



Mackenzie Valley Land and Water Board
7th Floor - 4910 50th Avenue
P.O. Box 2130
YELLOWKNIFE NT X1A 2P6
Phone (867) 669-0506
FAX (867) 873-6610

July 3, 2014

File: MV2013C0021&
MV2014L2-0002

Mr. Dave R. Webb
New Discovery Mines Ltd.
1909 108 W. Cordova St.
VANCOUVER BC V6B 0G5

Email: dave@drwgcl.com

Dear Mr. Webb:

**Preliminary Screening Exemption Confirmation and Issuance of Type A Land Use Permit (LUP) and Type B Water Licence (WL) –
New Discovery Mines Ltd. (NDM) – Mon Gold Mine – Discovery Lake, NT**

The Mackenzie Valley Land and Water Board (the Board) met on July 3, 2014 to review NDM's LUP Application MV2013C0021 and WL Application MV2014L2-0002. Based on the evidence provided, the Board has confirmed that the applications are exempt from Preliminary Screening as per the Exemption List Regulations of the *Mackenzie Valley Resource Management Act*, Schedule 1, Paragraph 2 (a and b) which states:

A development, or a part thereof, for which renewal of a permit, licence, or authorization is requested that
(a) has not been modified; and
(b) has fulfilled the requirements of the environmental assessment process established by the *Mackenzie Valley Resource Management Act*.

Attached is Land Use Permit MV2013C0021 granted by the Mackenzie Valley Land and Water Board (MVLWB) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA). A copy of this Permit has been filed on the Public Registry at the MVLWB office. The MVLWB has approved this Permit for a period of 5 years commencing July 3, 2014 and expiring July 2, 2019.

Please read all Land Use Permit conditions carefully, making particular note of the following:

1. Condition 48 regarding the posting of a security deposit. Pursuant to section 32 of the Mackenzie Valley Land Use Regulations, and as delegated by Schedule A of the MVRMA Delegation Instrument, this deposit is **payable to the Government of the Northwest Territories**, in the amount of \$88,000.00, and shall be posted with Government of the Northwest Territories, Department of Lands, North Slave Region, #16 Yellowknife Airport, Yellowknife NT, X1A 3T2. Please provide a copy of the receipt for the security deposit to the MVLWB office prior to the start of your operation.

2. Condition 40 regarding the Waste Management Plan (WMP) and condition 56 regarding the Spill Contingency Plan (SCP). Both of these plans shall be re-submitted for review and Board approval, prior to the commencement of construction for this project in accordance with the comments made during this review, and as summarized in Tables 1 and 2 (attached).
3. Condition 67 regarding the Engagement Plan. The Board hereby approves the Engagement Plan as submitted with the application, and reminds NDM that ongoing annual reviews of this plan are required.

Attached is Water Licence MV2014L2-0002 granted by the MVLWB in accordance with the *Mackenzie Valley Resource Management Act* and *Waters Act*. A copy of this Licence has been filed on the Public Registry at the MVLWB office. The MVLWB has approved this Licence for a period of seven (7) years commencing July 3, 2014 and expiring July 2, 2021.

Please read all Water Licence conditions carefully, making particular note of the following:

1. Part B, item 10 regarding the Engagement Plan. The Board hereby approves the Engagement Plan as submitted with the application, and reminds NDM that ongoing annual reviews of this plan are required.
2. Part C, item 1 regarding the posting of a security deposit. Pursuant to section 35 of the Northwest Territories *Waters Act*, this deposit is payable to **Government of the Northwest Territories**, in the amount of \$165,000.00, and shall be posted with the Government of the Northwest Territories, Department of Environment and Natural Resources, Box 1320, Yellowknife, NT, X1A 2L9, Attention: Director, Water Resources. Please provide a copy of the receipt for the security deposit to the MVLWB office prior to the start of your operation.
3. Part B, item 2 regarding the payment of water use fees. Pursuant to the Mackenzie Valley Land and Water Board's March 2013 Water Use Fee Policy, please submit payment of the Water Use Fee, in the amount of \$30.00, payable to: **Government of the Northwest Territories**, c/o Mackenzie Valley Land and Water Board, Box 2130, Yellowknife, NT, X1A 2P6.
4. Part G regarding the Waste Management Plan (WMP), the Waste Rock Management Plan (WRMP), and the Geochemical Characterization and Management Plan, and Part H regarding the Spill Contingency Plan (SCP). These plans shall be submitted and reviewed, for Board approval, prior to the commencement of construction for this project in accordance with the comments made during this review, and as summarized in Tables 1 through 3 (attached).
5. Part G, item 9, regarding the Effluent Quality Criteria for discharges to the receiving environment.
6. Part G, item 10, regarding the submission of a Water Quality Monitoring Program within one year of the commencement of construction.

7. Part I, item 2 regarding the Interim Closure and Reclamation Plan. The Board requires that NDM submit an Interim Closure and Reclamation Plan, in accordance with the comments made during this review, and as summarized in Table 4 (attached). This revised plan shall be submitted to the Board for approval before January 5, 2015 (6 months post-issuance).

This letter, with attached procedures, all inspection reports, and correspondence related thereto, is part of the Public Registry and is intended to keep all interested parties informed of the manner in which the Licence's requirements are being met. All Public Registry material will be considered if an amendment to the Licence is requested. Also attached is a copy of the "General Procedures for the Administration of Licences in the Northwest Territories". Please review these carefully and address any questions to the Board's office.

The full cooperation of NDM is anticipated and appreciated. If you have any questions or concerns, please contact Jen Potten at jpotten@mvlwb.com or (867) 766-7468.

