

Construction of the winter road will follow current best practices and standards for winter road construction. Depending on conditions and staging area availability, construction will either start at the Lupin mine with crews working southward, or crews may also start simultaneously at Lac de Gras and the Lupin mine, working both northwards and southwards. Crews will either be accommodated at the Lupin mine site or accommodated in a mobile construction camp.

Operation of the winter road will occur generally in accordance with the procedures already in place for the TCWR, along with those associated with this application. Operational activities include:

- Transport of equipment and supplies required for mine reclamation activities; and,
- Maintenance of the winter road including removal of blowing snow and repairing potholes and rough areas.

Should the need arise during operation of the winter road, the staged temporary construction camps may be used as emergency shelters.

Seasonal closure of the winter road will occur once conditions are deemed unsafe for operations.

Equipment and fuel may be staged along the route during construction, operation and seasonal closure to support late season use of the Project area, and early season construction, without being reliant on the TCWR and weather conditions south of the Project area.

Water for industrial use (road and portage construction and maintenance; NU and NWT) and domestic use (temporary camps; NWT only) will be withdrawn from nearby lakes. Withdrawal volumes will be within applicable permitted limits.

Waste generated over the life of the project will involve a combination of on-site treatment and disposal (incinerate camp waste, discharge black and greywater to upland sumps) and off-site treatment and disposal, with waste backhauled to approved facilities at the Lupin mine site or Yellowknife. Waste generation is limited to Northwest Territories.

Alternatives:

Alternatives to the project have been considered and involve:



- TCJV construct and operate the TCWR. Personnel at the TCJV indicate that this option is not favourable as they currently have no plans to construct this portion of the TCWR in the upcoming years.
- Airlift supplies and equipment into Lupin. Equipment and supplies required to support ongoing reclamation activities are of a size and weight that is either not possible, logistically difficult and/or cost prohibitive to transport to site by air.

Accordingly, it is the Applicant's preference to seasonally construct, operate and close the TCWR from Lac de Gras to Lupin themselves, to ensure an economic and efficient means of transporting supplies and equipment to the Lupin mine in support of ongoing reclamation and closure activities.



Project Summary: Lupin Mine Winter Access Road

Lupin Mines Inc. (Lupin Mines), a wholly owned subsidiary of Mandalay Resources Corporation, wishes to build a winter road from the diamond mines in NWT to the Lupin Mine in Nunavut to transport equipment and supplies to the Lupin mine site necessary for ongoing reclamation and closure activities. Currently, the winter road is only built to the diamond mines, not all the way to the Lupin mine site. Lupin Mines wants to use the existing winter road to the diamond mines, and then build the rest of the road to the Lupin mine.

Lupin Mines plans to need the road for 2-5 years. They will build it in December and January each year, and then move the required equipment and supplies between the Lupin mine site and Yellowknife from January to April. The winter road will close in April once the ice becomes unsafe.

The winter road from Tibbitt, NT, to Lupin, and beyond to the Jericho Mine, has been reviewed and constructed in the past (refer to NIRB file #s 00RN085 Tibbitt to Contwoyto, 02RN037 Tibbitt to Lupin, 04RN111 Tibbitt to Jericho). The Tibbitt to Contwoyto Winter Road Joint Venture (TCJV) currently holds a Licence of Occupation (NIRB # 02RN037) for the winter road route from the NT/NU border to Lupin. The Applicant wishes to access this winter road corridor occupied by the TCJV Licence. Conversations with the TCJV are underway to discuss any immediate plans to construct and operate the winter road in Nunavut and whether there are any schedule conflicts related to this aspect of the proposed land use operation.

APPENDIX H. PLAIN LANGUAGE SUMMARY (IN ENGLISH, INUKITUT AND INUINNAQTUN)



Project Summary: Lupin Mine Winter Access Road

Lupin Mines Inc. (Lupin Mines), a wholly owned subsidiary of Mandalay Resources Corporation, wishes to build a winter road from the diamond mines in NWT to the Lupin Mine in Nunavut to transport equipment and supplies to the Lupin mine site necessary for ongoing reclamation and closure activities. Currently, the winter road is only built to the diamond mines, not all the way to the Lupin mine site. Lupin Mines wants to use the existing winter road to the diamond mines, and then build the rest of the road to the Lupin mine.

Lupin Mines plans to need the road for 2-5 years. They will build it in December and January each year, and then move the required equipment and supplies between the Lupin mine site and Yellowknife from January to April. The winter road will close in April once the ice becomes unsafe.

The winter road from Tibbitt, NT, to Lupin, and beyond to the Jericho Mine, has been reviewed and constructed in the past (refer to NIRB file #s 00RN085 Tibbitt to Contwoyto, 02RN037 Tibbitt to Lupin, 04RN111 Tibbitt to Jericho). The Tibbitt to Contwoyto Winter Road Joint Venture (TCJV) currently holds a Licence of Occupation (NIRB # 02RN037) for the winter road route from the NT/NU border to Lupin. The Applicant wishes to access this winter road corridor occupied by the TCJV Licence. Conversations with the TCJV are underway to discuss any immediate plans to construct and operate the winter road in Nunavut and whether there are any schedule conflicts related to this aspect of the proposed land use operation.

[illegible]



Havaghamik Tohaktitjutighak:

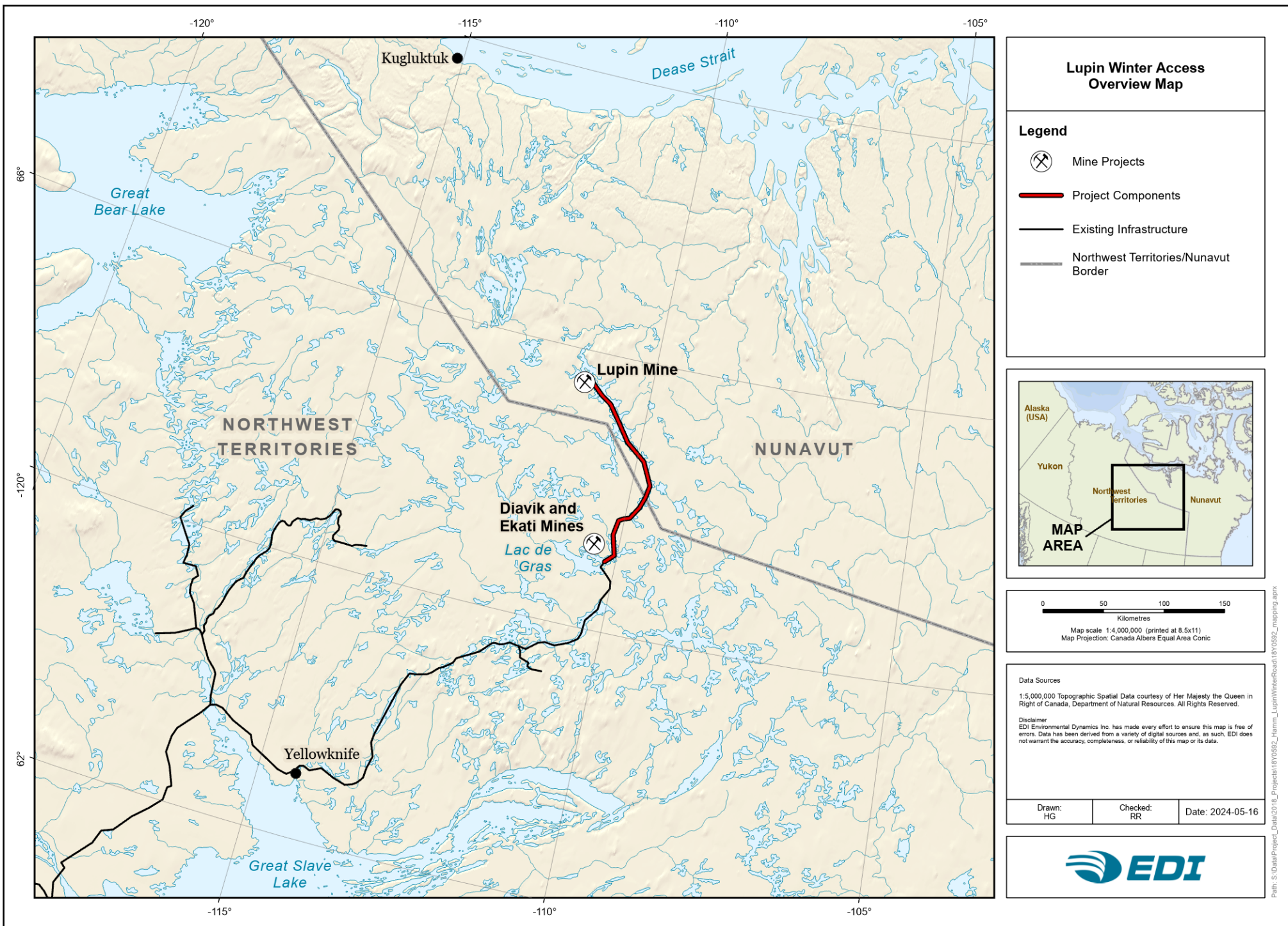
Lupin-mi Uyagaghiokvianutni Ukkiukmi Apkuhiokvighak

Lupin Mines Inc. (Lupin-mi Uyagaghiokvik), una nanminigiyaoyok tahapkunanga Mandalay Resources Timioyunit, piyomayakaktot hannayomavlutik ukkiumi apkutighamik tatvanga kipliktonik uyagaghiokvikmit tahamani Nunatiemi tahamunga Lupin Uyagaghiokvikmut Nunavumi atogumavlutjuk akjaktaotigiyomavlugu aghalutinik tatvalu tamayaghanik tatvunga Lupin Uyagaghiokvikmut piyagiakakmata havagiyaoniaktonik haligaghimaaklotik tatvalo hallumagomavlutjuk umiktaoniakmat tahamna havakviahimayok. Ublumi, tahamna ukkiumi apkuhioktaokataktok hannayaokataktat tahamungainak kipliktunik uyagaghiokvikmut, attangitmat tavunga Lupin uyagaghiokvianut. Lupin Mines piyomangmata atokataklugo tahamna apkuhioktaohimayok tatvunga kipliktunik uyagaghiokvikmut, tatvanga hannayomangmiyat apkuhioklutik tatvunga Lupin uyagaghiokvianut.

Lupin Uyagaghiokvianut hannaighimayut atogomavlutjuk tahamna apkuhioktaoniaktok malgoknik akungani talimat ukkiunik. Hananiaghimayut tatvani Desaiami akungani Januallimi aipagugaikpat, agjaktakvigilugu tahapkuninga aghalutinik tamayaniklu ihuakutighanik tatvunga Lupin uyagaghiokvikmut Yalunaimut tatkihiut Januallimi Appumut. Tahamna ukkiumi apkuhioktaohimayok umikatakiaktok Appumi tahamna hikku kayangaghitinago.

Tahamna ukkiumi apkuhioktaohimayok tatvunga Tibbitt Nunatiemi, tatvunga Lupin-mut, kangikhugu tavunga Jericho Uyagaghiokvikmut, ihivgioktaovluni tatvalo hannayaokataghimayok kinguani (naunaipkutat ukkua Nunavumi Avatilikiyiitjut nahauta #s 00RN085 Tibbitt-mit tatvunga Tahikjuamut, 02RN037 Tibbitt-mit tatvunga Lupin-mut, 04RN111 Tibbitt-mit Jericho-mut). Una Tibbitt-mit tatvunga Tahikjuak-mut Ukkiumi Apkuhioktaoniaktok attaluni tatvunga Tahikjuakmut Ukkiumi Apkuhioktaohimayomut Ikkayoktigighutik Havagiyaoyok (TCJV) hadja Laisikaktot Tahamanitjutighamingnik (NIRB # 02RN037) ukkiumi apkuhioktaoniaktomik tatvunga Nunatiap/Nunavut tiitikiup kigigiyaatnit tatvunga Lupin-mut. Ukkua Tughiktotikaktot piyomangmata atogumavlutjuk una ukkiumi apkuhioktaokataktok atoktaokataktok atoghutjuk una TCJV Laisiktagihimayaat. Ukakatigikataghimaliktat ukkua TCJV paknaiyaotigivaliyomavlutjuk hannatjutighaitnik tatvalu angmaumatjutighanik taffuma ukkiumi apkuhioktaokatakiaktok Nunavumi tatvalo kanok ihuilotaniakniakat tahapkunanga tughiktotaoniaktonik nunanik atogomaniaktonik .

APPENDIX I MAP



APPENDIX J REGULATORY HISTORY



Regulatory History: Lupin Mine Winter Access

The Tibbitt to Contwoyto Winter Road (TCWR) have been in seasonal operation since 1969. Below is a recent regulatory history associated with the TCWR in Nunavut, indicating that the winter road to Lupin, as described in the application NPC File #150434, has been referred to the Nunavut Impact Review Board (NIRB) multiple times in the past and the NIRB has indicated that the proposal may proceed without a Part 5 or 6 review. Attached are the supporting Screening Decision Reports from the NIRB and NPC, provided for reference.

NPC File # 148975, NIRB File # 19RN005 Nahanni Construction Ltd.

On January 14, 2019 the Nunavut Impact Review Board (NIRB) requested that the proponent Nahanni Construction Ltd. complete an online application form through the NIRB's public registry system and ensure, pursuant to s. 144(1) of the NuPPAA, that the information provided be sufficient to determine the scope of the project activities being proposed and that sufficient information has been provided to commence screening. On January 15, 2019 the NIRB received the required additional information and commenced the screening pursuant to Part 3 of the NuPPAA.

Following their assessment of all materials provided, the NIRB recommended that a review of Nahanni Construction Ltd.'s "Lupin Mine Winter Access" was not required pursuant to Article 12, Section 12.4.4(a) of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and s. 92(1)(a) of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (NuPPAA).

Subject to the Proponent's compliance with the terms and conditions as set out in below, the NIRB was of the view that the project proposal was not likely to cause significant public concerns, and it was unlikely to result in significant adverse environmental and social impacts.

The Board issued its screening decision report on Mar 4, 2019 (#19RN005) noting that the latest project scope, including an increase in water use volume and thus requiring a type B licence, determined the project to be exempt from screening.

NIRB File # 00RN085 RTL Robinson Enterprises Ltd

RTL applied for a Crown Land Use Permit (LUP) for a term of 2 years, December 1999 to April 2001, to construct the TCWR. Indian and Northern Affairs Canada (INAC) referred the application to the NIRB for screening. The NIRB received the referral on February 24, 2000. In their decision, the NIRB states:

The decision of the Board in this case is 12.4.4 (a): (a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval. Reflecting the primary objectives set out in Section 12.2.5;

Reasons for Decision:



NIRB's decision is based on specific considerations that reflect the primary objectives of the Land Claims Agreement. Our considerations in making this decision included:

- *the movement of vehicles and equipment, and their impact on wildlife;*
- *the movement of vehicles and equipment and their impact on the terrain;*
- *impact to archaeological and cultural landmarks;*
- *storage and disposal of fuel, garbage, and sewage; and*
- *clean up and restoration upon abandonment.*

NIRB File# 02RN037 Echo Bay Mines Ltd., BHP Diamonds Inc., Diavik Diamond Mines Inc.

Joint applicants applied to INAC for a 30-year renewal of the Licence of Occupation for the TCWR on November 5, 2001. This was referred to the NIRB for screening. In their decision, the NIRB states:

The decision of the Board in this case is 12.4.4 (a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval. Reflecting the primary objectives set out in Section 12.2.5;

NIRB File # 04RN111 Deton'Cho/RTL Corporation

Deton'Cho and RTL applied for a LUP from INAC for a period of 2 years, 2011-2013. INAC referred the matter to the NIRB for screening on January 11, 2011. In their decision, the NIRB states:

The decision of the Board in this case is 12.4.4 (a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;

Reasons for Decision:

NIRB's decision is based on specific considerations that reflect the primary objectives of the Land Claims Agreement. Our considerations in making this decision included:

- *the movement of vehicles and equipment, and their impact on wildlife;*
- *the movement of vehicles and equipment and their impact on the terrain;*
- *storage and disposal of fuel, garbage, and sewage; and*
- *clean up and restoration upon abandonment.*

APPENDIX K. FORMER NPC DETERMINATIONS



Cassel Kapolak

Wynter Kuliktana

Richard Dwyer

Carson Gillis

Tracey McCaie

Nicole McLaren

RE: NPC File No. 150434 [Lupin Mine Winter Access Road]

1. **Land use: Winter access road** from diamond mines in Northwest Territories to Lupin Mine in Nunavut for transportation of equipment and supplies for ongoing closure and reclamation activities.
2. **Modifications** to the amended project proposal:
 - a. Change in ownership from Nahanni Construction Limited to Lupin Mines Incorporated, a wholly owned subsidiary of Mandalay Resources Corporation.
3. Associated NPC File Nos.: 148975 and 149236 [Lupin Mine Winter Access]
4. Related NPC File No.: 148938 [Lupin Mine – Closure & Reclamation]
5. Associated NIRB File Nos.: 02RN037 [Lupin Winter Road] and 19RN005 [Lupin Mine Winter Access]
6. Related NIRB File Nos.: 00RN085 [Winter Road-Tibbit Lake to Contwoyto Lake] and 04RN111 [Winter Road Pellatt Lake to Jericho]

Page 1 of 2

7. **Location:** Transboundary and Kitikmeot Region; [Lac de Gras in the Northwest Territories to Contwoyto Lake in Nunavut and on to Lupin Mine]

A complete description of the project proposal reviewed by the NPC can be accessed online using the link below.