Yours sincerely,



Willard Hagen
Chair

Copied to: Distribution List

Attachments: Tables 1 to 4
Land Use Permit MV2013C0021
Lands Delegation Instrument
Water Licence MV2014L2-0002

Tables 1-4: NDM – Items required for inclusion into revised plans based on reviewer comments of applications for Land Use Permit MV2013C0021 and Water Licence MV2014L2-0002

Table 1: Waste Management Plan (WMP)

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|---|--|
| 1 | Incineration details, including design, stack testing, disposal of ash. |
| 2 | Waste storage so as not to become a wildlife attractant. |
| 3 | Designs for secondary containment. |
| 4 | Plans related to the management of sewage. |
| 5 | Details of the management of all waste, including drill cuttings. |
| 6 | Details regarding the installation and operation of sumps. |
| 7 | Include the location for the storage of ammonium nitrate on the map included with the WMP. Ensure that this location is more than 100m away from the ordinary high water mark. |

Table 2: Spill Contingency Plan (SCP)

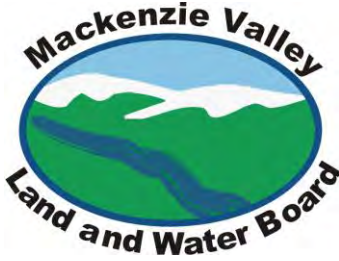
| | |
|---|--|
| 1 | Expand on on-site product list to include details of the cleanup of spilled glycol and any other chemicals used on site, including, for example, drilling additives and lubricants and ammonium nitrate. |
|---|--|

Table 3: Geochemical Characterization and Management Plan (GCMP)

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| 1 | Details regarding the management of drill cuttings, including those which may have the potential to result in acid rock drainage or metal leaching. |
| 2 | Details on the characterization of rock and cuttings, including mitigations and contingencies. |

Table 4: Closure and Reclamation Plan (CRP)

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|---|---|
| 1 | Review and follow the Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (AANDC et. al 2013) for closure and reclamation plans (CRP). |
| 2 | Provide details about the final land use for the site post-closure. |
| 3 | Present detailed, site-specific closure options for each facility and feature on site, including how each closure option satisfies the global objectives in the Guidelines (in 1), including all other relevant Federal and Territorial guidelines and regulations. |
| 4 | For each closure objective, present quantifiable remedial targets or outline the process to develop remedial targets. |
| 5 | Provide detailed descriptions of proposed closure option(s), including designs, or detailed descriptions of proposed studies to meet the closure requirements. |
| 6 | Present details of a post-closure (long term) monitoring program, or, justify why one would not be required. |
| 7 | Details regarding the closure of sumps. |



Land Use Permit

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|--------------|-------------|--------------|
| Permit Class | Permit No | Amendment No |
| A | MV2013C0021 | - |

Subject to the Mackenzie Valley Land Use Regulations and the terms and conditions in this Permit, authority is hereby granted to:

New Discovery Mines Ltd.

Permittee

to proceed with the land use operation described in the Application of:

| | |
|---|---------------------------|
| Signature Dr. Dave R. Webb | Date February 28, 2014 |
| Type of Land Use Operation Mineral Exploration | |
| Location Mon Gold Mine – Discovery Lake, NT | |

This Permit may be assigned, extended, discontinued, suspended, or cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Dated at Yellowknife this 3 day of July, 2014

Signature Chair 

Signature Witness 

Commencement Date
July 3, 2014

Expiry Date
July 2, 2019

ATTENTION

It is a condition of this Permit that the Permittee comply with the provisions of the *Mackenzie Valley Resource Management Act* and Regulations and the terms and conditions set out herein. A failure to comply may result in suspension or cancellation of this Permit.

Conditions Annexed to and Forming Part of Land Use Permit #MV2013C0021

Part A: Scope of Permit

1. This Permit entitles New Discovery Mines Ltd. to conduct the following land-use operation:
 - a) Use, construction and maintenance of a winter road from the Ingraham Trail to Discovery Lake;
 - b) Re-opening and securing of the North and South Declines as identified in the land use permit application;
 - c) Advanced mineral exploration program including bulk sampling;
 - d) Storage of waste rock and ore;
 - e) Quarrying;
 - f) Construction and operation of camp;
 - g) Fuel storage;
 - h) Storage and use of explosives; and
 - i) Use of equipment.

All activities will take place within 62°32'4.43" N by 114°08'54.00 W and 62°54'2.00" N by 114°20'60" W.

2. This Permit is issued subject to the conditions contained herein with respect to the use of land for the activities and area identified in Part A, item 1 of this Permit.
3. Compliance with the terms and conditions of this Permit does not absolve the Permittee from the responsibility for compliance with the requirements of all applicable federal, territorial, and municipal legislation.

Part B: Definitions (defined terms are capitalized throughout the Permit)

Act - the *Mackenzie Valley Resource Management Act*.

Archaeological Impact Assessment - as defined by the Prince of Wales Northern Heritage Centre – Guidelines for Developers.

Board - the Mackenzie Valley Land and Water Board established under Part 4 of the *Mackenzie Valley Resource Management Act*.

Borehole - a hole that is made in the surface of the ground by drilling or boring.

Drilling Fluids - any liquid mixture of water, sediment, drilling muds, chemical additives or other wastes that are pumped down hole while drilling and are specifically related to drilling activity.

Drilling Waste - all materials or chemicals, solid or liquid, associated with drilling, including drill cuttings and Drilling Fluids.

Durable Land - land that is able to withstand repeated use, such as gravel or sand with minimal vegetative cover.

Engagement Plan - a document, developed in accordance with the Board's *Engagement and Consultation Policy* and the *Engagement Guidelines for Applicants and Holders of Land Use Permits and Water Licences*, that clearly describes how, when, and which engagement activities will occur with an affected party during the life of the Project.

Fuel Storage Container - a container for the storage of **petroleum** or **allied petroleum products** with a capacity of less than 230 litres.