The Nunavut Planning Commission (NPC) has completed its review of the above noted project proposal. The NPC previously reviewed works and activities associated with the current project proposal including winter road construction and a determination was issued on 27 September 2019 (NPC File No. 149236) that it is outside the area of an applicable regional land use plan. In addition, works and activities associated with the current proposal were previously screened by the Nunavut Impact Review Board (NIRB File No.: 19RN005).

The above-noted project proposal is exempt from screening by the NIRB because the NPC is of the understanding that the change in ownership does not change the general scope of the previously amended project activities, and the exceptions noted in Section 12.4.3 (a) and (b) of the *Nunavut Agreement* do not apply.

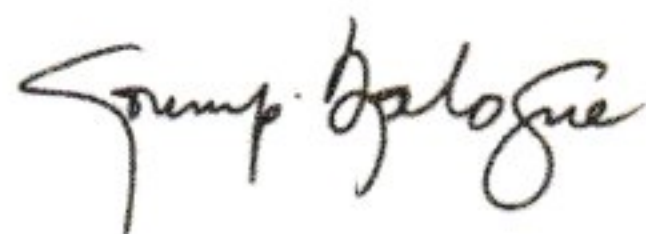
By way of this letter, the NPC is forwarding the project proposal to the regulatory authorities identified by the proponent. Project materials are available at the following address:

<https://lupit.nunavut.ca/portal/registry/registry.aspx?appid=150434>.

This decision applies only to the above noted project proposal as submitted. Proponents may not carry out projects and regulatory authorities may not issue licenses, permits and other authorizations in respect of projects if a review by the NPC is required.

If you have any questions, please do not hesitate to contact me at (867) 979-3444.

Sincerely,



Goump Djalogue
Manager of Planning & Implementation, MCIP, RPP
Nunavut Planning Commission

APPENDIX L. FORMER NIRB SCREEN DECISION REPORTS

From: [Keith Morrison](#)
To: [Nicole McLaren](#); [Cassel Kapolak](#); [nirb info](#)
Subject: RE: [External] Lupin Mine Winter Access
Date: July 18, 2024 11:49:02 AM
Attachments: [image002.png](#)
[image004.png](#)

Hello, Nicole. As per the conformity determination letter issued by NPC on June 11th, your project does not require screening by the NIRB so you can go ahead with your applications.

Keith Morrison

Manager Impact Assessment

Nunavut Impact Review Board

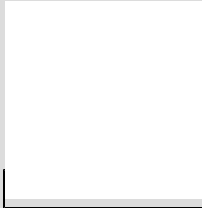
Phone 867-983-4617 **Web** www.nirb.ca

From: Nicole McLaren <NicoleM@falkirk.ca>

Sent: Thursday, July 18, 2024 12:17 PM

To: Cassel Kapolak <ckapolak@nirb.ca>; nirb info <info@nirb.ca>; Keith Morrison <kmorrison@nirb.ca>

Subject: [EXTERNAL] Lupin Mine Winter Access



IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender NicoleM@falkirk.ca

CAUTION: This email originated from outside of the organization. Do not click links, open attachments or follow direction, unless you recognize the sender and know the content is safe.

Good Afternoon,

I am writing on behalf of Mandalay Resources/Lupin Mines regarding our recent proposal to construct a winter access road this coming winter.

The previous NIRB file # is: 19RN005 (NPC file# 150434)

While the proposal is to conduct the exact same work as was previously permitted, we are looking for a new approval under a new permittee name. I noted that our recent screening

decision from NPC was recently filed under the former file number; however, I was curious if you could please assist me in understanding if the NIRB is conducting a new screening of this new proposal or if we are ok to proceed with filing our application with NWB and CIRNAC.

Most grateful,
Nicole McLaren

Nicole McLaren
Sustainability Lead
Falkirk Environmental Consultants
378 Esplanade E
North Vancouver, BC V7L 1A4 Canada
nicolem@falkirk.ca



APPENDIX M EFFECTS ASSESSMENT



Physical, Biological and Socio-Economic Effects Assessment: Lupin Mine Winter Access

Table 1 Potential physical, biological and socio-economic effects and proposed mitigation measures.

Valued Component	Activity	Effect	Proposed Mitigation Measure	Residual Impacts	Implementation Schedule	Proposed Monitoring Schedule	Reporting Schedule
Physical Components							
Air Quality	Winter road construction, operation, and seasonal closure	Negative and mitigable	Conduct routine preventative maintenance on engines. Implement <i>Environmental and Cultural Heritage Resources Protection Management Plan</i> .	None predicted.	Ongoing from the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report and Land Use Permit.	In accordance with NIRB Screening Decision Report and Land Use Permit.
Ground Stability	Winter road construction, operation, and seasonal closure	Negative and mitigable	Move equipment overland only when conditions are such that rutting or gouging will not occur. Utilize existing winter road corridor. Implement <i>Environmental and Cultural Heritage Resources Protection Management Plan</i> .	None predicted.	Ongoing from the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report and Land Use Permit.	In accordance with NIRB Screening Decision Report and Land Use Permit.
Hydrology	Winter road construction	Negative and mitigable	Water use in accordance with NWB approval and permit.	None predicted.	Throughout construction, as needed.	In accordance with NWB Approval terms and conditions.	In accordance with NWB Approval terms and conditions.



			Implement <i>Environmental and Cultural Heritage Resources Protection Management Plan</i> .				
Noise Levels	Winter road construction, operation, and seasonal closure	Negative and mitigable	Conduct routine preventative maintenance on engines. Ensure mufflers are in use, as required by manufacturers. Implement <i>Environmental and Cultural Heritage Resources Protection Management Plan</i> .	None predicted.	Ongoing from the commencement of Construction until Closure.	As required by manufacturer.	In accordance with NIRB Screening Decision Report and Land Use Permit.
Water Quality	Winter road construction, operation, and seasonal closure	Negative and mitigable	Activate the <i>Spill Contingency Management Plan</i> where required. Implement the <i>Environmental and Cultural Heritage Resources Management Plan</i> .	None predicted.	Ongoing from the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report and Land Use Permit.	In accordance with NIRB Screening Decision Report, Land Use Permit and NWB Approval terms and conditions.
Biological Components							
Aquatic Species	Winter road construction	Negative and mitigable	Equip water intake hoses with appropriately sized mesh screens.	None predicted.	During periods of water withdrawal.	In accordance with NIRB Screening Decision Report and NWB Approval.	In accordance with NIRB Screening Decision Report and

[illegible]

Archaeological and Historical Sites	Winter road construction	Negative and mitigable	<p>Utilize existing winter road corridor.</p> <p>Where possible, avoid interaction with known archaeological sites.</p> <p>Where not possible to avoid interaction with known archaeological sites, proceed with direction from the territorial Archaeologist.</p> <p>Implement the <i>Environmental and Cultural Heritage Resources Protection Management Plan</i>.</p>	None predicted.	During construction.	As required, in consultation with the project archaeologist and the Territorial Archaeologist.	As required, in consultation with the project archaeologist and the Territorial Archaeologist.
Employment	Engagement, winter road construction, operating and seasonal closure	Positive	Utilize local personal wherever possible.	Positive: economic benefits for Kitikmeot employed, directly or indirectly, by the Project.	Ongoing from pre-construction engagement, through to the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report.	In accordance with NIRB Screening Decision Report.

APPENDIX N ENGAGEMENT LOG

Date of Engagement	Engagement From	Attendees/ Addressee		Engagement Type	Reason for Engagement	Outcome	Action
		Organization	Name and Role				
12-Apr-24	Lupin Mines/Mandalay	CIRNAC Lands Admin	General	Email	Emailed asking about exclusivity of land use permit		
17-Apr-24	Lupin Mines/Mandalay	Nunavut Planning Commission	Daniel Haney, Planner	Email	Emailed asking for guidance on process for permitting a winter road		
17-Apr-24	Lupin Mines/Mandalay	Nunavut Planning Commission	Daniel Haney, Planner	Email	Daniel responded saying he can assist with application next week when back from vacation.		
03-May-24	Lupin Mines/Mandalay	TCWR JV Committee	Barry Henkel, Winter Roads Director	Email	Clarification around permitting and potential use of road corridor from Lac De Gras to Lupin	Need to have follow-up meeting to discuss their plans to use the road in March/April 2025.	Follow-up with Barry to set up meeting to discuss.
08-May-24	Lupin Mines/Mandalay	Crown-Indigenous Relations and Northern Affairs Canada	Andrew Keim Manager Water Resources, Nunavut Regional Office	Virtual Meeting	Call to discuss progress at Lupin Mine and recent submission of annual reports. Discuss upcoming winter works.		
28-May-24	Lupin Mines/Mandalay	TCWR JV Committee	Barry Henkel, Winter Roads Director	Virtual Meeting	Call to discuss the project, request permission to access the road, and discuss any possible schedule conflicts.	Received endorsement of the project.	Send over the bidder list for road construction once the bid has gone out. Have follow-up call to discuss fee structure for 2025.
09-May-24	Lupin Mines/Mandalay	Nunavut Planning Commission	Daniel Haney, Planner	Email	Emailed to indicate intent to file submission and set up new profile	-	-
27-May-24	Lupin Mines/Mandalay	Nunavut Planning Commission	Daniel Haney, Planner	Email	Email to indicate project had been submitted for screening.	-	-
28-May-24	Lupin Mines/Mandalay	CIRNAC Lands Admin	Tracey McCaie, Manager, Land Administration	Email	Email exchange to discuss any issues of exclusive use of the existing road route and what permits will be required.	-	Follow up with submission of application once screenings are complete by NPC and NIRB.
12-Jun-24	Lupin Mines/Mandalay	Akaiitcho Territory Government	Screening Officer Stephanie Poole	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	NWT Metis Nation	Lands and Resource Manager Tim Heron	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Tli Cho Government	Manager of Lands Protection Michael Birlea, Violet Camsell Blondin Jessica Hum	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Kugluktuk HTO	Manager Peter Taptuna	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Kitikmeot Inuit Association	Director of Lands Geoff Clark	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	GNWT Lands	Manager of Resource Management Clint Ambrose	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Lutsel K'e Dene First Nation	Lands Manager Lauren King	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Kugluktuk HTO	Amanda Dumond, Manager	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Tli Cho Government	Manager of Lands Protection Michael Birlea	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Yellowknives Dene First Nation	Director of Lands Management Joanne Black	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	Lupin Mines/Mandalay	Deninu Kue First Nation	Resource Management Coordinator Richard Si	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-

Date of Engagement	Engagement From	Attendees/ Addressee		Engagement Type	Reason for Engagement	Outcome	Action
		Organization	Name and Role				
12-Jun-24	Lupin Mines/Mandalay	NWT Metis Nation	Lands and Resource Manager Tim Heron	Email	Send email including letter of introduction to the project and project map. Request any comments or questions.	-	-
12-Jun-24	GNWT Lands	Lupin Mines/Mandalay	Manager of Resource Management Clint Ambrose	Email	Requested meeting to discuss permitting of the project and recommended reaching out to MVLWB for pre-engagement list.	-	Respond with availability for meeting with Clint.
12-Jun-24	Lupin Mines/Mandalay	GNWT Lands	Manager of Resource Management Clint Ambrose	Email	Responded to set up meeting	-	-
12-Jun-24	Lupin Mines/Mandalay	MVLWB	Jen Potten, Regulatory Coordinator	Email	Contacted to request information about permitting the project and request pre-engagement list	-	-
14-Jun-24	Lupin Mines/Mandalay	GNWT Lands	Manager of Resource Management Clint Ambrose	Virtual Meeting	Call with Clint to discuss the project and upcoming application to MVLWB.		Send Clint copy of the application before submission.
19-Jun-24	Lupin Mines/Mandalay	Nunavut Water Board	Richard Dwyer, Manager of Licensing	Virtual Meeting	Introductory call with CEO of Mandalay and NWB to provide update on the project and discuss future plans.		
24-Jun-24	Kitikmeot Inuit Association	Lupin Mines/Mandalay	Tannis Bolt, Senior Lands Officer	Email	Email from KIA requesting information about upcoming notice for winter access road project.		
09-Jul-24	Lupin Mines/Mandalay	Kitikmeot Inuit Association	Tannis Bolt, Senior Lands Officer	Email	Responded to Tannis to discuss project and require guidance for application for KIA approvals.		
17-Jul-24	Kitikmeot Inuit Association	Lupin Mines/Mandalay	Tannis Bolt, Senior Lands Officer	Email	Response from KIA with further guidance about whether this is a renewal or a new application.		
18-Jul-24	Lupin Mines/Mandalay	Kitikmeot Inuit Association	Tannis Bolt, Senior Lands Officer	Email	Responded to Tannis to confirm this is a new application.		
18-Jul-24	Lupin Mines/Mandalay	Nunavut Impact Review Board	Keith Morrison, Manager Impact Assessment	Email	Email to confirm clearance to proceed with applications		
18-Jul-24	Nunavut Impact Review Board	Lupin Mines/Mandalay	Keith Morrison, Manager Impact Assessment	Email	Confirmation to proceed with other applications. Project does not require screening.		
29-Jul-24	Kitikmeot Inuit Association	Lupin Mines/Mandalay	Tannis Bolt, Senior Lands Officer	Email	Response from KIA providing instructions and new application form.		
14-Aug-24	Lupin Mines/Mandalay	TCWR JV Committee	Barry Henkel, Winter Roads Director	Virtual Meeting	Call with JDS and Barry to discuss upcoming winter road work.	Maintain communication to discuss outcome of RFP and coordination of operational dates.	

APPENDIX O. ENVIRONMENT AND HERITAGE RESOURCES MANAGEMENT PLAN



WILDLIFE MANAGEMENT PLAN:

LUPIN MINE WINTER ACCESS ROAD PROJECT

May 2024



Plain Language Summary

This Plan describes possible effects the Project may have on wildlife and their habitat and describes what Lupin Mines Inc. (Lupin Mines) will do to minimize the effects from the Lupin Mine Winter Access Road. The road follows an existing alignment from Lac de Gras in the Northwest Territories (NT; Lac de Gras) to the Lupin Mine in Nunavut (NU; Lupin).

Revision History

Revision #	Date	Section	Summary of Changes	Author	Approver
1	Apr 2024	All	New document	N. McLaren	

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1.0 Introduction

Lupin Mine wishes to construct and operate a portion of the Tibbitt to Contwoyto Winter Road (TCWR). The Lupin Mine Winter Access Project (the Project) involves the construction, operation and closure of a winter road occurring within the existing corridor of the Tibbitt to Contwoyto Winter Road (TCWR) from the Ekati Mine turnoff on Lac de Gras in the Northwest Territories (NT; Lac de Gras) to the Lupin Mine in Nunavut (NU; Lupin) (Figure 1). The access route will traverse 95 km in NT and 118 km in NU for a total of 213 km. This is a transboundary project. Once constructed the winter access road will be used to mobilize and demobilize equipment and supplies that may be used for ongoing reclamation of the Lupin Mine in the Kitikmeot Region of Nunavut.

These activities have the potential to affect wildlife and wildlife habitat. This Wildlife Protection Plan (the Plan) identifies wildlife typically found in the area, describes effects that project activities may have, outlines actions Lupin Mine will take to mitigate effects to wildlife and wildlife habitat, and considers the guidance provided in Table 1.

Table 1 Relevant guidance documents including legislation, permits and licences.

Document	Authority
<i>Species at Risk Act</i> (2002)	Environment and Climate Change Canada
<i>Migratory Birds Convention Act</i> (1994)	Environment and Climate Change Canada
<i>Canada Wildlife Act</i> (1985)	Government of Canada
<i>Nunavut Wildlife Act</i> (2003)	Government of Nunavut
Draft Nunavut Land Use Plan (2016)	Nunavut Planning Commission
<i>NT Reindeer Act and Regulation</i> (2014)	Government of NT
<i>NT Wildlife Act</i> (2017)	Government of NT
Draft Bathurst Caribou Range Plan (2018a)	Department of Environment and Natural Resources, NWT
Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories (1993)	Government of Northwest Territories
Screening Decision Report	Nunavut Impact Review Board
Approval Without a Licence	Nunavut Water Board
Land Use Permits	Crown-Indigenous Relations and Northern Affairs Canada Government of Northwest Territories
Spill Contingency Management Plan, Lupin Winter Access Road Project, Lac de Gras NWT to Lupin, NU (2024)	Lupin Mine Inc.
Abandonment and Restoration Plan, Lupin Winter Access Road Project, Lac de Gras NWT to Lupin, NU (2024)	Lupin Mine Inc.

Environment and Heritage Resources Protection Management Plan, Lupin Winter Access Road Project, Lac de Gras NWT to Lupin, NU (2024)	Lupin Mine Inc.
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1.1 Scope

This Plan applies to construction and operation activities associated with the Lupin Winter Access Road Project. The use of the winter road is expected to be seasonal for up to two (2) consecutive years, commencing in January 2025, however, as a contingency, use over a five (5) period is being sought in the event of unforeseen delays. Construction is expected to occur in December and January each year. Operations are expected to occur from January to April, depending on ice conditions. Closure will occur seasonally once ice conditions are such that ice travel is deemed unsafe. Typically, this will occur in April.