Fuel Storage Tank - a closed container for the storage of **petroleum** or **allied petroleum products** with a capacity of more than 230 litres.

Greywater - all liquid wastes from showers, baths, sinks, kitchens, and domestic washing facilities but not including toilet wastes.

Habitat - the area or type of site where a species or an individual of a species of wildlife naturally occurs or on which it depends, directly or indirectly, to carry out its life processes.

Inspector - an Inspector designated by the Minister under the *Mackenzie Valley Resource Management Act*.

Minister - the Minister of Indian Affairs and Northern Development.

Ordinary High Water Mark - the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active channel/bank-full level" which is often the 1:2 year flood flow return level. In inland lakes, wetlands, or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

Permafrost - ground (soil or rock) that remains at or below 0°C for at least two consecutive years.

Secondary Containment - containment that prevents liquids that leak from Fuel Storage Tanks or containers from reaching outside the containment area and includes double-walled Tanks, piping, liners, and impermeable barriers.

Sewage - all toilet wastes and Greywater.

Spill Contingency Plan - a document, developed in accordance with Aboriginal Affairs and Northern Development Canada's *Guidelines for Spill Contingency Planning* (April 2007), that describes the set of procedures to be implemented to minimize the effects of a spill.

Sump - a man-made pit or natural depression in the earth's surface used for the purpose of depositing waste material, such as non-Toxic Drilling Waste or Sewage, therein.

Toxic - a substance that enters or may enter the environment in a quantity or concentration or under conditions such that it:

- a) Has or may have an immediate or long-term harmful effect on the environment or its biological diversity;
- b) Constitutes or may constitute a danger to the environment on which life depends; or
- c) Constitutes or may constitute a danger in Canada to human life or health.

Waste – any garbage, debris, or chemical or toxic material to be used, stored, disposed of, or handled on land, and also as defined in section 2 of the *Northwest Territories Waters Act*.

Waste Management Plan (WMP) - a document, developed in accordance with the Board's *Guidelines for Developing a Waste Management Plan*, that describes the methods of waste management from waste generation to final disposal.

Watercourse - a natural body of flowing or standing water or an area occupied by water during part of the year, and includes streams, springs, swamps and gulches but does not include groundwater.

Part C: Conditions Applying to All Activities (headings correspond to subsection 26(1) of the Mackenzie Valley Land Use Regulations)

26(1)(a) Location and Area

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| 1. | The Permittee shall locate all camps on Durable Land or previously cleared areas. | Camp Location |
| 2. | The Permittee shall not construct parallel lines or roads, unless an existing line or road cannot be used. | Parallel Roads |
| 3. | The Permittee shall locate all lines, trails, and right-of-ways to be constructed parallel to any Watercourse a minimum of 100 metres from the Ordinary High Water Mark, except at crossings. | Parallel Watercourse |
| 4. | The Permittee shall not conduct this land-use operation on any lands not designated in the complete application. | Location of Activities |
| 5. | Prior to the commencement of the land-use operation, the Permittee shall accompany an Inspector during an inspection of the proposed land use area. | Inspect Locations |

26(1)(b) Time

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| 6. | At least 48 hours prior to the commencement of this land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) 765-6648. | Contact Inspector |
| 7. | At least 48 hours prior to commencement of this land-use operation, the Permittee shall provide the following information, in writing, to the Board <u>and</u> an Inspector: a) the name(s) of the person(s) in charge of the field operation; b) alternates; and c) all methods for contacting the above person(s). | Identify Agent |
| 8. | At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of: a) the plan for removal or storage of equipment and materials; and b) when final cleanup and reclamation of the land used will be completed. | Reports Before Removal |
| 9. | The Board, for the purpose of this operation, designates March 31, as spring break-up. | Spring Break – up |

26(1)(c) Type and Size of Equipment

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| 10. | The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the complete application. | Only Approved Equipment |
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26(1)(d) Methods and Techniques

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| 11. | Prior to the movement of any vehicle that exerts pressure on the ground in excess of 35 kPa, the Permittee shall scout proposed lines and routes to select the best location for crossing streams and avoiding terrain obstacles. | Detours and Crossings |
| 12. | The Permittee shall construct and maintain the overland portion of winter roads with a minimum of 10 cm of packed snow and/or ice at all times during this land-use operation. | Winter Roads |
| 13. | The Permittee shall not erect camps or store material, other than that required for immediate use, on the ice surface of a Watercourse. | Storage on Ice |

26(1)(e) Type, Location, Capacity, and Operation of All Facilities

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| 14. | The Permittee shall ensure that the land use area is kept clean at all times. | Clean Work Area |
| 15. | The Permittee shall not locate any Sump within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | Sumps From Water |

26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land

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| 16. | The Permittee shall, where permafrost exists, insulate the ground surface beneath all structures associated with this land-use operation to prevent: a) any vegetation present from being removed; b) the melting of Permafrost; and c) the ground settling and/or eroding. | Permafrost Protection |
| 17. | The land-use operation shall not cause obstruction to any natural drainage. | Natural Drainage |
| 18. | The Permittee shall minimize erosion by installing erosion control structures as the land-use operation progresses. | Progressive Erosion Control |
| 19. | The Permittee shall, where flowing water from a Borehole is encountered: a) plug the Borehole in such a manner as to permanently prevent any further outflow of water; and b) immediately report the occurrence to the Board and an Inspector. | Flowing Artesian Well |
| 20. | The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface. | Prevention of Rutting |
| 21. | The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting. | Suspend Overland Travel |
| 22. | The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. | Vehicle Movement Freeze-up |