Construction of the winter road will follow best practices and standards for winter road construction. Depending on conditions and staging area availability, construction will start at Lupin with crews working southward. Alternatively, as available, crews may also start simultaneously at Lac de Gras and Lupin, working both northwards and southwards. Crews will be accommodated at the mine site throughout construction, operation and closure. A small, mobile, temporary camp will be used as construction progresses to provide emergency shelter for work crews.

Operation of the winter road will occur generally in accordance with the procedures already in place for the TCWR, along with those identified in the documents listed in Table 1. Access and use of the road will be limited to Lupin Mine staff and contractors.

Operational activities include:

- Transport of equipment and supplies required for mine reclamation activities; and
- Maintenance of the winter road including removal of blowing snow and repairing potholes and rough areas.

Seasonal closure of the winter road will occur once conditions are deemed unsafe for operations which typically occurs in April to early May.

1.2 Objectives

Lupin Mine acknowledges that wildlife, including caribou, have the potential to occur within the Project area, and that the Project has the potential to affect wildlife and wildlife habitat. Accordingly, this Plan strives to prevent or minimize potential Project-related effects on caribou and other wildlife with the primary purpose of the Plan being to outline wildlife protection, avoidance and mitigation strategies.

The objectives of the Plan are to:

- Minimize any Project-related effects on wildlife and their habitat; and
- Minimize wildlife and Project personnel interactions.

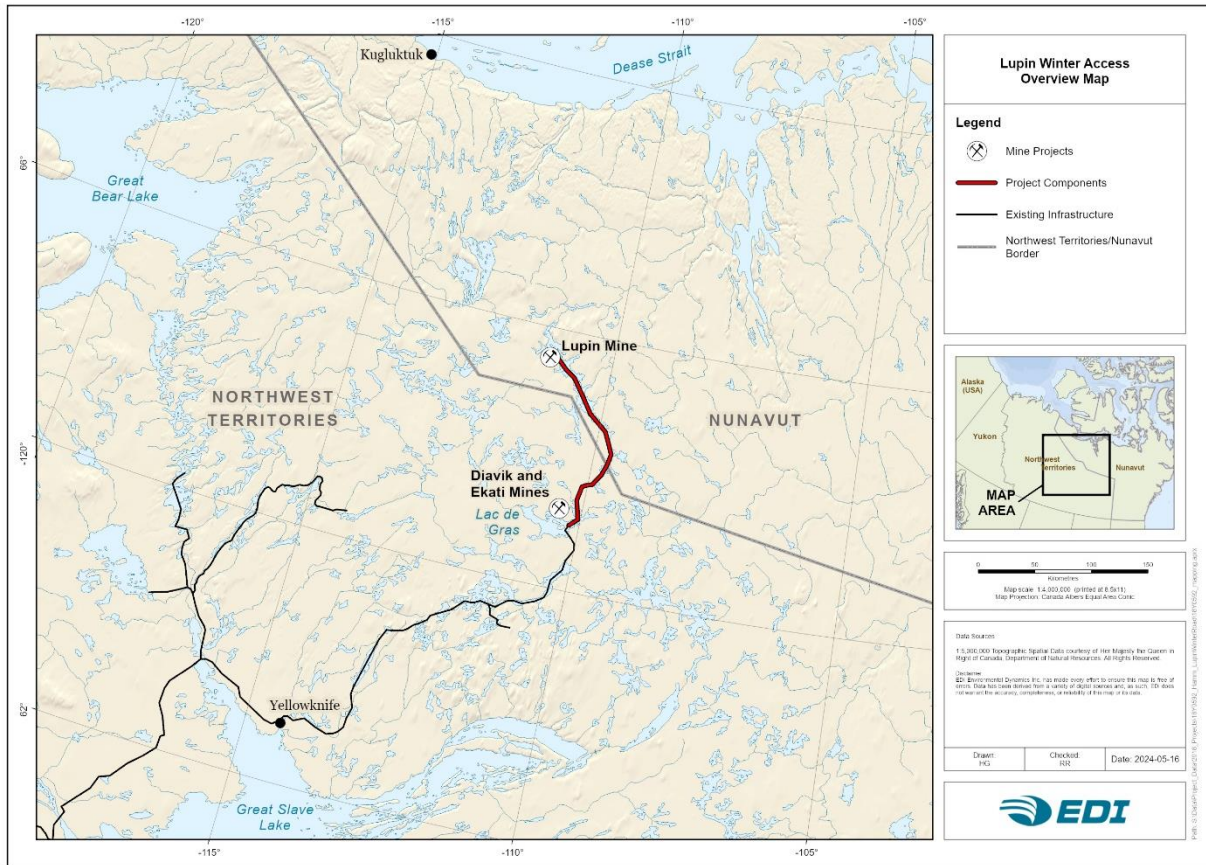


Figure 1 Lupin Mine Winter Program location.

1.3 Site Description

The Project is located within the Southern Arctic Ecozone and the Takijuq Lake Upland Ecoregion. Much of this region is composed of unvegetated rock outcrops and vegetative cover is characterized by shrub tundra, consisting of dwarf birch, willow, northern Labrador tea, *Dryas* spp. and *Vaccinium* spp. Organic Cryosols are the dominant soils in the lowlands and permafrost is deep and continuous. The proposed winter road is located north of the treeline.

Characteristic wildlife includes caribou, muskoxen, grizzly bear, wolverine, hare, arctic fox, and wolf. Small mammals (e.g., Arctic ground squirrel, voles, and lemmings) are distributed throughout the region and provide an important food source for predators. Many species of migratory birds are present in the area during the summer season, including waterfowl, upland birds, and shorebirds, while some bird species are present year-round (e.g., ptarmigan, gyrfalcon, and common raven).

Notwithstanding the existing biodiversity in the region, the Project area does not contain any of the following:

- Important Bird Areas (IBA);
- Key Habitat Sites for migratory birds and species at risk;
- Wetlands of International Importance (RAMSAR);
- Migratory Bird or Wildlife Sanctuaries; or
- Heritage Rivers.

1.4 Plan Management

This Plan considers wildlife species and their habitat that have the potential to occur within or adjacent to the Project area, and the related potential effects arising from Project-related activities. The Plan will be reviewed annually by the Project Manager and may be updated if:

- The Program scope changes to include new activities;
- Changes in conditions that could be biologically meaningful have been observed, such as caribou calving within the Project area;
- Results of ongoing stakeholder engagements indicate a Plan revision is necessary.

1.5 Plan Implementation

This Plan is effective upon approval and is valid throughout all phases of the Project.

The Project Manager or designate is responsible for Plan implementation.

A copy of this Plan is maintained on site at the Lupin Mine.

2.0 Roles and Responsibilities

Lupin Mine is responsible for activities associated with winter access to the Lupin Mine, including implementation and management of this Plan, and directing, documenting and reporting pertaining to closure activities.

Lupin Mine's contact information is provided below.

Lupin Mines Incorporated

c/o Mandalay Resources Corp.
Suite 330-76 Richmond Street
Toronto, ON Canada M5C 1P1

Contact: Kellie Leedham

Phone: (403)808-1534

Email: kellie@falkirk.ca

2.1 Staff, Contractors, Suppliers, and Visitors

All personnel conducting activities on site, including staff, contractors, suppliers, and visitors, are required to implement this Plan as it pertains to their activities on site. Specifically, these responsibilities include:

- Completing site orientation including wildlife awareness training;
- Reporting all incidental wildlife observations to the Project Manager; and
- Responding appropriately to Security Patrol wildlife advisories.

2.2 Managers and Supervisors

Managers and supervisors have a responsibility to ensure that staff, contractors, consultants, and visitors have been trained in Lupin Mine wildlife mitigation expectations and procedures. Additional supervisor and manager responsibilities include:

- Conducting wildlife awareness training; and
- Ensuring that all personnel adhere to recommended mitigation measures.

2.3 Project Manager

In addition to the duties outlined above, the Project Manager is responsible for:

- Responding to wildlife sightings and implementing recommended mitigation measures;
- Responding to wildlife interactions; and
- Managing wildlife documentation.

2.4 Lupin Mine Security

Lupin Mine's security will patrol the road 24 hours per day. In addition to the above, they are responsible for:

- Notifying drivers of wildlife present on the road; and
- Advising drivers how to respond to wildlife situations as they arise, in accordance with this Plan.

3.0 Potential Effects

Project construction and operation activities could potentially have the following effects on wildlife and their habitat:

- Disturbance caused by road traffic;
- Mortality (road kills);
- Greater access for hunters, leading to increase in mortality; and
- Attraction of wildlife to food sources along the winter road or within emergency shelter camp if used.

4.0 General Mitigation Measures

A variety of mitigation measures will be employed to avoid, control, or reduce potential Project-related effects on wildlife and their habitat. General measures are outlined below, while additional species-specific mitigation measures are presented in subsequent sections. The measures presented are designed to be practicable, effective, and relative to the Program scope. The Plan incorporates best management practices and the latest available scientific information.

4.1 Compliance

The first step in mitigating effects is compliance with relevant regulatory instruments, as outlined below.

4.1.1 Federal and Territorial Legislation

Mitigation and management measures to reduce Project effects on wildlife are derived from federal and territorial legislation.

The *Migratory Birds Convention Act* (1994) prohibits killing or taking of migratory birds, their nests and eggs, and the deposition of harmful substances in areas frequented by migratory birds. The purpose of the *NWT Wildlife Act* (2017) and the *Nunavut Wildlife Act* (2003) is to establish a comprehensive program for the management of wildlife and their habitat including the conservation, protection, and recovery of species at risk.

The *Species at Risk Act* (SARA 2002) was created to protect at risk wildlife on federal lands, as well as defining the critical habitat of listed species.

4.1.1.2 Species at Risk Occurring Within the Project Area

The Grizzly Bear (*Ursus arctos*) is listed federally as a species of special concern since 2012. Human activities such as campsites and industrial development in the NWT may lead to bear-human conflicts and human-caused mortalities. Grizzly bears are becoming more common in areas of the NWT and Nunavut where they used to be rarely seen (Environment Canada 2014). However, it is likely that grizzly bears will be hibernating during the season that the road will be active.

Wolverine (*Gulo gulo*) is listed federally as a species of special concern since 2003. The potential threat to wolverine in the Territories is associated with human development or activities, disturbances to denning areas and human-caused mortalities due to conflicts (Environment Canada 2014).

Peregrine Falcon (*Falco peregrinus anatum/tundrius*) is federally listed as a species of special concern since 2007. Potential threats in the Territories include poaching of eggs for falconry, declining songbird or seabird prey populations, and susceptibility to organochlorine pesticide contamination (Environment Canada 2014); the Project poses none of these threats to Peregrine

falcon. Peregrine falcons will likely not be present during the winter season construction and operation of the road.

Short-eared Owl (*Asio flammeus*) is listed federally as a species of special concern since 2008. The potential threat in the Territories is human disturbance during the nesting period, which often results in the nest being deserted. Nests are found on the ground in grasslands, tundra, bogs, marshes and other open non-forested habitats (Environment Canada 2014). Short-eared owl will likely not be present during the winter season construction and operation of the road.

4.2 General Wildlife

4.2.1 Potential effects to specific wildlife species

Grizzly bears are present within the vicinity of the winter road but should be hibernating in dens when the winter road is constructed and operational. Grizzly bears in this area generally enter dens that are excavated on a well drained slope and typically with a southern aspect in late October and occupy the den for as long as seven months (timing varies by sex and age) (Species at Risk Committee 2017). Potential effect of the winter road on grizzly bears include:

- Disturbance to bears in their dens caused by road traffic, noise, and vibration.

Tundra wolves are present within the vicinity of the winter road and are active all winter. Tundra wolves follow the barren-ground caribou herds. Tundra wolf dens can be located on the tundra, in the tree line transition area and potentially in the boreal forest. These wolves do not burrow to create dens but use caves and rocks that provide shelter. The denning period for wolves usually begins in early May (after road closure). Potential effects of the winter road on wolves include:

- Disturbance caused by road traffic;
- Mortality (road kills);
- Greater access for hunters, leading to increase in mortality; or
- Attraction of wolves to food sources along the winter road.

Wolverine are present within the vicinity of the winter road and are active all winter. Sites where wolverine dens have been found include ravines or drainages where snow accumulates, snow-covered rocky scree or boulder talus, taiga peat bogs with rocky areas. The key factor in wolverine denning habitat is an area with deep snow throughout the denning season. Wolverine denning period can be as early as February and can last till late May. There is a very low possibility that a wolverine would establish a den near the active winter road. Issues related to the potential effect of the winter road on wolverine include:

- Disturbance caused by winter road traffic and noise;
- Mortality (road kill); and
- Greater access for hunters, leading to potential overharvest.

Arctic fox den sites are typically located on the tops or sides of eskers, or the tops of banks of lakes or rivers where the soil is sandy, dry, and stable. Den sites are usually free of snow earlier than the surrounding landscape. Pairs often return to the same area and dens may be up to 300 years old and possess as many as 100 entrances. Arctic fox pairs start to seek den sites beginning in February and March. This corresponds to a period when the winter road will be operational. Foxes are usually established within their dens by early May after the winter road has closed for the season. Arctic fox can tolerate high levels of human disturbance. Issues related to the potential effect of the winter road on foxes include:

- Mortality (road kills); and
- Greater access for trappers.

The potential for the road to disturb any denning wildlife including grizzly bear is very low because the majority of the route is on lakes. There are eight (8) portage areas where there is the small possibility of a grizzly bear den site or arctic fox den or wolf den. If the route is within 300 m of an area with possible grizzly bear, fox or wolf denning habitat, a den survey should be completed prior to construction. The survey area should include 200 m off the centerline on each side of the road. If a den site is observed within the survey area, the proposed road should be rerouted around the den site to the greatest extent possible (as conditions permit). Any located potential grizzly bear den site should be verified to confirm if the den is active and all active den site should be monitored by Lupin Mine contractor security and/or the Project Manager when they are patrolling the route, to verify if the road traffic is disturbing the denning bear by recording any signs of bear activity (signs of bear leaving the den). Similarly, all located arctic fox dens should be monitored to ensure that the use of the road is not disturbing arctic fox pairs into abandoning the den site. The Government of Nunavut or Government of Northwest Territories Conservation Officer will be informed if there are signs that the road is disturbing the hibernating bear or other denning wildlife and other possible mitigation measures may be discussed.

All wildlife observations will be documented.

4.2.2 Problem Wildlife

Problematic wildlife situations may arise where an animal acts in an aggressive manner, is a repetitive nuisance, or poses a threat to worker safety. Early detection and reporting of wildlife interactions supports proactive rather than reactive measures to be taken to prevent injury or destruction of a problem animal. If problem wildlife or evidence of problem wildlife is observed:

- Immediately notify the Project Manager;
- Take action to deal with an attractant, where relevant; and
- If a persistent or emergent wildlife-related issue exists, Project Manager, or designate, shall inform the Government of Nunavut or Government of Northwest Territories Conservation Officer to determine suitable action to be taken.

4.2.3 Waste Management

Managing waste so as not to attract wildlife is a key mitigation measure. Typical waste management measures employed include:

- Garbage, including all food wastes, is kept within vehicles transiting the road;
- Food waste arising from use of the emergency shelter will remain indoors until it can be properly disposed;
- In the event of a spill response, wastes and materials are handled in accordance with the *Spill Contingency Management Plan* (Lupin Mines 2024); and
- No garbage or food waste will be left along the road.

4.2.4 Sensory Disturbance

Project-related activities that create noise have the potential of creating sensory disturbances to wildlife. Sensory disturbance is minimized by managing noise emitted by vehicles and heavy equipment. Noise control measures include:

- Maintain all equipment and fit with appropriate mufflers.

4.2.5 Awareness and Training

The purpose of personnel training and awareness is to demonstrate that it is each person's responsibility to minimize Project effects on wildlife, including disruption and disturbance to wildlife, and ensure the safety of all personnel involved with the exploration Program.

As a part of the Site Orientation, all personnel, including staff and contractors, are engaged in a discussion on local wildlife resources including the following:

- Basic local wildlife ecology and possible Project-related effects on wildlife and wildlife habitat;
- Operating protocols such as incidental observation reporting;
- Awareness of known wildlife-sensitive areas such as breeding areas, den sites, nests and wildlife-sensitive periods;
- Project protocols associated with dealing with aggressive or unusual wildlife behaviour around work areas;
- Wildlife attractant management;
- Wildlife safety including bears and predators;
- Wildlife incidental/accident reporting and response procedures; and
- Compliance expectations and non-compliance disciplinary actions that may be enforced.

The following wildlife specific-training measures, awareness and responsibilities apply to avoid project effects to wildlife:

- Avoid any contact with wildlife including approaching and feeding wildlife;
- Where possible, try to stay out of sight of wildlife;
- Lupin Mine security will patrol the route 24 hours a day during construction and operation of the road and notify all drivers of wildlife observed so that drivers can stop on the portages and wait for wildlife to pass;
- Lupin Mine security will inform the drivers when it is safe to proceed;
- Avoid harassing or disturbing wildlife, especially when approaching a work site where caribou cows and calves, muskoxen groups or other wildlife may be encountered;
- If caribou cows and calves, muskoxen groups or other wildlife aggregations are observed foraging or migrating within a work area as crews approach, where safety permits, avoid the work area until the animals have moved at least 200 m from the site;
- If caribou or muskoxen groups are observed within 200 m of the road and are approaching the road, Lupin Mine security will stop and inform all drivers of the sighting. Security will then wait until the animals have move across the road and moved beyond 200 m and then inform all drivers it is same to proceed.
- If the vehicle driver can not stop at a portage site or can't find a safe spot to stop, they will reduce their speed and cautiously approach the area where the wildlife were observed (wildlife will be given the right of way).
- Project personnel and contractors are not permitted to hunt or fish while conducting business on behalf of Lupin Mine within the entire Project area; and
- Record all wildlife sightings in a Wildlife Incidental Observation Log.

5.0 Caribou

The Bathurst barren-ground caribou herd range has traditionally spanned from southern and central Northwest Territories to the herd's calving grounds west of Bathurst Inlet in Nunavut. A decline in the population has been observed over the last 30 years and 2018 survey results indicate the population is now approximately 8,200 individuals (Government Northwest Territories 2018b). Since this herd migrates across territorial borders, it is managed collaboratively by the Government of the Northwest Territories, the Wek'ëezhii Renewable Resources Board and the Nunavut Wildlife Management Board.

The Project is located within the Bathurst caribou herd range (Figure 2, copied from Range Plan) and caribou from other neighbouring herds can also wander into this range area.

The Northwest Territories Department of Environment and Natural Resources has drafted a Bathurst Caribou Range Plan (Range Plan) that aims to balance the diverse interests of all governments, communities and stakeholders across the range in Nunavut, Northwest Territories and northern Saskatchewan (Government of Northwest Territories 2018a). This range plan primarily has the goal of addressing issues related to cumulative land disturbance but is focused on managing disturbance to caribou and habitat to support recovery of the herd.



The Range Plan includes four specific management objectives:

1. Ensure the integrity of important habitats.
2. Ensure connectivity between seasonal ranges.
3. Ensure the amount of human-caused land disturbance is kept below certain levels.
4. Ensure the development, design and use of roads is managed with consideration to caribou.

The majority of the Project area is located within a lower use spring migration use area and by the time caribou start their migration towards calving and summer area, the winter road should be near closing. However, some sections of the winter road can be found within higher and mid-use utilization areas (Government of Northwest Territories 2018a). Accordingly, it is reasonable to expect to see Caribou any time of the year along the route.



Figure 2. The Bathurst Caribou Range planning area and historical range extent as identified by traditional knowledge (Government of Northwest Territories 2018).

5.1 Potential Project Interactions

Given the social and ecological importance of caribou to the economy and residents of the Territories, and the specific consideration afforded caribou, it is important to consider caribou-specific Project interactions and understand the relative risk posed by the Project to caribou.

Caribou and their associated habitats can be affected by various factors associated with construction, operational and closure activities, including removal of habitat, disturbance from vehicles and equipment, and possible camp activities. The Project may interact with caribou via:

- Indirect habitat loss
 - Avoidance or reduce use of areas near a disturbance;
 - Increased energy expenditure due to a response to sensory disturbance;
- Disruption of movement
 - Delayed crossing or avoidance of Project area;
- Mortality
 - Direct, through collision with vehicle;
 - Indirect, through increased hunter knowledge of caribou in the area that may arise through informal and social communications.

Currently, the use of the Winter Road does not overlap with migration movements, thus Project effects to caribou movement are likely minimal. The use of the winter road may disrupt caribou movement patterns; however, the potential is low as the Project construction and operational schedule does not overlap with any migratory movement except project closure may overlap with the start of the spring migration. Because of the limited use by caribou within the winter season within the Project area, the risk of caribou mortality due to vehicle collisions is considered low, as is indirect mortality associated with an increase access for hunters to the Project area.

There is no likely Project interaction with caribou during calving or post-calving periods since the Project area is located outside of these sensitive areas. There is the potential for caribou to wander into the Project area during the early spring season since the area is located within caribou migration range. There is also the possibility of caribou from other herds to wander into the Project area. Mitigation and management measures apply to all caribou.

5.2 Mitigation and Management Measures for Caribou

In addition to the general wildlife mitigation measures presented in Section 4.3.4 and Section 4.3.5 the following caribou-specific mitigations measures have been considered for the Lupin Mine Winter Access Project:

- Minimize sensory disturbance;
- Where possible, during road maintenance, graders will use a wing to support development of snowbanks that have a low angle of repose, reducing snow bank height;
- If caribou are observed within 300 m of the road, graders will reduce their speed and limit the distance that snow is thrown towards the caribou;
- For areas where snowbanks are taller than a meter, breaks should be created every 500 m so the snowbank does not act as a barrier to caribou movement; and

- To protect caribou, the winter access road will have caribou advisory signs to ensure caribou and other wildlife are given the right of way.

5.2.2 Sensory Disturbance

The construction, use and maintenance, and closure of the winter access road could possibly cause caribou to alter their behavior and movements. This effect will be mitigated by:

- Avoiding direct movement of equipment and people toward caribou;
- Giving caribou and all wildlife the right of way;
- Stop vehicles where it is safe to do so and allow caribou and all wildlife to cross the road if they are seen within 200m of the road and moving towards the road;
- In the presence of caribou, remain in the vehicle, as caribou may perceive you as a predator if you leave the vehicle; and
- Should they be used, all-terrain vehicles and snow machines should neither stop within sight of a caribou nor approach a caribou.

5.3 Monitoring

The initial step in monitoring and mitigation for caribou is to determine, using all available information, when caribou may interact with the Project. Ongoing observation by Project personnel will support monitoring for any observed change in distribution of caribou.

Incidental observations by drivers may trigger immediate mitigation measures, such as avoiding caribou. Relevant incidental observations may also trigger measures and active monitoring.

6.0 Reporting and Documentation

All wildlife sightings are documented, as are interactions, observed sensitive habitat occurrences including denning sites, and implementation of traffic control measures. The Project Manager maintains these records in the Lupin Mine site office and makes them available to a Land Use Inspector upon request.

7.0 References

Canada Wildlife Act. 1985. R.S., 1985, c. W-9, s. 1; 1994, c. 23, s. 2(F)

Migratory Birds Convention Act. 1994. S.C. 1994, c. 22

Northwest Territories Wildlife Act. 2017. S.N.W.T. 2014, c.31[F], S.N.W.T. 2017,c.19

Nunavut Wildlife Act. 2003. S.Nu 2003, c26 Reindeer Act. 2014. S.N.W.T. 2014,c.16

Reindeer Regulations. 2014. R-011-2014

Species at Risk Act (SARA). 2002. S.C. 2002, c. 29

Environment Canada, 2014. *Species at Risk in the NWT: 2014*. A guide to species in the NWT currently listed, or under consideration for listing, under federal and territorial species at risk legislation, 2014 edition. 88 pp.

https://www.nwtspeciesatrisk.ca/sites/default/files/pdf/SpeciesatRiskintheNWT_English.pdf

Government of Northwest Territories, 2018a. *Draft Bathurst Caribou Range Plan*. Department of Environment and Natural Resources, 74 pp.

https://www.enr.gov.nt.ca/sites/enr/files/resources/draft_bathurst_caribou_range_plan.pdf

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Lupin Mine, 2024. *Environment and Heritage Resources Protection Management Plan*, Lupin Winter Access Road Project, Lac de Gras NWT to Lupin, NU.

APPENDIX P. ABANDONMENT AND RESTORATION MANAGEMENT PLAN



ABANDONMENT AND RESTORATION MANAGEMENT PLAN:

LUPIN MINE WINTER ACCESS ROAD PROJECT

May 2024



Plain Language Summary:

This Plan describes what Lupin Mines Inc. will do at the end of each winter to close the winter road in a manner that is safe for people and protects the environment.

Revision History:

Revision #	Date	Section	Summary of Changes	Author	Approver
1	Apr 2024	All	New document	N. McLaren	



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1.0 Introduction

In support of ongoing reclamation of the Lupin Mine, Lupin Mine Incorporated is planning to access the Lupin Mine in winter along a portion of the existing Tibbitt to Contwoyto Winter Road corridor between the Ekati Mine turnoff on Lac de Gras and the Lupin Mine in Northwest Territories and Nunavut, respectively (the Project). This Plan considers the guidance and requirements provided in the documents listed in Table 1.

1.1 Scope

This Plan applies to seasonal and final decommissioning of the winter road and related staging areas, from the Ekati turnoff on the Tibbitt to Contwoyto Winter Road on Lac de Gras in Northwest Territories to landfall at the Lupin Mine in Nunavut (the Winter Road).

Seasonal closure includes annual decommissioning of the road at the end of each season, and equipment staging. Final closure includes decommissioning at the end of the final season of use.

Table 1 Relevant guidance documents including legislation, permits and licences.

Document	Authority
Nunavut Mine Site Reclamation Policy (2002)	Indigenous and Northern Affairs Canada
Abandonment and Reclamation Policy for Inuit Owned Lands (Version 2.0)	Qikiqtani Inuit Association
Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories (1993)	Government of Northwest Territories
Guidelines for Safe Ice Construction (2015)	Government of Northwest Territories
<i>Nunavut Water Nunavut Surface Rights Tribunal Act</i> (2002) and <i>Nunavut Water Regulations</i> (2013)	Indigenous and Northern Affairs Canada
<i>Territorial Lands Act</i> (1985) and <i>Land Use Regulations</i> (2016)	Indigenous and Northern Affairs Canada
<i>Mackenzie Valley Resource Management Act</i> (1998)	Government of Canada
<i>Northwest Territories Lands Act</i> (2014)	Government of Northwest Territories
<i>Northwest Territories Lands Use Regulations</i> (2014)	Government of Northwest Territories
<i>Northwest Territories Waters Regulations</i> (2014)	Government of Northwest Territories
<i>Environmental Protection Act</i> (1988)	Government of Northwest Territories
<i>Waters Act</i> (2014)	Government of Northwest Territories
Screening Decision Report	Nunavut Impact Review Board
Approval Without a Licence	Nunavut Water Board
Land Use Permits	Crown-Indigenous Relations and Northern Affairs Canada Government of Northwest Territories

1.2 Site Description

The Winter Road occurs along an existing route established in the 1970's and since used intermittently to service the Lupin Mine and the Jericho Mine. The Winter Road route predominantly traverses lakes, with few portages where the road occurs overland. Of the 213 km, 95 km occur in Northwest Territories and 118 occur in Nunavut. Seven (7) portages occur in Northwest Territories and there is one (1) portage in Nunavut. Staging areas along the route which may be utilized to store

equipment and fuel include existing portage areas as discussed with and approved by the Inspector.

The Winter Road occurs entirely above the tree line, with overland portions traversing the barren lands of the Southern Arctic Ecozone and the Tundra Shield Low Arctic Ecoregion, within the Slave Geologic province. Portages generally follow low-lying terrain found between lakes along the road route (EBA 2001, Ecosystem Classification Group 2012).

The Winter Road is accessed in mid- to late-winter only. At this time, ground is frozen and snow covered, and ice thickness on lakes is up to 2 m thick.

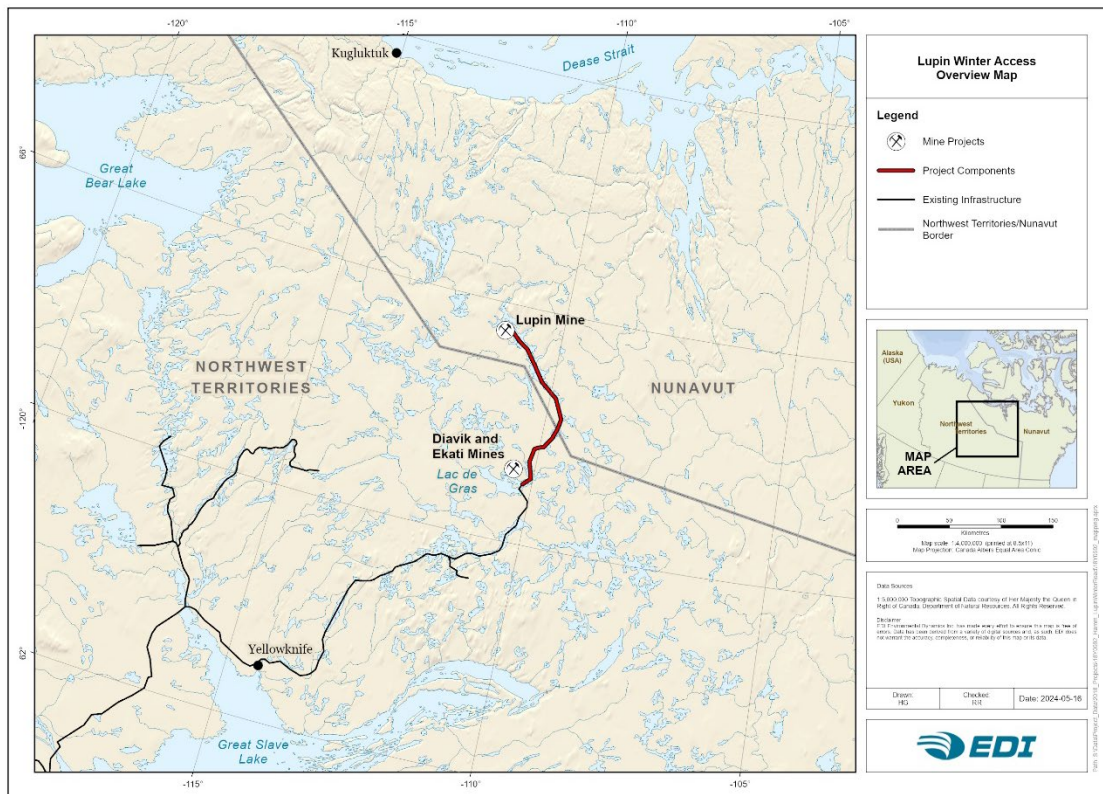


Figure 1 Lupin Mine Winter Program location.

1.3 Closure Objectives

Closure objectives for the site are to:

- re-establish pre-disturbance terrain conditions, where possible;
- restore areas occupied by the undertaking to a condition compatible with future land use.

1.4 Plan Management

This Plan is intended to fulfill requirements associated with water use authorizations and land use licences and permits.



The Plan will be reviewed annually by the Project Manager and updated as needed.

1.5 Plan Implementation

This Plan is effective upon approval and is valid throughout all phases of the Project.

The Project Manager or designate is responsible for Plan implementation.

A copy of this Plan is maintained on site at the Lupin Mine.

2.0 Roles and Responsibilities

Lupin Mine is responsible for activities associated with winter access to the Lupin Mine, including implementation and management of this Plan, and directing, documenting and reporting pertaining to closure activities.

Lupin Mine's contact information is provided below.

Lupin Mines Incorporated

c/o Mandalay Resources Corp.

Suite 330-76 Richmond Street

Toronto, ON Canada M5C 1P1

Contact: Kellie Leedham

Phone: (403)808-1534

Email: kellie@falkirk.ca

3.0 Seasonal Closure

Any equipment that may be used to construct or traverse the road in future years may be staged at adjacent mines sites or in designated staging areas, or as otherwise approved by the Inspector.

Equipment staged along the route is drained of fuel with a drip tray placed underneath to capture any fluid leaks.

Fuel staged along the route, including that contained in barrels, tidy tanks, or a fuel truck, is placed in adequate, secondary containment.

At the end of each season, planned abandonment of the road corridor entails removal of all supplies and equipment from the road, and removal of snowfalls and V-notching ice bridges at portages prior to freshet.

Hazardous and domestic waste generated during the Program, either due to a spill response or use of camps, is dealt with in accordance with the Waste Management Plan (Lupin Mine 2024).

Water pumps used for construction, and the temporary camp are staged in approved staging areas either offsite or along the route, with other equipment when not in use.



4.0 Final Closure

Final closure at the end of the project involves a planned abandonment of the road corridor and entails removal of all supplies and equipment from the road, and removal of snowfalls and V-notching ice bridges at portages prior to freshet.

Hazardous and domestic waste generated either due to a spill response or use of the emergency shelter is backhauled for off-site disposal or treatment.

Water pumps used for construction and camps are removed.

5.0 Reporting and Documentation

Annual reporting will occur in accordance with the terms and conditions of the relevant authorizations. Closure efforts will be photo documented.

7.0 References

Environmental Protection Act. R.S.N.W.T. 1988,c.E-7

Mackenzie Valley Resource Management Act. S.C. 1998, c. 25

Northwest Territories Lands Act. S.N.W.T. 2014,c.13

Northwest Territories Waters Regulations. R-019-2014

Northwest Territories Lands Use Regulations. R-012-2014

Nunavut Waters and Nunavut Surface Rights Tribunal Act. S.C. 2002, c. 10

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Qikiqtani Inuit Association, undated. *Abandonment and Reclamation Policy for Inuit Owned Lands (Version 2.0)*.

APPENDIX Q. SPILL CONTINGENCY PLAN



SPILL CONTINGENCY MANAGEMENT PLAN:

LUPIN MINE WINTER ACCESS ROAD PROJECT

May 2024



Emergency Contact Information

Organization	Contact	Location	Telephone/Radio
Discovery Mining Services (c/o Lupin Mines)	Rod Brown	Yellowknife	867-920-4600
JDS (c/o Lupin Mines)	Darren Kress	Yellowknife	204-558-6023
Stantec	Steve Bundrock	Calgary	403-990-5443
NT-NU Spill Centre	Inspector	Yellowknife	867-767-9188
Government of Northwest Territories	Resource Management Officer	Kugluktuk	867-982-4306
Crown-Indigenous Relations and Northern Affairs	Field Operations	Iqaluit	867-975-4295
Mackenzie Valley Land and Water Board	Regulatory Specialist	Yellowknife	867-766-7464
Nunavut Water Board	Licencing Department	Gjoa Haven	867-360-6338

Plain Language Summary

This Plan describes how people are trained and what needs to be done to respond safely to a spill of fuel or other hazardous material while building and using the winter road from Lac de Gras to Lupin.