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| 23. | The Permittee shall not use any material other than clean water and snow in the construction of ice bridges. | Ice Bridge Materials |
| 24. | The Permittee shall not use any materials other than clean snow and water in the construction of snow fills. | Snowfill Materials |
| 25. | Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and either remove or v-notch all snowfills from stream crossings, unless otherwise authorized in writing by an Inspector. | Remove or V-Notch Snowfills |
| 26. | Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and v-notch all ice bridges, unless otherwise authorized in writing by an Inspector. | V-notch Ice Bridges |
| 27. | The Permittee shall not cut any stream bank, unless otherwise authorized in writing by an Inspector. | Stream Banks |
| 28. | The Permittee shall minimize approach grades on all Watercourse crossings. | Minimize Approach |
| 29. | The Permittee shall slope the sides of waste material piles, excavations, and embankments — except in solid rock — to a minimum ratio of 2:1 vertical, unless otherwise authorized in writing by an Inspector. | Excavation and Embankments |
| 30. | The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse. | Watercourse Buffer |
| 31. | The Permittee shall not excavate land within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | Excavate Near Watercourse |
| 26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material | | |
| 32. | At least seven days prior to the use of any chemicals that were not identified in the complete application, the MSDS sheets must be provided to an Inspector and the Board. | Chemicals |
| 33. | The Permittee may deposit non-Toxic Drilling Waste in a Sump or natural depression. Any Sumps or natural depressions used to deposit Drilling Waste must be located at least 100 metres from the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | Drilling Waste |
| 34. | The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses. | Drilling Waste Containment |

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| 35. | The Permittee shall maintain a record of all spills. For all reportable spills, in accordance with the GNWT <i>Spill Contingency Planning and Reporting Regulations</i> , the Permittee shall: | Report Spills |
| | <ul style="list-style-type: none"> a) immediately report each spill to the 24-hour Spill Report Line (867) 920-8130; b) report each spill to an Inspector within 24 hours; and c) submit, to the Board and an Inspector, a detailed report on each spill within 30 days. | |
| 36. | The Permittee shall dispose of all Toxic substances as described in the approved Waste Management Plan. | Waste Chemical Disposal |
| 37. | The Permittee shall dispose of all combustible waste petroleum products by removal to an approved disposal facility. | Waste Petroleum Disposal |
| 26(1)(h) Wildlife and Fish Habitat | | |
| 38. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | Habitat Damage |
| 39. | If migratory birds or their nesting areas, or any species at risk are encountered during the course of operations, the Permittee shall minimize all activity so as to not disturb these animals. | Migratory Birds |
| 26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage | | |
| 40. | Sixty (60) days prior to commencement of this land-use operation, the Permittee shall submit a revised Waste Management Plan to the Board for approval, in accordance with the Mackenzie Valley Land and Water Board's March 2011, or subsequent editions, <i>Guidelines for the Development of a Waste Management Plan</i> . The Permittee shall not commence this land-use operation until the Board has approved the Plan. The Permittee shall adhere to the Waste Management Plan, once approved, and shall annually review the Plan and make any necessary revisions to reflect any changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. | Waste Management |
| 41. | The Permittee shall keep all garbage and debris in a secure container until disposal. | Garbage Container |
| 42. | The Permittee shall dispose of all garbage, waste, and debris as described in the approved Waste Management Plan, unless otherwise authorized in writing by an Inspector. | Remove Garbage |
| 43. | The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan. | Sewage Disposal |
| 26(1)(j) Protection of Historical, Archaeological, and Burial Sites | | |
| 44. | The Permittee shall not operate any vehicle or equipment within 150 metres of a known or suspected historical or archaeological site or burial ground. | Archaeological Buffer |

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| 45. The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. | Site Disturbance |
| 46. The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered: a) immediately suspend operations on the site; and b) notify the Board at (867) 669-0506 or an Inspector at (867) 765-6648, and the Prince of Wales Northern Heritage Centre at (867) 920-6182 or 873-7688. | Site Discovery and Notification |
| 47. Prior to any new land disturbance, the Permittee shall conduct an Archaeological Impact Assessment of the sites where disturbance is planned and shall submit a summary report to the Board and the Prince of Wales Northern Heritage Centre. | AIA |
| 26(1)(k) Objects and Places of Recreational, Scenic, and Ecological Value | |
| <i>Intentionally left blank</i> | |
| 26(1)(l) Security Deposit | |
| 48. Prior to commencement of the land-use operation, the Permittee shall deposit with the Minister a security deposit in the amount of \$88,000.00. | Security Deposit |
| 49. All costs to remediate the area under this Permit are the responsibility of the Permittee. | Responsibility for Remediation Costs |
| 26(1)(m) Fuel Storage | |
| 50. The Permittee shall not place any Fuel Storage Containers or Tanks within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | Fuel Near Water |
| 51. The Permittee shall ensure that all fuel caches have adequate Secondary Containment. | Fuel Cache Secondary Containment |
| 52. The Permittee shall set up all refueling points with Secondary Containment. | Secondary Containment – Refueling |
| 53. The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses. | Fuel Containment |
| 54. The Permittee shall mark all Fuel Storage Containers and Tanks with the Permittee's name. | Mark Containers |
| 55. The Permittee shall seal all outlets of Fuel Storage Containers and store the containers on their sides with the outlets located at 3 and 9 o'clock, except for containers currently in use. | Seal Outlet |