Revision History

Revision #	Date	Section	Summary of Changes	Author	Approver
1	Apr 2024	All	New document	N. McLaren	

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2.0 Roles and Responsibilities	Error! Bookmark not defined.
2.1 Staff, Contractors, Suppliers and Visitor	Error! Bookmark not defined.
2.2 Managers and Supervisors	Error! Bookmark not defined.
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5.0 Biological Resources	Error! Bookmark not defined.
5.1 Vegetation	Error! Bookmark not defined.
6.0 Heritage Resources	Error! Bookmark not defined.
7.0 Waste Management.....	Error! Bookmark not defined.
8.0 Training	Error! Bookmark not defined.
9.0 Reporting and Documentation	Error! Bookmark not defined.
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9.2 Documentation.....	Error! Bookmark not defined.
10.0 References	Error! Bookmark not defined.

1.0 Introduction

A spill is an unplanned or uncontrolled release of a regulated or hazardous material, either as a solid, liquid or gas. Spills associated with Lupin Mine Inc. (Lupin Mine) Lupin Winter Access Program (the Program) may occur along the winter road route either on ice or on a portage overland. Regardless of the type or quantity of material involved, all work areas must implement measures to reduce the potential for spills and have an action plan for responding to spills. This Spill Contingency Plan (the Plan) describes methods for preventing and responding to spills during the Program and considers the guidance provided in the documents listed in Table 1.

1.1 Scope

The purpose of the Program is to construct and operate a portion of the Tibbitt to Contwoyto Winter Road (TCWR) route from the Ekati Mine turnoff on Lac de Gras in the Northwest Territories (NT; Lac de Gras) to the Lupin Mine in Nunavut (NU; Lupin) to mobilize and demobilize equipment and supplies that may be used for ongoing reclamation of Lupin in the Kitikmeot Region of Nunavut (the Program).

The Program includes transportation only of equipment and supplies such as bulk fuel, lime, and explosives; materials storage, other than supplies that may be housed in the emergency shelter, is outside of the scope of the Program.

This Plan is effective for the duration of the land use operations, commencing upon approval of this Plan and effective through winter road construction, operations, and closure activities for a period of up to five (years) or as otherwise permitted.

The Plan considers spills to snow or ice only.

Table 1 Relevant guidance documents including legislation, permits and licences.

Document	Authority
Contingency Planning and Spill Reporting in Nunavut: A guide to the new regulations	Government of Nunavut
Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories (1993)	Government of Northwest Territories
A Guide to the Spill Contingency Planning and Reporting Regulations (2011)	Government of Northwest Territories
<i>Nunavut Water Nunavut Surface Rights Tribunal Act</i> (2002) and <i>Nunavut Water Regulations</i> (2013)	Indigenous and Northern Affairs Canada
<i>Territorial Lands Act</i> (1985) and <i>Land Use Regulations</i> (2016)	Indigenous and Northern Affairs Canada
<i>Mackenzie Valley Resource Management Act</i> (1998)	Government of Canada
<i>Northwest Territories Lands Act</i> (2014)	Government of Northwest Territories
<i>Northwest Territories Lands Use Regulations</i> (2014)	Government of Northwest Territories
<i>Northwest Territories Waters Regulations</i> (2014)	Government of Northwest Territories
<i>Environmental Protection Act</i> (1988)	Government of Northwest Territories
<i>Waters Act</i> (2014)	Government of Northwest Territories
<i>Spill Contingency Planning and Reporting Regulations</i> (1993)	Government of Northwest Territories, Nunavut
<i>Canadian Environmental Protection Act</i> (1999)	Environment and Climate Change Canada

<i>Environmental Emergency Regulations (2003)</i>	Environment and Climate Change Canada
<i>Transportation of Dangerous Goods Act (1992)</i>	Transport Canada
<i>Transportation of Dangerous Goods Regulations (2012)</i>	Transport Canada
<i>Hazardous Products Act (1985)</i>	Health Canada
<i>Canada Labour Code (1985)</i>	Employment and Social Development Canada
<i>Canada Occupational Safety and Health Regulation (1986)</i>	Employment and Social Development Canada
Screening Decision Report	Nunavut Impact Review Board
Approval Without a Licence	Nunavut Water Board
Land Use Permit	Crown-Indigenous Relations and Northern Affairs Canada Government of Northwest Territories

1.2 Objectives

Lupin Mine strives to meet and exceed best management practices regarding materials handling, however, it is recognized that accidental spills and unplanned releases may occur. Accordingly, the objective of this Plan is to:

- Ensure employees and contractors are trained to respond to spills in an effective manner; and
- Outline appropriate spill response measures to ensure personnel safety and environmental protection.

1.3 Site Description

The Program occurs along an existing winter road route established in the 1970's and since used intermittently to service the Lupin Mine and the Jericho Mine (the Winter Road). The Winter Road route predominantly traverses lakes, with few portages where the road occurs overland. Of the 213 km, 95 km occur in Northwest Territories and 118 occur in Nunavut. Seven (7) portages occur in Northwest Territories and there is one (1) portage in Nunavut.

The Winter Road occurs entirely above the tree line, with overland portions traversing the barrenlands of the Southern Arctic Ecozone and the Tundra Shield Low Arctic Ecoregion, within the Slave Geologic province. Portages generally follow low-lying terrain found between lakes along the road route (EBA 2001, GNWT 2012).

The Winter Road is accessed in mid- to late-winter only. At this time, ground is frozen and snow covered, and ice thickness on lakes is up to 2 m thick.

1.4 Plan Management

This Plan is intended to fulfill requirements associated with the water licence and land use licences and permits as well as existing legislation. The Plan will be updated to maintain a current contact list, as needed.

The Plan will be reviewed annually by the Project Manager and updated as needed. When material changes occur, the updated document will be issued externally as needed.

1.5 Plan Implementation

This Plan is effective upon approval and is valid throughout all phases of the Project.

The Project Manager or designate is responsible for Plan implementation.

A copy of this Plan is maintained on site at Lupin.

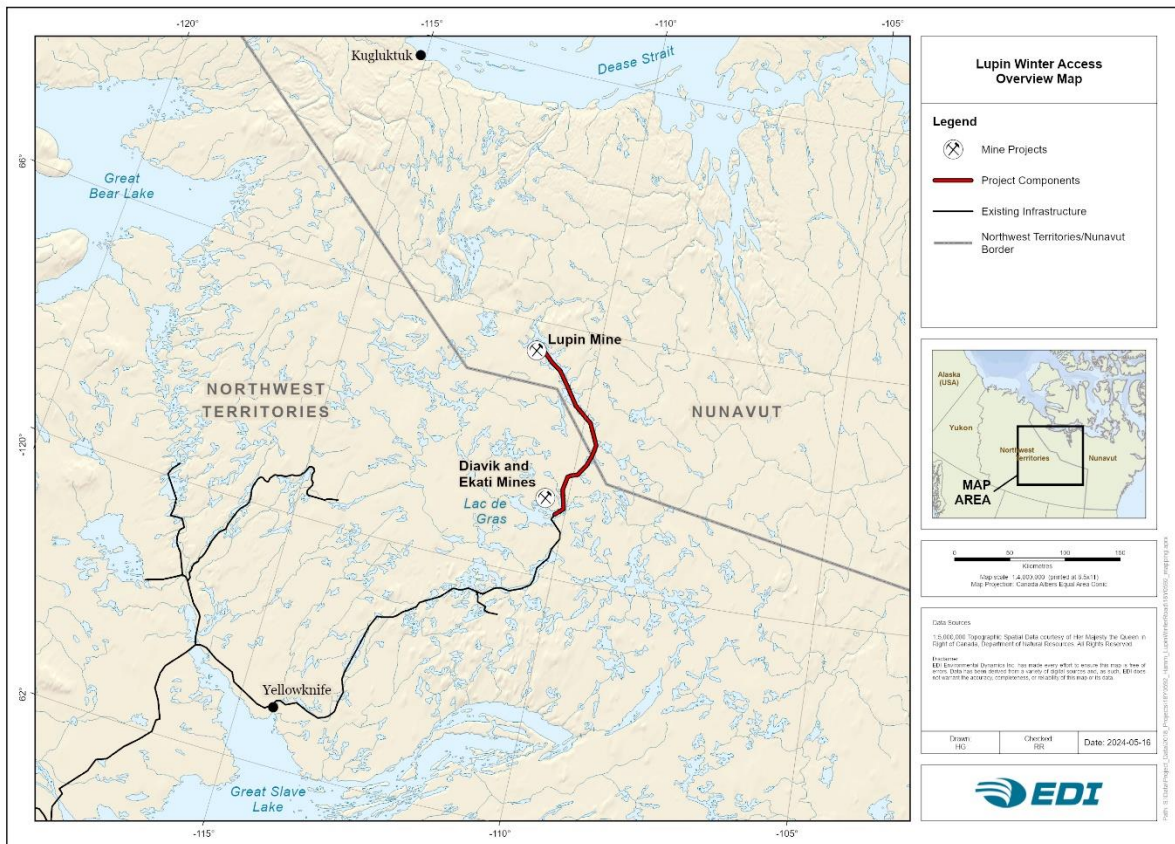


Figure 1 Lupin Mine Winter Program location.

2.0 Roles and Responsibilities

Lupin Mine is responsible for activities associated with winter access to the Lupin Mine, including implementation and management of this Plan, and directing, documenting, and reporting pertaining to closure activities.

Lupin Mine's contact information is provided below.

Lupin Mines Incorporated
c/o Mandalay Resources Corp.
Suite 330-76 Richmond Street
Toronto, ON Canada M5C 1P1
Contact: Kellie Leedham

Phone: (403)808-1534

Email: kellie@falkirk.ca

2.1 Staff, Contractors, Suppliers, and Vendors

All personnel conducting activities on site, including staff, contractors, suppliers and visitors, are required to implement this Plan as it pertains to their activities on site. Specifically, these responsibilities include:

- Taking all necessary steps to minimize the chance of spills when working with materials that may pose a risk to worker health and the environment;
- Cooperating with your supervisor and/or Lupin Mine management to implement a spill prevention program;
- Carrying out only those duties and tasks that you are experienced at and trained to perform;
- Where there is uncertainty, asking questions and bring concerns to the attention of your supervisor when working with products that pose potential environmental and health risks;
- Responding to spills for which you are responsible or discover, and for which you have the requisite training and equipment; and
- Reporting all spills, regardless of size, to your supervisor or Lupin Mine management in a timely manner.

2.2 Managers and Supervisors

Managers and supervisors have a responsibility to ensure that staff, contractors, consultants and visitors

have been trained in Lupin Mine spill response expectations and procedures. Additional supervisor and

manager responsibilities include:

- Maintaining a no blame work environment in initiating a spill response and related follow-up actions;
- Ensuring site-specific and material-specific training is provided to all departments and staff;
- Ensuring there are appropriate and sufficient spill response supplies in work area for the hazard characteristics and quantities of materials handled or transported;
- Provide assistance in response to chemical spills including the coordination of additional response personnel or equipment;
- Maintain records regarding inspections, personnel training, emergency equipment testing and spill kit maintenance; and
- Contact appropriate government agencies and emergency services where appropriate.

An emergency contact list is provide in Appendix A.

3.0 Spill Prevention

Successful spill prevention is based on safe handling and transport of materials.

3.1 Product Inventory

Table 2 provides a list of materials expected to be transported along the winter road. Note that products are not stored on site.

Should the need for temporary storage arise, such in the event of an emergency response, secondary containment will be established, and the inspector will be notified.

Table 2 Petroleum and chemical products typically transported along the winter road.

Material	Amount	Container
ANFO	10,400 kg	Bags or sticks, on bulk haul trucks
Diesel	6	450 L truck-mounted tidy tanks
	1,500,000	Bulk haul trucks
	Up to 5	210 L drums in secondary containment, in emergency shelter
Gasoline	10	50 L jerry cans
Lime	40,000 kg	Bulk haul trucks
Propane	Up to 5	100 lb cylinders, in emergency shelter
Spent spill response materials	Various	205 L drums or lined mega bags
Various lubricants	5	5 gal pails
	40,000 L	Bulk haul trucks

3.2 Material Handling and Disposal

Material handling during the program will be minimal as most materials will be transported along the Winter Road, with loading and unloading to occur at separately permitted facilities. Instances where materials may be handled includes during a spill response or vehicle and equipment refuelling during Construction. Considerations for proper material handling include:

- Conduct refueling and equipment repair in a designated area within secondary containment or utilizing a drip tray;
- Use equipment or seek assistance when transporting heavy or awkward containers;
- Use funnels and spill containment trays when pouring or transferring chemicals from one container to another; and
- Utilize proper PPE when handling hazardous materials.

Disposal is limited to the disposal of spent spill response materials. Should a spill and related cleanup occur, spent response materials will be backhauled for proper disposal off site.

4.0 Spill Response

The nature of a spill response will vary depending upon the situation, the material spilled and location of the spill and the spill receiving environment. In all spill response scenarios, the following steps should be taken to ensure employee safety and environmental protection are maintained:

1. Ensure your own safety and the safety of your coworkers by:
 - a. Stop what you are doing;

- b. Stay clear of the spill;
 - c. Warn others nearby,
 - d. Shut down nearby equipment;
2. If required, and if it is safe to do so, assist injured or contaminated persons;
3. Assess the situation. Notify and report, as needed:
 - a. Emergency
 - i. if the spill poses a significant risk to persons, property or the environment, call for help and contact your supervisor or the Project Manager immediately;
 - b. Non-emergency: proceed with appropriate spill response;
4. Consult the Safety Data System (SDS) sheets for exposure risk;
5. Put on appropriate personal protective equipment (PPE; gloves, safety glasses, apron, footwear);
6. Contain the spill as outlined in the following sections;
7. Label and prepare containers of waste and spent spill response materials for disposal in accordance with Sections 3.1 and 3.2;
8. Conduct spill reporting as outlined in Section 5;
9. Where required, participate in incident investigations and follow-up measures.

4.1 Spills to Snow

In the event of a spill to snow:

- If flowing fluid, construct an ice berm or barrier downslope of the spill by compacting snow and spraying with water (if conditions permit) or use synthetic, impervious sheeting;
- Compact snow around the perimeter of the spill area;
- Locate the low point of the spill area and clear channels in the snow towards this low point, to allow free product to flow into the low point;
- Recover free product through manual or mechanical means including shovels, heavy equipment and pumps, or if approved, combust in situ;
- Absorb petroleum residue with synthetic sorbent socks, pillows, pads or granular materials;
- Mechanically recover all contaminated snow and ice.

4.2 Spills to Ice

In the event of a spill to ice:

- Follow procedures for a spill to snow.

If materials penetrate and are under the ice:

- Drill holes through ice using ice auger to locate fuel/petroleum product;
- Once detected, cut slots in the ice using chain saws and remove ice blocks. Light non-aqueous phase liquids will collect in openings in the ice;
- Recover free product through manual or mechanical means including scoops or pumps, or, if approved, combust in situ; and
- Absorb petroleum residue with synthetic sorbent socks, pillows, or pads.

4.3 Spill Kits

Spill kits on site may vary based on location and supplier. Contents of typical small and large kits are presented below.

A typical small (68 L) spill kit may contain the following:

- 50 oil sorbent pads
- 4 small pillows
- 2 large pillows
- 4-4 inch socks
- 1 plug patty (instant leak-stop)
- 1 pair of nitrile gloves
- 1 pair of splash goggles
- 1 disposable respirator

A typical large (220 L) spill kit may contain the following:

- 4 socks (3" x 10')
- 5 socks (3" x 4')
- 50 pads
- 5 pillows
- 1 roll
- 1 drain cover
- 1 caution tape
- 2 pairs nitrile gloves
- 2 pairs safety goggles
- 2 protective coveralls
- 10 disposable bags
- 1 instruction book

Spill kits are inspected at the start of each field season and following each spill response to ensure contents are sufficient.

5.0 Reporting and Documentation

5.1 Safety Data System (SDS)

SDS sheets are maintained onsite at the Lupin Mine. The SDS sheets are reviewed annually at the start of the field program to ensure that appropriate and current SDS sheets are available.

5.2 Spill Reporting

As mentioned in Section 4, spill reporting is a key component of the spill response efforts. Once it is safe to do so, the first responder shall collect the following info:

- 1) Date and time of spill
- 2) Location of spill

- 3) Direction the spill is moving
- 4) Name of contact person at location of spill, and phone number where applicable
- 5) Material and quantity spilled
- 6) Cause of spill
- 7) Whether spill is contained or stopped
- 8) Action taken to contain, recover, clean-up and dispose of spilled material

All spills and unplanned releases are reported to the Project Manager. Materials and quantities listed in Appendix B that are spilled or released in an unplanned manner require external reporting. In the event of a reportable spill and once it is safe to do so, the Project Manager or designate will initiate notification of the following:

- 1) Lupin Mine Project Manager.
- 2) NT-NU 24-hour spill report line.
- 3) CIRNAC and/or GNWT Inspector.

Following initial notification, the Project Manager will complete a NT-NU Spill Reporting Form. The completed form must be submitted to the Inspector within seven calendar days of the incident.