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| 56. | Sixty (60) days prior to commencement of this land-use operation, the Permittee shall submit a revised Spill Contingency Plan to the Board for approval, in accordance with Indian and Northern Affairs Canada's 2007, or subsequent editions, <i>Guidelines for Spill Contingency Planning</i> . The Permittee shall not commence this land-use operation until the Board has approved the Plan. The Permittee shall adhere to the Spill Contingency Plan, once approved, and shall annually review the Plan and make any necessary revisions to reflect any changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. | Spill Contingency Plan |
| 57. | Prior to commencement of operations, the Permittee shall ensure that spill-response equipment is in place to respond to any potential spills. | Spill Response |
| 58. | All equipment that may be parked for two hours or more, should have a haz-mat/drip tray under it or be sufficiently diapered. (Leaky equipment should be repaired immediately.) | Drip Trays |
| 59. | The Permittee shall clean up all leaks, spills, and contaminated material. | Clean Up Spills |
| | 26(1)(n) Methods and Techniques for Debris and Brush Disposal | |
| 60. | The Permittee shall not clear areas larger than identified in the complete application. | Minimize Area Cleared |
| | 26(1)(o) Restoration of the Lands | |
| 61. | The Permittee shall dispose of all overburden as instructed by an Inspector. | Disposal of Overburden |
| 62. | The Permittee shall store overburden and use it to recontour the site after operations are complete, unless otherwise authorized in writing by an Inspector. | Save and Place Organic Soil |
| 63. | Prior to the expiry date of this Permit, the Permittee shall complete all cleanup and restoration of the lands used. | Final Cleanup and Restoration |
| 64. | Prior to the expiry date of this Permit, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation. | Natural Vegetation |
| 65. | The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so. | Progressive Reclamation |
| | 26(1)(p) Display of Permits and Permit Numbers | |
| 66. | The Permittee shall keep a copy of this Permit on hand at all times during this land-use operation. | Copy of Permit |

26(1)(q) Biological and Physical Protection of the Land

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| 67. The Permittee shall adhere to the Engagement Plan once approved and shall annually review the plan and make any necessary revisions to reflect changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval and shall be in accordance with the Mackenzie Valley Land and Water Board's June 2013, or subsequent editions, <i>Engagement Guidelines for Applicants and Holders of Land Use Permits and Water Licences</i> . | Engagement Plan |
| 68. If any plan is not approved by the Board, the Permittee shall revise the plan according to the Board's direction and re-submit it to the Board for approval. | Resubmit Plan |
| 69. All revised plans submitted to the Board shall include a brief summary of the changes made to the plan. | Summary of Changes |



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7th Floor - 4910 50th Avenue
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Phone (867) 669-0506
FAX (867) 873-6610

Reasons for Decision

Issued pursuant to paragraph 40(2)(c) of the *Mackenzie Valley Land Use Regulations* (MVLUR).

| Land Use Permit Application | |
|------------------------------|------------------------------------|
| Preliminary Screener | MVLWB |
| Reference/File Number | MV2013C0021 |
| Applicant | New Discovery Mines Ltd. |
| Project | Mon Gold Mine – Discovery Lake, NT |

Decision from Mackenzie Valley Land and Water Board Meeting of

July 3, 2014

With respect to this Application, notice was given in accordance with sections 63 and 64 of the MVRMA. There was no public hearing held in association with this Application.

Background

Mineral exploration and milling have been previously permitted and licenced at this site under the following authorizations: N89C103, N1L2-1598, and MV2001F0095.

Decision

The Board is satisfied that:

- the development is exempt from Part 5 pursuant to Schedule 1, Paragraph 2 (a and b) of the Exemption List Regulations;
- any potential adverse environmental effects are insignificant or mitigable with known technology; and
- there is no likelihood that the proposed development might be a cause of public concern.

After reviewing the submissions of the Applicant, the written comments received by the Board and the Staff Report prepared for the Board, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and Regulations made thereunder, has determined that:

Land Use Permit MV2013C0021 be issued subject to the terms and conditions contained therein.

The Board's reasons for this decision are as follows:

- The Board is satisfied that appropriate consultation has been conducted and that advice has been sought and considered, in accordance with sections 63 and 64 of the MVRMA.
- It is the opinion of the Board that the terms and conditions attached to MV2013C0021, pursuant to the MVRMA, will prevent or mitigate any potential significant environmental impacts which might result from the project.
- The use of land proposed by the Applicant is of a nature contemplated by the MVRMA.
- The Board has notified the Applicant, through a statement included in the scope of this Permit, that compliance with the terms and conditions of this Permit has no effect on the Permittee's responsibility for compliance with the requirements of any other legislation.
- The operation will likely contribute to the socio-economic well-being and economic development of the region.
- No significant or unmitigable public concern was made known to the Board.
- The Board has reviewed the information contained in the July 3, 2014 Staff Report regarding environmental impacts and/or public concerns.
- The Board has requested New Discovery Mines Ltd. post security in the amount of \$88,000.00 to address costs of abandonment of the land use operation and restoration of the site, in accordance with section 32(1) and (2) of the MVLUR.

Land Use Permit MV2013C0021 contains provisions that the Board feels necessary to ensure and monitor compliance with the MVRMA and the Regulations made thereunder and to provide appropriate safeguards in respect of the Applicant's use of the land affected by the Permit.

SIGNATURE

Mackenzie Valley Land and Water Board



Chair

July 3, 2014

Date



**Mackenzie Valley Land and Water Board
Water Licence**

Pursuant to the *Mackenzie Valley Resource Management Act* and Regulations, the Mackenzie Valley Land and Water Board, hereinafter referred to as the Board, hereby grants to:

New Discovery Mines Ltd.

(Licensee)

of 1909 108 W. Cordova St. VANCOUVER BC V6B 0G5

(mailing address)

hereinafter called the Licensee, the right to alter, divert, or otherwise use water subject to the restrictions and conditions contained in the *Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence number: MV2014L2-0002

Licence type: B

Water Management Area: Northwest Territories 01

Location: Mon Gold Mine:
62°32'4.43" N by 114°08'54.00 W and
62°54'2.00" N by 114°20'60" W

Purpose: To use water and dispose of waste

Description: Mineral exploration

Quantity of water **not to be exceeded**: 6m³/day and 1500m³/year

Effective date of Licence: July 3, 2014

Expiry date of Licence: July 2, 2021

This Licence, issued and recorded at Yellowknife, includes and is subject to the annexed conditions.

Mackenzie Valley Land and Water Board

A handwritten signature in black ink, appearing to be "M. Per".

Chair

A handwritten signature in black ink, appearing to be "A. Stewart".

Witness

Type B Water Licence MV2014L2-0002 New Discover Mines Ltd. – Mon Gold Mine

Part A: Scope and Definitions

1. Scope

- a) This License entitles the Licensee to use Water and dispose of Waste for the industrial undertaking of mineral exploration at the Mon Gold Mine, as described in the complete application and the additional information submitted during the regulatory process, including the following:
 - a. Withdrawal and use of Water from Discovery Lake;
 - b. Withdrawal of Water from lakes other than Discovery Lake for use along the winter road route, as described in the complete application;
 - c. Construction, maintenance, and operation of the winter road from the Ingraham Trail to Discovery Lake, as described in the complete application;
 - d. Re-opening and securing of the North and South Declines;
 - e. Advanced mineral exploration program, including bulk sampling;
 - f. Storage of Waste Rock and ore;
 - g. Construction and operation of a camp;
 - h. Fuel storage; and
 - i. Storage and use of explosives.
- b) This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the depositing of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposit of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Commissioner in Executive Council under the Act, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.
- c) Compliance with the terms and conditions of this Licence does not relieve the Licensee from responsibility for compliance with the requirements of all applicable, Federal, Territorial, and Municipal legislation.

2. Definitions

"Acid Rock Drainage" means the release of acidic Water, often with elevated sulphate concentrations that occurs as a result of oxidation of sulphide minerals contained in rock or other materials that are exposed as a result of natural weathering processes, Construction or mining activities.

"Act" means the *Waters Act*.

“Action Level” means a predetermined qualitative or quantitative trigger which, if exceeded, requires the Licensee to take appropriate actions including, but not limited to: further investigations, changes to operations, or enhanced mitigation measures and reporting of same.

“Analyst” means an Analyst designated by the Minister under section 65(1) of the Act.

“Board” means the Mackenzie Valley Land and Water Board established by subsection 99(1) of the *Mackenzie Valley Resource Management Act*.

“Construction” means any activities undertaken to construct or build any components of, or associated with, the development of the Project.

“Discharge” means the direct or indirect release of any Water or Waste to the Receiving Environment.

“Engagement Plan” means a document, developed in accordance with the Board’s *Engagement and Consultation Policy* and the *Engagement Guidelines for Applicants and Holders of Land Use Permits and Water Licences*, that clearly describes how, when, and which engagement activities will occur with an affected party during the life of the Project.

“Engineered Structure” means any structure or facility related to Water Use or the deposit of Waste that is normally designed and approved by a Professional Engineer, that are associated with the Project, including but not limited to the aboveground sump and the fuel storage facility.

“Greywater” means all liquid wastes from showers, baths, sinks, kitchens, and domestic washing facilities but not including toilet wastes.

“Groundwater” means all Water below the ground surface.

“Inspector” means an Inspector designated by the Minister under subsection 65(1) of the Act.

“Licensee” means the holder of this Licence.

“Non-Potentially Acid Generating (Non-PAG) Rock” means any rock that does not have the capability to produce acidic leachate, seepage, or drainage, but may still be capable of producing near neutral pH metal leaching.

“Maximum Average Concentration” means the discrete average of any four consecutive analytical results within a given Discharge period submitted to the Board in accordance with the sampling and analysis requirements specified in the Surveillance Network Program.

“Metal Leaching” means the release of metals and metalloids in leachate, seepage or drainage from rock or other materials associated with the development of site infrastructure or mining activities during construction, operations, or after closure of the Project.

“Minewater” means groundwater or any Water generated for the life of the project including runoff from facilities associated with the Project and all Water or Waste pumped or flowing out of any mine workings.

“Minister” means a duly appointed member of the Executive Council who is responsible for the Waters Act or the department responsible for administering that Act.

“Modification” in respect of a structure, means a change, other than an expansion, that does not alter the purpose or function of a structure.

“Potentially Acid Generating (PAG) Rock” means any rock that has the capability to produce acidic leachate, seepage, or drainage.

“Professional Engineer” means a person who is registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists in accordance with the *Engineering and Geoscience Professions Act*. S.N.W.T. 2006, V.16, or subsequent editions, as a Professional Engineer, and whose principal field of specialization is appropriate to address the components of the Project at hand.

“Project” means the Mon Gold Mine Project operation in its entirety as described in the complete application.

“Receiving Environment” means, for the purpose of this Licence, the natural aquatic environment that receives any deposit or Discharge of Waste, including Seepage or Minewater, from the Project.

“Reclamation” means activities which facilitate the return of affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment, human activities, and the surrounding environment.

“Regulations” are those Regulations promulgated pursuant to section 63 of the Act.

“Seepage” includes Water or Waste that drains through or escapes from any structure designed to contain, withhold, divert or retain Water or Waste.

“Sewage” means all toilet Waste and greywater.

“Sump” means a storage facility constructed to temporarily collect, hold, or transfer Water, and or Waste within the project.

“Unauthorized Discharge” is a release or Discharge of any Water or Waste not authorized under this Licence.

"Waste" means any substance defined as Waste by section 2 of the Act.

"Wastewater" means the Water that is generated by the Project that originate on site and requires treatment or any other Water management activity.

"Waste Rock" means all unprocessed rock materials, including drill cuttings, Potentially Acid Generating Rock and Non-Potentially Acid Generating Rock that are produced as a result of mining operations.