A detailed follow-up report must be submitted to the Inspector within 30 days of the incident.

6.0 Training

All attendees to site participate in a site orientation which outlines onsite hazards and roles and responsibilities regarding material handling, storage, and spill response. Spill kit contents and deployment are periodically reviewed at weekly site safety meetings.

All attendees to site must be trained in Workplace Hazardous Materials Information System (WHMIS) procedures.

7.0 References

Canada Labour Code R.S.C., 1985, c. L-2

Canada Occupational Safety and Health Regulation. 1986. SOR/86-304

Canadian Environmental Protection Act (CEPA). S.C. 1999, c.33

Environmental Emergency Regulations SOR/2003-307

Environmental Protection Act. R.S.N.W.T. 1988, c.E-7

Hazardous Products Act R.S.C., 1985, C. H-3

Mackenzie Valley Resource Management Act. S.C. 1998, c. 25

Mine Health and Safety Act, SNWT (Nu) 1994, c25

Mine Health and Safety Regulations, NWT Reg (Nu) 125-95

Northwest Territories Lands Act. S.N.W.T. 2014,c.13

Northwest Territories Lands Use Regulations. R-012-2014

Northwest Territories Waters Regulations. R-019-2014

Nunavut Waters and Nunavut Surface Rights Tribunal Act. S.C. 2002, c.10

Nunavut Waters Regulations. SOR/2013-69

Spill Contingency Planning and Reporting Regulations R-068-93

Territorial Lands Act. R.S.C.. 1985, c. T-7

Territorial Land Use Regulations. SOR/2016 R-32, s.1.

Transportation of Dangerous Goods Act (TDGA). S.C. 1992, c.34

Transportation of Dangerous Goods Regulations. SOR/2012-245

Government of the Northwest Territories, 2011. *A Guide to the Spill Contingency Planning and Reporting Regulations*. Environment and Natural Resources. Updated March 2011.

Government of the Northwest Territories, 2003. *Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories*.

Government of Nunavut, 2011. *Contingency Planning and Spill Reporting in Nunavut: A guide to the new regulations*.

Lupin Mine Emergency Contact List

Name	Role	Phone
Daniel Jenkins	JDS - Project Manager	+1-604-813-1792
Darren Kress	JDS - Construction Manager	+1-306-575-7027
Jon Melnyk	JDS - Project Coordinator	+1-403-862-2994
Darwin Ziprick	JDS – Health and Safety Lead	+1-250-575-7179
Malcolm Mclean	DMS - President	+1-867-920-4600
Rod Brown	DMS – Vice President	+1-867-920-4600
Jennifer Ryden	DMS – Logistics Manager	+1-867-445-1637
Kellie Leedham	Mandalay Consultant	+1-403-808-1534

APPENDIX R. WASTE MANAGEMENT PLAN



WASTE MANAGEMENT PLAN:

LUPIN MINE WINTER ACCESS ROAD PROJECT

24 October 2024

Revision History

Revision #	Date	Section	Summary of Changes	Author
1	Apr 2024	All	New document	N. McLaren, Falkirk Environmental
2	Sept 2024	1.2, 3.1, date , contact information.	Plan Updates	A. Jebb, Falkirk Environmental
3	Oct.25, 2024	All	<ul style="list-style-type: none"> Updated waste management options for sewage, greywater and non-mineral waste for the project and camp operations. Updated waste stream disposal details. Updated waste reduction options and waste impact mitigation options. 	K. Leedham, Falkirk Environmental

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1. INTRODUCTION

In support of ongoing reclamation of the Lupin Mine, Lupin Mine Incorporated a subsidiary of Mandalay Resources, is planning to access the Lupin Mine in winter along a portion of the existing Tibbitt to Contwoyto Winter Road corridor between the Ekati Mine turnoff on Lac de Gras and the Lupin Mine in Northwest Territories and Nunavut, respectively (the Project). This Plan considers the guidance and requirements related to waste management provided in the documents listed in Table 1-1 and recommendations from government regulators.

The table below outlines documents referenced in the development of this waste management plan.

Table 1-1: Relevant Guidance Documents Including Legislation, Permits and Licenses

Document	Authority
MVLWB Guidelines for Developing a Waste Management Plan (2011a)	Mackenzie Valley Land and Water Board
Contingency Planning and Spill Reporting in Nunavut: A guide to the new regulations	Government of Nunavut
Environmental Guideline for the General Management of Hazardous Waste in Nunavut (2010)	Government of Nunavut
Guideline for Hazardous Waste Management (2017)	Government of Northwest Territories
A Guide to the Spill Contingency Planning and Reporting Regulations (2011)	Government of Northwest Territories
<i>Nunavut Water Nunavut Surface Rights Tribunal Act</i> (2002) and Nunavut Water Regulations (2013)	Indigenous and Northern Affairs Canada
<i>Mackenzie Valley Resource Management Act</i> (1998)	Government of Canada
<i>Northwest Territories Lands Act</i> (2014)	Government of Northwest Territories
Northwest Territories Lands Use Regulations (2014)	Government of Northwest Territories
Northwest Territories Waters Regulations (2014)	Government of Northwest Territories
<i>Environmental Protection Act</i> (1988)	Government of Northwest Territories, Nunavut
<i>Waters Act</i> (2014)	Government of Northwest Territories
Spill Contingency Planning and Reporting Regulations (1993)	Government of Northwest Territories, Nunavut
<i>Canadian Environmental Protection Act</i> (1999)	Environment and Climate Change Canada
Environmental Emergency Regulations (2003)	Environment and Climate Change Canada
<i>Transportation of Dangerous Goods Act</i> (1992)	Transport Canada
Transportation of Dangerous Goods Regulations (2012)	Transport Canada



1.1 COMPANY NAME

Lupin Mines Incorporated
c/o Mandalay Resources Corp.
Suite 330-76 Richmond Street Toronto, ON Canada M5C 1P1

Contact: Kellie Leedham, Falkirk Environmental Consultants – an authorized agent of Mandalay Resources

Email: kellie@falkirk.ca

1.2 MANDALAY CORPORATE ENVIRONMENTAL POLICY

Mandalay Resources is committed to maintaining the highest level of integrity in its corporate responsibilities toward resource development and environmental stewardship. Mandalay is committed to environmental protection throughout the exploration, development, operation and eventual closure and rehabilitation of each of its projects by applying sound judgment, by meeting or exceeding legislative requirements and by minimizing adverse impacts its activities may have on the environment. Mandalay views adherence to the policy's environmental guidelines as a continual improvement process.

1.3 PROJECT DESCRIPTION

The Tibbitt to Contwoyto Winter Road (TCWR) will be built along an existing route established in the 1970's and since used intermittently to service the Lupin Mine and the Jericho Mine (Figure 1-1). The Winter Road route predominantly traverses lakes, with few portages where the road occurs overland. Of the 210 km, 95 km occur in Northwest Territories and 115km occur in Nunavut. Seven (7) portages occur in Northwest Territories and there is one (1) portage in Nunavut. Staging areas along the route which may be utilized to store equipment and fuel include existing portage areas as discussed with and approved by the Inspector. Figure 1-1 shows the general routing of the Lupin Mine Winter Road.

The Winter Road occurs entirely above the tree line, with overland portions traversing the barren lands of the Southern Arctic Ecozone and the Tundra Shield Low Arctic Ecoregion, within the Slave Geologic province. Portages generally follow low-lying terrain found between lakes along the road route (EBA 2001, Ecosystem Classification Group 2012).

The Winter Road is accessed in mid- to late-winter only. At this time, the ground is frozen and snow covered, and ice thickness on lakes is up to 2 m thick.

The Project will consist of up to two portable, temporary camps may be used to support seasonal construction. Each camp will house an average of 15 persons,

The first camp location will be adjacent to Portage 55 of the TCWR. The camp will follow the construction and maintenance crews along the length of the winter road. All camps will be located adjacent to the winter road and will be established on durable ground. Proper setbacks from the nearest watercourses will be maintained. The Inspector will be notified of the campsite locations and the construction and land use operations progress.

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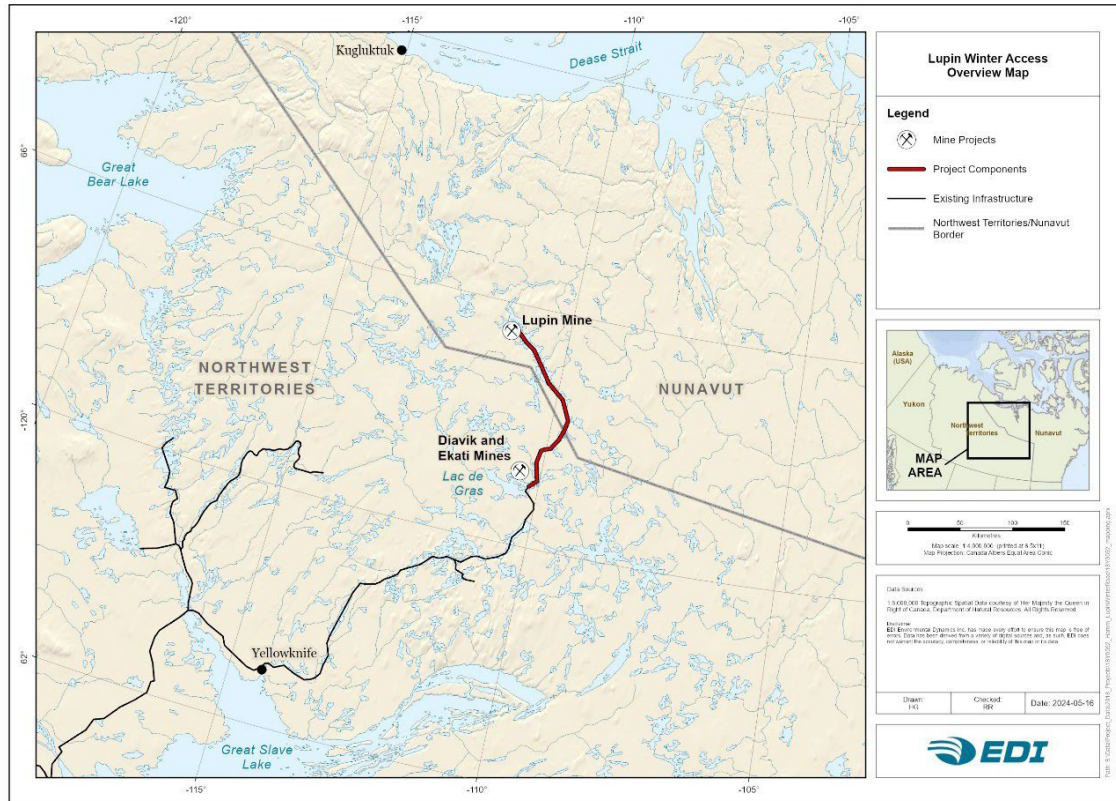


Figure 1.-1: Lupin Mine Winter Road Location

1.4 SCOPE

The Program involves constructing and operation a portion of the Tibbitt to Contwoyto Winter Road (TCWR) route from the Ekati Mine turnoff on Lac de Gras to Lupin to mobilize and demobilize equipment and supplies that may be used for ongoing reclamation of Lupin in the Kitikmeot Region of Nunavut (the Program). The Program includes transportation only of equipment and supplies such as bulk fuel, soda ash, and lubricants activities occurring at the Lupin mine site are authorized elsewhere and are outside of the scope of the Program. The Program involves constructing and operation a portion of the Tibbitt to Contwoyto Winter Road (TCWR) route from the Ekati Mine turnoff on Lac de Gras to Lupin to mobilize and demobilize equipment and supplies that may be used for ongoing reclamation of Lupin in the Kitikmeot Region of Nunavut (the Program). The Program includes transportation only of equipment and supplies such as bulk fuel, soda ash, and lubricants activities occurring at the Lupin mine site are authorized elsewhere and are outside of the scope of the Program.

The scope of the Lupin Mine Winter Access Road generally includes:

- Winter road construction and maintenance.
- Water withdraws to support winter road construction.
- Hauling and transport of equipment to support Lupin mine reclamation.
- Establishment of a temporary camp to house workers during road construction.
- Proper storage of all wastes at the camp facility until disposal.
- Sewage treatment and discharge of greywater into constructed sumps.
- Possible incineration of domestic waste from the camp.
- Possible backhaul of domestic waste from the camp to the Yellowknife Solid Waste Disposal Facility.
- Backhauling of potentially hazardous wastes to KBL Waste Transfer site in Yellowknife.
- Waste management goals include limiting impacts to the environment including terrestrial and aquatic resources and operating in a manner that is compliant with all authorizations.

1.5 PLAN MANAGEMENT AND IMPLEMENTATION

The onsite Project Manager or designate is responsible for Plan implementation.

A copy of this Plan is maintained in the Lupin Mine's office in both Yellowknife. A copy of this Plan will also be maintained by the Project Manager onsite, during the construction of the road.

The Plan will be reviewed annually by the Project Manager and updated as needed. When material changes occur, the updated document will be issued externally as needed.

All workers and contractors involved in the winter road construction and any associated activities (i.e. camp operations), will be trained on proper waste handling and disposal options during the project.

2. IDENTIFICATION OF WASTE TYPES

Types of waste that may be generated through the Program include:

- Non-mineral waste:
- Potentially hazardous waste

No mineral waste will be produced because of this program.

2.1 IDENTIFICATION OF NON-MINERAL WASTES

Given the nature and duration of the winter road construction project, minimal non-mineral refuse is expected to be produced. The Project is of short duration and requires minimal supplies that produce waste. Examples of this type of waste that may be produced domestic waste include domestic waste such as organic food waste and putrescible waste and wastes related to camp activities. Also, construction of the road may produce wastes or bi-products such as wood, metal, and plastics. Treated sewage and other greywater will be produced from workers and camp operations

2.2 IDENTIFICATION OF POTENTIALLY HAZARDOUS WASTES

Potentially hazardous wastes produced may include fuels, antifreeze, fuel transport containers (e.g. jerry cans), oil filters, batteries, oily rags, solvents, and sorbent materials (which can also be referred to as Listed Wastes). In the event of a spill, spill response materials may be generated in the event of an unplanned release from the vehicles constructing, maintaining, or transiting the road. Implementing a robust safety program will minimize waste of this type from being generated; however, in the event of an unplanned release the volume of waste generated may vary depending on the magnitude of the spill.

3. MANAGEMENT OF WASTES

The section below details how different types of waste will be handled throughout the project. Pollution prevention is the most effective and proactive management practice to eliminate and reduce the generation of waste. Best management options will be followed to reduce the amount of waste produced at the site. Where possible and appropriate options are available, efforts will be made to re-use, repurpose, or recycle materials.

Table 4-1 below provides summary of the types of expected waste, best management approaches, treatment, and disposal options.

3.1 NON-MINERAL WASTE MANAGEMENT

3.1.1 Sewage and Greywater

A portable sewage treatment unit will be placed at the camp to treat sewage from flush toilets. This sewage treatment plant will also treat greywater from the camp kitchen and camp washing facilities. Treated waters will be disposed of into a sump that is located no less than 100m from any waterbody. Sump locations will be determined once the exact location of the camp and any nearby waterbodies are determined

3.1.2 Other Waste Management

Appropriate waste disposal containers to allow for appropriate waste separation will be available to crews during road construction. All waste will be hauled back to the camp location. The camp will be equipped with appropriate containers to accommodate all types of waste that may be produced until disposal. These containers will be durable and in good condition and will minimize attractants and interactions with wildlife and crews.

The project is considering two options for domestic waste disposal. Selection will depend on the successful

camp contractor for the project and their current equipment availability. These options had not finalized at the time this report was created. A preferred option will be presented to regulators as soon as available.

The two options are described below:

1. **Incineration:** A dual chamber diesel incinerator that meets the Environment and Climate Change Canada (ECCC) Canada-wide standards for Dioxins and Furans: (80 pg I-TEQ/Rm3 @ 11% O2) and Mercury (20 µg/Rm3 @ 11% O2) is being considered. Operations of the incinerator would only be performed by certified operators and would meet incineration practices and standards and documentation requirements.
2. **Store waste at Camp and backhaul to Yellowknife Solid Waste Facility (landfill) at the end of the Project:**
 - Kitchen waste will be stored at camp in a secure containment unit meant for domestic waste, within an outdoor structure or building. This will function to prevent wildlife encounters. Cold weather will help prevent odours.
 - Other waste, such as scrap wood and metal will be separated and stored in a designated area that is kept tidy and properly labelled.

3.2 POTENTIALLY HAZARDOUS WASTE MANAGEMENT

All hazardous and potentially hazardous wastes will be handled and stored in accordance with the NWT Guidelines for Hazardous Waste Management (2017) and other applicable regulation and best management practices.

All hazardous and potentially hazardous wastes will be labelled and stored in accordance with Workplace Hazardous Materials Information System (WHMIS) and will be transported in accordance with Transportation of Dangerous Goods (TDG) Regulations (2012).

The storage of such materials will occur at the camp facility. At the end of the project, all hazardous wastes will be back-hauled to Yellowknife by a certified waste hauler for final disposal at the KBL Waste Facility.

4. WASTE STORAGE AND DISPOSAL

4.1 NON-MINERAL WASTE

4.1.1 Sewage and Greywater

Sewage and greywater will be treated via the sewage treatment facility onsite at the camp. Treatment and disposal to associated sumps will be continuous. The camp operations will have a designated employee assigned to ensure the proper operations of this facility and disposal option.