"Water(s)" means any Waters as defined by Section 2 of the Act.

"Water Use" means the use of Water as defined by section 1 of the Act.

"Water Use Fee" means a fee for the use of Water set out in the Regulations promulgated under section 63 the Act.

Part B: General Conditions

1. The Licensee shall ensure a copy of this Licence is maintained on site at all times
2. The Water Use Fee shall be paid annually, totaling \$30.00, in advance of any Water use, in accordance with the Mackenzie Valley Land and Water Board's March 2013, or subsequent editions, *Water Use Fee Policy*.
3. All information submitted to the Board, as required by this Licence, shall:
 - a) Be in accordance with the Mackenzie Valley Land and Water Board's March 2012 *Document Submission Standards*, or subsequent editions; and
 - b) Include a section within each submission which identifies wherein the pertinent requirements of the Licence are addressed.
4. The Licensee shall comply with the terms of any plans approved pursuant to the conditions of this Licence and with any revisions to the plans as may be made from time to time pursuant to the conditions of this Licence and as approved by the Board.
5. The Licensee shall comply with the Surveillance Network Program, which is annexed to and forms part of this Licence, and any amendment to the Surveillance Network Program as may be made from time to time by the Board.
6. The Surveillance Network Program and any compliance dates specified in this Licence may be amended at the discretion of the Board.
7. Meters, devices, or other such methods used for measuring the volumes of Water used and Waste Discharged shall be installed, operated, and maintained by the Licensee to the satisfaction of an Inspector.
8. The Licensee shall post and maintain signs necessary to identify the stations of the Surveillance Network Program to the satisfaction of an Inspector.

9. Beginning April 1, 2015, and no later than every April 1 thereafter, the Licensee shall submit an **Annual Water Licence Report** to the Board, which shall include, but not be limited to the following:
- a) A summary of Engagement activities conducted in accordance with the approved Engagement Plan (Part B, item 11), undertaken during the previous calendar year and shall include a brief description of activities planned for the forthcoming year;
 - b) A summary of activities conducted in accordance with this Licence, including a summary of updates or changes to the processes or facilities required for the management of Water and Wastewater, undertaken during the previous year calendar year;
 - c) A summary of updates or revisions to the approved Waste Management Plan (Part G, item 2), Waste Rock Management Plan (Part G, item 3), Geochemical Characterization and Management Plan (Part G, item 4), Water Quality Monitoring Program (Part G, item 18), Spill Contingency Plan (Part H, item 1) and Interim Closure and Reclamation Plan (Part I, item 1) undertaken during the previous calendar year;
 - d) A summary and interpretation of monitoring results, including any Action Level exceedances described in the approved Geochemical Characterization and Management Plan (Part G, item 4) and the approved Water Quality Monitoring Program (Part G, item 18);
 - e) A description of actions taken in response to Action Level exceedances;
 - f) The monthly and annual quantities in cubic meters (m³) of Water obtained from Discovery Lake or from lakes other than Discovery Lake for use along the winter road route, identified by source;
 - g) The monthly and annual quantities in cubic meters (m³) of all Water discharged from the Project, identified by source and discharge location;
 - h) A summary and interpretation of Water quality monitoring results from the Waste Rock pile;
 - i) The monthly and annual quantities in cubic meters (m³) and tonnes (t) of Waste Rock placed in the Waste Rock pile, identifying the rock type, geochemical classification and general disposal location within the pile;
 - j) An overview analysis and interpretation of major trends of Waste Rock type and Seepages, site plans indicating the locations of Seepage from the Waste Rock, and summary of recommendations for future Seepage monitoring or management actions;
 - k) The monthly, annual and cumulative quantities in cubic meters (m³) and tonnes (t), and location of any ore stockpiles;
 - l) A list and description for all Unauthorized Discharges that occurred during the previous calendar year, including the date, NWT spill number, volume, location, summary of the circumstances and follow-up actions taken, and status (i.e. open or closed), in accordance with the reporting requirements in Part H, item 3 (Spill Contingency Plan) of this Licence;
 - m) Any other details on Water Use or Waste disposal requested by the Board by November 30 of the year being reported;

- n) Tabular summaries of all data and information generated under the Surveillance Network Program and graphical summaries of parameters with effluent quality criteria referred to in Part G, at the points of compliance (Surveillance Network Program site 02), in excel or an electronic and printed format acceptable to the Board. The Licensee shall provide raw data in electronic form to the Board;
 - o) A list of submissions made to the Board during the previous calendar year; and
 - p) A summary of actions taken to address concerns, non-conformances, or deficiencies in any reports filed by an Inspector.
10. The Permittee shall adhere to the **Engagement Plan** once approved and shall annually review the plan and make any necessary revisions to reflect changes in operations or as directed by the Board. Revisions to the plan shall be in accordance with the Mackenzie Valley Land and Water Board's June 2013, or subsequent editions, *Engagement Guidelines for Applicants and Holders of Land Use Permits and Water Licences* and shall be submitted to the Board for approval at the following times:
- a) At least sixty (60) days prior to any proposed changes to the requirements in the approved Plan; and
 - b) Upon the request of the Board.
11. If any Plan is not approved by the Board, the Licensee shall revise the Plan according to the Board's direction and re-submit it to the Board for approval.
12. In conducting its activities under this Licence, the Licensee shall make best efforts to consider and incorporate any scientific and Traditional Knowledge that is made available to the licensee.
13. The Licensee shall take every reasonable precaution to protect the environment from the effects of its licenced activities.