4.1.2 Food Waste Storage

Food waste will be stored in sealed storage containers, either until disposal via incineration or until they can food waste can be backhauled at the end of the project for disposal in Yellowknife at the Solid Waste Disposal Facility. Food waste will be kept in a sealed containers (i.e. sealed barrels) within a secure structure (i.e. sea-can). Cold temperatures will facilitate to minimize smell to minimize wildlife attractants and interactions

4.1.3 Dry Storage

Non-hazardous waste such as wood, scrap metal, plastics will be sorted and stored in designated areas until disposal via incineration or until they can be backhauled at the end of the project for disposal in Yellowknife at the Solid Waste Disposal Facility.

4.2 HAZARDOUS AND POTENTIALLY HAZARDOUS WASTES

The storage of hazardous and potentially hazardous, and listed wastes will follow all appropriate regulations, including the Guideline for Hazardous Waste Management in the Northwest Territories (2017). The following sections provide details on specific storage and handling procedures specific to the Project.

4.2.1 Used Oil and Waste Fuel

Used oil and filters from vehicle maintenance and waste fuel will be managed in accordance with the Used Oil and Waste Fuel Management Regulation (NWT, 2004). Storage of used oil and waste fuel will be securely stored at the camp facility until the end of the season, when they will be backhauled to Yellowknife for final disposal at KBL.

- Storage will occur in a container that was manufactured for the purpose of storing petroleum products. Such containers can be easily inspected, tightly sealed, closed and handled to prevent leakages or spill and will be
- Storage in an area where access is controlled and monitored.
- Storage containers and areas will be labelled according to WHIMIS.

4.2.2 Antifreeze (and other chemicals)

Antifreeze will be stored in accordance with the NWT Guideline for the Management of Waste Antifreeze (1998). Storage best management practices include:

Antifreeze storage will include:

- Storage in containers (preferably originals) that are sound, sealed and not damaged or leaking and should be sealed or closed at all times.
- Waste antifreeze will NEVER be stored with food or in used food containers such as bottles or cans.
- Storage in an area where access is controlled and monitored.
- Storage containers and areas will be labelled according to WHIMIS.

4.3 TRANSPORTATION OF HAZARDOUS AND OTHER LISTED WASTES

The transportation of all hazardous and potentially hazardous wastes from the camp back to KBL in Yellowknife will be done by a certified hauler, who's operations are compliant with all applicable regulations.

5. WASTE MANAGEMENT OVERVIEW AND IMPACT ASSESSMENT

The table below summarizes the various waste streams of the project,

Given the short duration of the project and the limited number of people involved in road construction and staying at the camp at any one-time, non-mineral waste production is expected to be fairly minimal. Similarly, hazardous, and potentially hazardous waste production is expected to be minimal. Efforts to manage both non-mineral wastes and hazardous and potentially hazardous will seek to minimize volumes of waste produced.

Table 4.-1: Waste Steam Summary

Waste Stream	Management Approach			Impact Assessment	
	Reduce/ Reuse/ Recycle Options	Treatment	Disposal Option	Potential Effects	Mitigation Measures
Non – Mineral Wastes					
Treated Sewage effluent	N/A	Bioreactor wastewater treatment unit	Treated effluent disposed in a sump >100 m from water body in area with good drainage.	Attract wildlife Contamination nutrient enrichment of nearby waterbodies	Secure waste storage to minimize attraction Situatesumps >100 m from waterbody and place sump in area of good infiltration (e.g. sands, gravels)
Sewage Solids	N/A	N/A	Proper disposal at landfill	No potential effects if securely contained.	n/a
Camp Greywater	Efforts to conserve water in camp will be encouraged.			Attract wildlife Contamination/nutrient enrichment of nearby waterbodies	Use strainers in the camp kitchens to prevent food waste in greywater Secure waste storage to minimize attraction Located sumps >100 m from waterbody and place sump in area of good infiltration (e.g. sands, gravels)
Organic and putrescible waste	Order minimal amounts of food, to meet the camp demands and reduce excess waste. Where appropriate, re-purpose food leftovers in new meals		Either incinerate or store properly until able to backhaul to the Yellowknife Landfill.	Attract wildlife	Prompt incineration with proper storage until incineration, or; Store in industrial grade garbage bags in secure containers that can be cleaned if needed with properly fitting lids for later disposal.
Wood scraps and pallets	Utilize construction methods and planning that minimize materials and allow for product reuse.		Wood can be burned in the incinerator or backhauled to Yellowknife for landfill disposal.	N/A	
Plastics (large items, such as 10gallon buckets)	Utilize construction methods and planning that minimize materials and allow for product reuse.	Reuse or recycle as appropriate	Backhaul to Yellowknife for recycling or landfill disposal.	N/A	

Waste Stream	Management Approach			Impact Assessment	
Scrap metal	Utilize construction methods and planning that minimize materials and allow for product reuse.	Reuse or recycle as appropriate	Backhaul to Yellowknife for recycling or landfill disposal.		
Potentially Hazardous Wastes					
Used oil and Waste Fuel	Bulk fuel will reduce reliance on disposable containers that tend to produce more waste		Proper onsite storage until final disposal at KBL in Yellowknife.	Potential for pollution, particularly aquatics and threat to human health	Proper handling and storage
Lubricants, filters, spent sorbent materials	Only required amounts will be purchased		Proper onsite storage until final disposal at KBL in Yellowknife.	Potential for pollution, particularly aquatics and threat to human health	Proper handling and storage
Antifreeze	Only required amounts will be purchased If possible, collect antifreeze and return it to heating systems after maintenance Possibly, filter and use additive to extend life of product		Proper onsite storage until final disposal at KBL in Yellowknife.	Potential for pollution, particularly aquatics and threat to human health	Proper handling and storage.
Miscellaneous Batteries, paint cans, aerosols)	Recycling options are available in Yellowknife.		Backhaul for recycle in Yellowknife	Potential for pollution. Aerosols can explode in landfills or if heated.	Proper handling and storage.
Hydrocarbon contaminated water from secondary containment facilities (snow/ice, or drip trays)	Cover containment areas to reduce ingress of rain and snow to reduce volumes of contaminated water.		Pump and store in adequate, sealed, properly labelled containers. Backhaul to Yellowknife to KBL Hazardous Waste TS.	Potential for pollution, threat to human health	Proper handling and storage. Routine inspection of secondary containment facilities.
Incinerator ash/residue (if incineration is chosen as an option)	Waste reduction in general will result in less product to incinerate		Storage in sealed container and backhaul to KBL.	Ash contains chemicals that could cause harm to human health	Wear adequate PPE when handling.



6. ROLES AND RESPONSIBILITIES

Lupin Mines Incorporated and ultimately is responsible for activities associated with Lupin winter access, including implementation and management of this Plan.

6.1 STAFF, CONTRACTORS, SUPPLIERS AND VISITORS

All personnel conducting activities on site, including staff, contractors, suppliers, and visitors, are required to implement this Plan as it pertains to their activities on site. Specifically, these responsibilities include:

- Disposing of domestic waste in designated containers and adhering to all waste management practices;
- Responding to spills in accordance with the Spill Contingency Management Plan;
- Cooperating with your supervisor and/or Lupin Mine management to implement a waste management program;
- Carrying out only those duties and tasks that you are experienced at and trained to perform;
- Where there is uncertainty, asking questions and bring concerns to the attention of your supervisor when working with waste.

6.2 MANAGERS AND SUPERVISORS

Managers and supervisors have a responsibility to ensure that staff, contractors, consultants, and visitors have been trained in Lupin Mine waste management expectations and procedures. They have the responsibility to ensure that waste management practices and activities are followed in accordance with this plan and updated if necessary.

7. REPORTING AND DOCUMENTATION

Waste management reporting will occur in accordance with record keeping and reporting requirements of various project authorizations. All documentation records will be available to an inspector on request.

8. TRAINING

All attendees to site, including visitors, will participate in a site orientation which outlines waste management expectations, roles, and responsibilities. All training records will be available to an inspector on request.

APPENDIX S. WILDLIFE MANAGEMENT PLAN



WILDLIFE MANAGEMENT PLAN:

LUPIN MINE WINTER ACCESS ROAD PROJECT

May 2024



Plain Language Summary

This Plan describes possible effects the Project may have on wildlife and their habitat and describes what Lupin Mines Inc. (Lupin Mines) will do to minimize the effects from the Lupin Mine Winter Access Road. The road follows an existing alignment from Lac de Gras in the Northwest Territories (NT; Lac de Gras) to the Lupin Mine in Nunavut (NU; Lupin).

Revision History

Revision #	Date	Section	Summary of Changes	Author	Approver
1	Apr 2024	All	New document	N. McLaren	

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1.0 Introduction

Lupin Mine wishes to construct and operate a portion of the Tibbitt to Contwoyto Winter Road (TCWR). The Lupin Mine Winter Access Project (the Project) involves the construction, operation and closure of a winter road occurring within the existing corridor of the Tibbitt to Contwoyto Winter Road (TCWR) from the Ekati Mine turnoff on Lac de Gras in the Northwest Territories (NT; Lac de Gras) to the Lupin Mine in Nunavut (NU; Lupin) (Figure 1). The access route will traverse 95 km in NT and 118 km in NU for a total of 213 km. This is a transboundary project. Once constructed the winter access road will be used to mobilize and demobilize equipment and supplies that may be used for ongoing reclamation of the Lupin Mine in the Kitikmeot Region of Nunavut.

These activities have the potential to affect wildlife and wildlife habitat. This Wildlife Protection Plan (the Plan) identifies wildlife typically found in the area, describes effects that project activities may have, outlines actions Lupin Mine will take to mitigate effects to wildlife and wildlife habitat, and considers the guidance provided in Table 1.

Table 1 Relevant guidance documents including legislation, permits and licences.

Document	Authority
<i>Species at Risk Act</i> (2002)	Environment and Climate Change Canada
<i>Migratory Birds Convention Act</i> (1994)	Environment and Climate Change Canada
<i>Canada Wildlife Act</i> (1985)	Government of Canada
<i>Nunavut Wildlife Act</i> (2003)	Government of Nunavut
Draft Nunavut Land Use Plan (2016)	Nunavut Planning Commission
<i>NT Reindeer Act and Regulation</i> (2014)	Government of NT
<i>NT Wildlife Act</i> (2017)	Government of NT
Draft Bathurst Caribou Range Plan (2018a)	Department of Environment and Natural Resources, NWT
Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories (1993)	Government of Northwest Territories
Screening Decision Report	Nunavut Impact Review Board
Approval Without a Licence	Nunavut Water Board
Land Use Permits	Crown-Indigenous Relations and Northern Affairs Canada Government of Northwest Territories
Spill Contingency Management Plan, Lupin Winter Access Road Project, Lac de Gras NWT to Lupin, NU (2024)	Lupin Mine Inc.
Abandonment and Restoration Plan, Lupin Winter Access Road Project, Lac de Gras NWT to Lupin, NU (2024)	Lupin Mine Inc.

Environment and Heritage Resources Protection Management Plan, Lupin Winter Access Road Project, Lac de Gras NWT to Lupin, NU (2024)	Lupin Mine Inc.
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1.1 Scope

This Plan applies to construction and operation activities associated with the Lupin Winter Access Road Project. The use of the winter road is expected to be seasonal for up to two (2) consecutive years, commencing in January 2025, however, as a contingency, use over a five (5) period is being sought in the event of unforeseen delays. Construction is expected to occur in December and January each year. Operations are expected to occur from January to April, depending on ice conditions. Closure will occur seasonally once ice conditions are such that ice travel is deemed unsafe. Typically, this will occur in April.

Construction of the winter road will follow best practices and standards for winter road construction. Depending on conditions and staging area availability, construction will start at Lupin with crews working southward. Alternatively, as available, crews may also start simultaneously at Lac de Gras and Lupin, working both northwards and southwards. Crews will be accommodated at the mine site throughout construction, operation and closure. A small, mobile, temporary camp will be used as construction progresses to provide emergency shelter for work crews.

Operation of the winter road will occur generally in accordance with the procedures already in place for the TCWR, along with those identified in the documents listed in Table 1. Access and use of the road will be limited to Lupin Mine staff and contractors.

Operational activities include:

- Transport of equipment and supplies required for mine reclamation activities; and
- Maintenance of the winter road including removal of blowing snow and repairing potholes and rough areas.

Seasonal closure of the winter road will occur once conditions are deemed unsafe for operations which typically occurs in April to early May.

1.2 Objectives

Lupin Mine acknowledges that wildlife, including caribou, have the potential to occur within the Project area, and that the Project has the potential to affect wildlife and wildlife habitat. Accordingly, this Plan strives to prevent or minimize potential Project-related effects on caribou and other wildlife with the primary purpose of the Plan being to outline wildlife protection, avoidance and mitigation strategies.

The objectives of the Plan are to:

- Minimize any Project-related effects on wildlife and their habitat; and
- Minimize wildlife and Project personnel interactions.

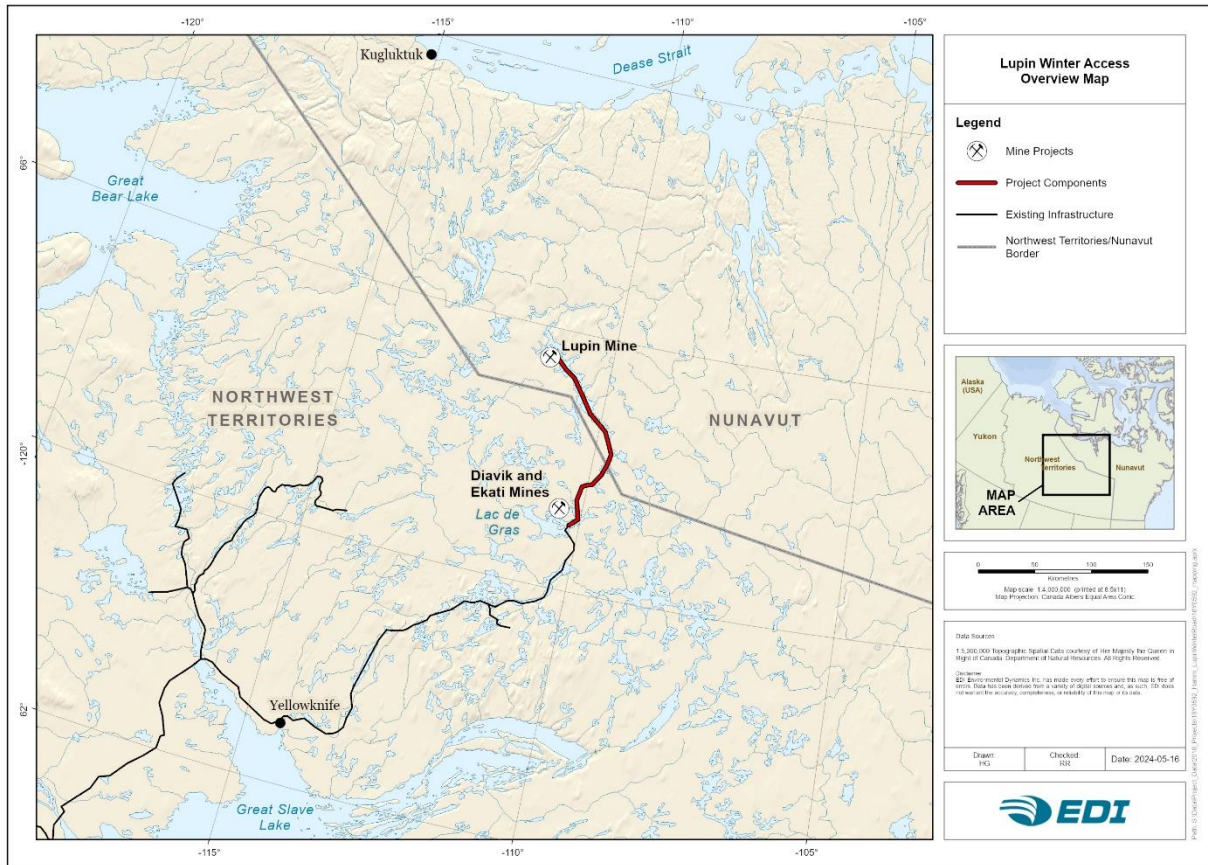


Figure 1 Lupin Mine Winter Program location.

1.3 Site Description

The Project is located within the Southern Arctic Ecozone and the Takijuq Lake Upland Ecoregion. Much of this region is composed of unvegetated rock outcrops and vegetative cover is characterized by shrub tundra, consisting of dwarf birch, willow, northern Labrador tea, *Dryas* spp. and *Vaccinium* spp. Organic Cryosols are the dominant soils in the lowlands and permafrost is deep and continuous. The proposed winter road is located north of the treeline.

Characteristic wildlife includes caribou, muskoxen, grizzly bear, wolverine, hare, arctic fox, and wolf. Small mammals (e.g., Arctic ground squirrel, voles, and lemmings) are distributed throughout the region and provide an important food source for predators. Many species of migratory birds are present in the area during the summer season, including waterfowl, upland birds, and shorebirds, while some bird species are present year-round (e.g., ptarmigan, gyrfalcon, and common raven).

Notwithstanding the existing biodiversity in the region, the Project area does not contain any of the following:

- Important Bird Areas (IBA);
- Key Habitat Sites for migratory birds and species at risk;
- Wetlands of International Importance (RAMSAR);
- Migratory Bird or Wildlife Sanctuaries; or
- Heritage Rivers.

1.4 Plan Management

This Plan considers wildlife species and their habitat that have the potential to occur within or adjacent to the Project area, and the related potential effects arising from Project-related activities. The Plan will be reviewed annually by the Project Manager and may be updated if:

- The Program scope changes to include new activities;
- Changes in conditions that could be biologically meaningful have been observed, such as caribou calving within the Project area;
- Results of ongoing stakeholder engagements indicate a Plan revision is necessary.

1.5 Plan Implementation

This Plan is effective upon approval and is valid throughout all phases of the Project.

The Project Manager or designate is responsible for Plan implementation.

A copy of this Plan is maintained on site at the Lupin Mine.

2.0 Roles and Responsibilities

Lupin Mine is responsible for activities associated with winter access to the Lupin Mine, including implementation and management of this Plan, and directing, documenting and reporting pertaining to closure activities.

Lupin Mine's contact information is provided below.

Lupin Mines Incorporated

c/o Mandalay Resources Corp.
Suite 330-76 Richmond Street
Toronto, ON Canada M5C 1P1

Contact: Kellie Leedham

Phone: (403)808-1534

Email: kellie@falkirk.ca



2.1 Staff, Contractors, Suppliers, and Visitors

All personnel conducting activities on site, including staff, contractors, suppliers, and visitors, are required to implement this Plan as it pertains to their activities on site. Specifically, these responsibilities include:

- Completing site orientation including wildlife awareness training;
- Reporting all incidental wildlife observations to the Project Manager; and
- Responding appropriately to Security Patrol wildlife advisories.

2.2 Managers and Supervisors

Managers and supervisors have a responsibility to ensure that staff, contractors, consultants, and visitors have been trained in Lupin Mine wildlife mitigation expectations and procedures. Additional supervisor and manager responsibilities include:

- Conducting wildlife awareness training; and
- Ensuring that all personnel adhere to recommended mitigation measures.

2.3 Project Manager

In addition to the duties outlined above, the Project Manager is responsible for:

- Responding to wildlife sightings and implementing recommended mitigation measures;
- Responding to wildlife interactions; and
- Managing wildlife documentation.

2.4 Lupin Mine Security

Lupin Mine's security will patrol the road 24 hours per day. In addition to the above, they are responsible for:

- Notifying drivers of wildlife present on the road; and
- Advising drivers how to respond to wildlife situations as they arise, in accordance with this Plan.

3.0 Potential Effects

Project construction and operation activities could potentially have the following effects on wildlife and their habitat:

- Disturbance caused by road traffic;
- Mortality (road kills);
- Greater access for hunters, leading to increase in mortality; and
- Attraction of wildlife to food sources along the winter road or within emergency shelter camp if used.

4.0 General Mitigation Measures

A variety of mitigation measures will be employed to avoid, control, or reduce potential Project-related effects on wildlife and their habitat. General measures are outlined below, while additional species-specific mitigation measures are presented in subsequent sections. The measures presented are designed to be practicable, effective, and relative to the Program scope. The Plan incorporates best management practices and the latest available scientific information.

4.1 Compliance

The first step in mitigating effects is compliance with relevant regulatory instruments, as outlined below.

4.1.1 Federal and Territorial Legislation

Mitigation and management measures to reduce Project effects on wildlife are derived from federal and territorial legislation.

The *Migratory Birds Convention Act* (1994) prohibits killing or taking of migratory birds, their nests and eggs, and the deposition of harmful substances in areas frequented by migratory birds. The purpose of the *NWT Wildlife Act* (2017) and the *Nunavut Wildlife Act* (2003) is to establish a comprehensive program for the management of wildlife and their habitat including the conservation, protection, and recovery of species at risk.

The *Species at Risk Act* (SARA 2002) was created to protect at risk wildlife on federal lands, as well as defining the critical habitat of listed species.

4.1.1.2 Species at Risk Occurring Within the Project Area

The Grizzly Bear (*Ursus arctos*) is listed federally as a species of special concern since 2012. Human activities such as campsites and industrial development in the NWT may lead to bear-human conflicts and human-caused mortalities. Grizzly bears are becoming more common in areas of the NWT and Nunavut where they used to be rarely seen (Environment Canada 2014). However, it is likely that grizzly bears will be hibernating during the season that the road will be active.

Wolverine (*Gulo gulo*) is listed federally as a species of special concern since 2003. The potential threat to wolverine in the Territories is associated with human development or activities, disturbances to denning areas and human-caused mortalities due to conflicts (Environment Canada 2014).

Peregrine Falcon (*Falco peregrinus anatum/tundrius*) is federally listed as a species of special concern since 2007. Potential threats in the Territories include poaching of eggs for falconry, declining songbird or seabird prey populations, and susceptibility to organochlorine pesticide contamination (Environment Canada 2014); the Project poses none of these threats to Peregrine

falcon. Peregrine falcons will likely not be present during the winter season construction and operation of the road.

Short-eared Owl (*Asio flammeus*) is listed federally as a species of special concern since 2008. The potential threat in the Territories is human disturbance during the nesting period, which often results in the nest being deserted. Nests are found on the ground in grasslands, tundra, bogs, marshes and other open non-forested habitats (Environment Canada 2014). Short-eared owl will likely not be present during the winter season construction and operation of the road.

4.2 General Wildlife

4.2.1 Potential effects to specific wildlife species

Grizzly bears are present within the vicinity of the winter road but should be hibernating in dens when the winter road is constructed and operational. Grizzly bears in this area generally enter dens that are excavated on a well drained slope and typically with a southern aspect in late October and occupy the den for as long as seven months (timing varies by sex and age) (Species at Risk Committee 2017). Potential effect of the winter road on grizzly bears include:

- Disturbance to bears in their dens caused by road traffic, noise, and vibration.

Tundra wolves are present within the vicinity of the winter road and are active all winter. Tundra wolves follow the barren-ground caribou herds. Tundra wolf dens can be located on the tundra, in the tree line transition area and potentially in the boreal forest. These wolves do not burrow to create dens but use caves and rocks that provide shelter. The denning period for wolves usually begins in early May (after road closure). Potential effects of the winter road on wolves include:

- Disturbance caused by road traffic;
- Mortality (road kills);
- Greater access for hunters, leading to increase in mortality; or
- Attraction of wolves to food sources along the winter road.

Wolverine are present within the vicinity of the winter road and are active all winter. Sites where wolverine dens have been found include ravines or drainages where snow accumulates, snow-covered rocky scree or boulder talus, taiga peat bogs with rocky areas. The key factor in wolverine denning habitat is an area with deep snow throughout the denning season. Wolverine denning period can be as early as February and can last till late May. There is a very low possibility that a wolverine would establish a den near the active winter road. Issues related to the potential effect of the winter road on wolverine include:

- Disturbance caused by winter road traffic and noise;
- Mortality (road kill); and
- Greater access for hunters, leading to potential overharvest.

Arctic fox den sites are typically located on the tops or sides of eskers, or the tops of banks of lakes or rivers where the soil is sandy, dry, and stable. Den sites are usually free of snow earlier than the surrounding landscape. Pairs often return to the same area and dens may be up to 300 years old and possess as many as 100 entrances. Arctic fox pairs start to seek den sites beginning in February and March. This corresponds to a period when the winter road will be operational. Foxes are usually established within their dens by early May after the winter road has closed for the season. Arctic fox can tolerate high levels of human disturbance. Issues related to the potential effect of the winter road on foxes include:

- Mortality (road kills); and
- Greater access for trappers.

The potential for the road to disturb any denning wildlife including grizzly bear is very low because the majority of the route is on lakes. There are eight (8) portage areas where there is the small possibility of a grizzly bear den site or arctic fox den or wolf den. If the route is within 300 m of an area with possible grizzly bear, fox or wolf denning habitat, a den survey should be completed prior to construction. The survey area should include 200 m off the centerline on each side of the road. If a den site is observed within the survey area, the proposed road should be rerouted around the den site to the greatest extent possible (as conditions permit). Any located potential grizzly bear den site should be verified to confirm if the den is active and all active den site should be monitored by Lupin Mine contractor security and/or the Project Manager when they are patrolling the route, to verify if the road traffic is disturbing the denning bear by recording any signs of bear activity (signs of bear leaving the den). Similarly, all located arctic fox dens should be monitored to ensure that the use of the road is not disturbing arctic fox pairs into abandoning the den site. The Government of Nunavut or Government of Northwest Territories Conservation Officer will be informed if there are signs that the road is disturbing the hibernating bear or other denning wildlife and other possible mitigation measures may be discussed.

All wildlife observations will be documented.

4.2.2 Problem Wildlife

Problematic wildlife situations may arise where an animal acts in an aggressive manner, is a repetitive nuisance, or poses a threat to worker safety. Early detection and reporting of wildlife interactions supports proactive rather than reactive measures to be taken to prevent injury or destruction of a problem animal. If problem wildlife or evidence of problem wildlife is observed:

- Immediately notify the Project Manager;
- Take action to deal with an attractant, where relevant; and
- If a persistent or emergent wildlife-related issue exists, Project Manager, or designate, shall inform the Government of Nunavut or Government of Northwest Territories Conservation Officer to determine suitable action to be taken.

4.2.3 Waste Management

Managing waste so as not to attract wildlife is a key mitigation measure. Typical waste management measures employed include:

- Garbage, including all food wastes, is kept within vehicles transiting the road;
- Food waste arising from use of the emergency shelter will remain indoors until it can be properly disposed;
- In the event of a spill response, wastes and materials are handled in accordance with the *Spill Contingency Management Plan* (Lupin Mines 2024); and
- No garbage or food waste will be left along the road.

4.2.4 Sensory Disturbance

Project-related activities that create noise have the potential of creating sensory disturbances to wildlife. Sensory disturbance is minimized by managing noise emitted by vehicles and heavy equipment. Noise control measures include:

- Maintain all equipment and fit with appropriate mufflers.

4.2.5 Awareness and Training

The purpose of personnel training and awareness is to demonstrate that it is each person's responsibility to minimize Project effects on wildlife, including disruption and disturbance to wildlife, and ensure the safety of all personnel involved with the exploration Program.

As a part of the Site Orientation, all personnel, including staff and contractors, are engaged in a discussion on local wildlife resources including the following:

- Basic local wildlife ecology and possible Project-related effects on wildlife and wildlife habitat;
- Operating protocols such as incidental observation reporting;
- Awareness of known wildlife-sensitive areas such as breeding areas, den sites, nests and wildlife-sensitive periods;
- Project protocols associated with dealing with aggressive or unusual wildlife behaviour around work areas;
- Wildlife attractant management;
- Wildlife safety including bears and predators;
- Wildlife incidental/accident reporting and response procedures; and
- Compliance expectations and non-compliance disciplinary actions that may be enforced.

The following wildlife specific-training measures, awareness and responsibilities apply to avoid project effects to wildlife:

- Avoid any contact with wildlife including approaching and feeding wildlife;
- Where possible, try to stay out of sight of wildlife;
- Lupin Mine security will patrol the route 24 hours a day during construction and operation of the road and notify all drivers of wildlife observed so that drivers can stop on the portages and wait for wildlife to pass;
- Lupin Mine security will inform the drivers when it is safe to proceed;
- Avoid harassing or disturbing wildlife, especially when approaching a work site where caribou cows and calves, muskoxen groups or other wildlife may be encountered;
- If caribou cows and calves, muskoxen groups or other wildlife aggregations are observed foraging or migrating within a work area as crews approach, where safety permits, avoid the work area until the animals have moved at least 200 m from the site;
- If caribou or muskoxen groups are observed within 200 m of the road and are approaching the road, Lupin Mine security will stop and inform all drivers of the sighting. Security will then wait until the animals have move across the road and moved beyond 200 m and then inform all drivers it is same to proceed.
- If the vehicle driver can not stop at a portage site or can't find a safe spot to stop, they will reduce their speed and cautiously approach the area where the wildlife were observed (wildlife will be given the right of way).
- Project personnel and contractors are not permitted to hunt or fish while conducting business on behalf of Lupin Mine within the entire Project area; and
- Record all wildlife sightings in a Wildlife Incidental Observation Log.

5.0 Caribou

The Bathurst barren-ground caribou herd range has traditionally spanned from southern and central Northwest Territories to the herd's calving grounds west of Bathurst Inlet in Nunavut. A decline in the population has been observed over the last 30 years and 2018 survey results indicate the population is now approximately 8,200 individuals (Government Northwest Territories 2018b). Since this herd migrates across territorial borders, it is managed collaboratively by the Government of the Northwest Territories, the Wek'èezhii Renewable Resources Board and the Nunavut Wildlife Management Board.

The Project is located within the Bathurst caribou herd range (Figure 2, copied from Range Plan) and caribou from other neighbouring herds can also wander into this range area.

The Northwest Territories Department of Environment and Natural Resources has drafted a Bathurst Caribou Range Plan (Range Plan) that aims to balance the diverse interests of all governments, communities and stakeholders across the range in Nunavut, Northwest Territories and northern Saskatchewan (Government of Northwest Territories 2018a). This range plan primarily has the goal of addressing issues related to cumulative land disturbance but is focused on managing disturbance to caribou and habitat to support recovery of the herd.



The Range Plan includes four specific management objectives:

1. Ensure the integrity of important habitats.
2. Ensure connectivity between seasonal ranges.
3. Ensure the amount of human-caused land disturbance is kept below certain levels.
4. Ensure the development, design and use of roads is managed with consideration to caribou.

The majority of the Project area is located within a lower use spring migration use area and by the time caribou start their migration towards calving and summer area, the winter road should be near closing. However, some sections of the winter road can be found within higher and mid-use utilization areas (Government of Northwest Territories 2018a). Accordingly, it is reasonable to expect to see Caribou any time of the year along the route.



Figure 2. The Bathurst Caribou Range planning area and historical range extent as identified by traditional knowledge (Government of Northwest Territories 2018).

5.1 Potential Project Interactions

Given the social and ecological importance of caribou to the economy and residents of the Territories, and the specific consideration afforded caribou, it is important to consider caribou-specific Project interactions and understand the relative risk posed by the Project to caribou.

Caribou and their associated habitats can be affected by various factors associated with construction, operational and closure activities, including removal of habitat, disturbance from vehicles and equipment, and possible camp activities. The Project may interact with caribou via:

- Indirect habitat loss
 - Avoidance or reduce use of areas near a disturbance;
 - Increased energy expenditure due to a response to sensory disturbance;
- Disruption of movement
 - Delayed crossing or avoidance of Project area;
- Mortality
 - Direct, through collision with vehicle;
 - Indirect, through increased hunter knowledge of caribou in the area that may arise through informal and social communications.

Currently, the use of the Winter Road does not overlap with migration movements, thus Project effects to caribou movement are likely minimal. The use of the winter road may disrupt caribou movement patterns; however, the potential is low as the Project construction and operational schedule does not overlap with any migratory movement except project closure may overlap with the start of the spring migration. Because of the limited use by caribou within the winter season within the Project area, the risk of caribou mortality due to vehicle collisions is considered low, as is indirect mortality associated with an increase access for hunters to the Project area.

There is no likely Project interaction with caribou during calving or post-calving periods since the Project area is located outside of these sensitive areas. There is the potential for caribou to wander into the Project area during the early spring season since the area is located within caribou migration range. There is also the possibility of caribou from other herds to wander into the Project area. Mitigation and management measures apply to all caribou.

5.2 Mitigation and Management Measures for Caribou

In addition to the general wildlife mitigation measures presented in Section 4.3.4 and Section 4.3.5 the following caribou-specific mitigations measures have been considered for the Lupin Mine Winter Access Project:

- Minimize sensory disturbance;
- Where possible, during road maintenance, graders will use a wing to support development of snowbanks that have a low angle of repose, reducing snow bank height;
- If caribou are observed within 300 m of the road, graders will reduce their speed and limit the distance that snow is thrown towards the caribou;
- For areas where snowbanks are taller than a meter, breaks should be created every 500 m so the snowbank does not act as a barrier to caribou movement; and

- To protect caribou, the winter access road will have caribou advisory signs to ensure caribou and other wildlife are given the right of way.

5.2.2 Sensory Disturbance

The construction, use and maintenance, and closure of the winter access road could possibly cause caribou to alter their behavior and movements. This effect will be mitigated by:

- Avoiding direct movement of equipment and people toward caribou;
- Giving caribou and all wildlife the right of way;
- Stop vehicles where it is safe to do so and allow caribou and all wildlife to cross the road if they are seen within 200m of the road and moving towards the road;
- In the presence of caribou, remain in the vehicle, as caribou may perceive you as a predator if you leave the vehicle; and
- Should they be used, all-terrain vehicles and snow machines should neither stop within sight of a caribou nor approach a caribou.

5.3 Monitoring

The initial step in monitoring and mitigation for caribou is to determine, using all available information, when caribou may interact with the Project. Ongoing observation by Project personnel will support monitoring for any observed change in distribution of caribou.

Incidental observations by drivers may trigger immediate mitigation measures, such as avoiding caribou. Relevant incidental observations may also trigger measures and active monitoring.

6.0 Reporting and Documentation

All wildlife sightings are documented, as are interactions, observed sensitive habitat occurrences including denning sites, and implementation of traffic control measures. The Project Manager maintains these records in the Lupin Mine site office and makes them available to a Land Use Inspector upon request.

7.0 References

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