Part C: Conditions Applying to Security Deposits

- 1. Prior to commencement of Construction, the Licensee shall post and maintain a security deposit with the Minister totaling \$165,000.00.
- 2. Upon request of the Board, the Licensee shall submit a revised Reclamation liability estimate utilizing the current version of RECLAIM or another method acceptable to the Board.
- 3. The amount of the security deposit required by Part C, Item 1 may be revised by the Board based on estimates of the current Reclamation liability referred to in Part C, Item 2 of this Licence or based on such other information as may be available to the Board.
- 4. If the amount of the security deposit is revised by the Board as described under Part C, item 3, the Licensee shall post the revised amount with the Minister within 90 days of the Board giving notice of the revised amount.

Part D: Conditions Applying to Water Use

1. The Licensee may only obtain Water for domestic purposes, mining, road watering, and associated uses from Discovery Lake, unless otherwise approved by the Board.
2. The Licensee may only obtain Water for Construction, maintenance, and operation of the winter road as described in the completed application.
3. The total annual quantity of Water withdrawn from all Water bodies shall not exceed 1,500 cubic metres (m³).
4. The total daily quantity of Water withdrawn from all Water bodies shall not exceed 6 cubic metres (m³).
5. The Licensee shall construct and maintain the Water intake(s) with a fish screen designed to prevent impingement and/or entrainment of fish. The fish screen shall be in accordance with the *Department of Fisheries and Oceans' Freshwater Intake End-of-Pipe Fish Screen Guidelines, 1995*, or subsequent editions, and *Fish Screen Design Criteria for Flood and Water Truck Pumps, 2011*, or subsequent editions.
6. In one ice-covered season, total Water withdrawal from a single waterbody shall not exceed 10% of the available Water volume calculated using the appropriate maximum expected ice thickness in accordance with the detailed guidance referred to in the *Department of Fisheries and Oceans' Protocol for Winter Water-Withdrawal from Ice-Covered Waterbodies in the NWT and NU*.

Part E: Conditions Applying to Construction

1. The Licensee shall ensure that all structures intended to contain, withhold, divert, or retain Water or Wastes are designed, constructed, and maintained to prevent escape of Waste to the Receiving Environment.
2. The Licensee shall ensure that all Engineered Structures intended to contain, withhold, divert, or retain Water or Wastes are constructed and maintained following the recommendations of the Professional Engineer responsible for the design, including but not limited to, recommendations regarding field supervision and inspection requirements.
3. The Licensee shall maintain Construction records and geochemical records of Construction materials for all Engineered Structures and make them available at the request of the Board or an Inspector.
4. A minimum of sixty (60) days prior to the commencement of Construction of Engineered Structures, the Licensee shall submit to the Board, the **Final Detailed Construction Plan**, which shall include, but not be limited to, the following:
 - a) A description of the facilities to be constructed, including proposed locations;
 - b) Quantities and the physical and geochemical characteristics of materials required for Construction;

- c) Design drawings and specifications of Engineered Structures, stamped by a Professional Engineer;
 - d) Construction considerations, including timing, sequencing, and a schedule;
 - e) Operations and maintenance requirements; and
 - f) Monitoring plans.
5. Within ninety (90) days of the completion of the Construction of the Engineered Structures, the Licensee shall submit an **As-Built Report** which shall include as-built drawings of the structures, documentation of field decisions that deviate from the Final Detailed Construction Plan, and any data used to support these decisions to the Board
 6. The Inspector must receive written notification a minimum of ten (10) days prior to commencement of Construction from the Licensee.

Part F: Conditions Applying to Modifications

1. The Licensee may, without written approval from the Board, carry out Modifications to facilities related to Water use or Waste disposal the following requirements are met:
 - a) The Licensee has notified the Board and Inspector in writing of such proposed Modification at least 60 days prior to beginning the Modifications
 - b) The Modification do not place the Licensee in contravention of either the Licence or the Act;
 - c) The Board has not, during the 60 days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than 60 days;
 - d) An Inspector has authorized the proposed Modification and provided a letter of notification to the Board; and
 - e) The Board has not rejected the proposed Modification.
2. Within 90 days of the completion of Modification referred to in Part F, Item 1, the Licensee shall provide as-built drawings to the Board.
3. Modification for which all of the conditions referred to in Part F, Item 1, have not been met, may be carried out only with written approval from the Board.

Part G: Conditions Applying to Waste and Water Management

1. The Licensee shall manage Waste and Water with the objectives of minimizing the impacts of the Project on the quantity and quality of Water in the Receiving Environment through the use of appropriate mitigation measures, monitoring, and follow-up action.
2. A minimum of sixty (60) days prior to the commencement of Construction, the Licensee shall submit a revised **Waste Management Plan** to the Board for approval, in accordance with the Mackenzie Valley Land and Water Board's March 2011, or subsequent editions, *Guidelines for the Development of a Waste Management Plan*. The Licensee shall not commence Construction until the Board has approved the Plan.

3. A minimum of sixty (60) days prior to the commencement of Construction, the Licensee shall submit a **Waste Rock Management Plan** to the Board for approval. The Plan shall meet the objectives listed in Part G, item 1, and detail how the Licensee will place, manage, and monitor Waste Rock. The Licensee shall not commence Construction until the Board has approved the Plan. The Plan shall also include, at a minimum, the following:
 - a) Information regarding operation and management:
 - i. a summary, with appropriate maps or diagrams, of the facilities and operational procedures used for the management and storage of all Waste Rock and ore;
 - ii. a description of the geochemical criteria for management and placement of Waste Rock, and ore, including linkages to the Geochemical Characterization and Management Plan referred to in Part G, item 4 of this Licence;
 - iii. a summary of Water management procedures including:
 - a) an identification of all potential sources of drainage from each Waste Rock storage site and the distance to the downstream Receiving Environment;
 - b) a detailed description, including a map or diagram, of the structures intended to contain, withhold, divert, or retain Water or Wastes related to the management of Waste Rock and the predicted performance in terms of flow, capacity, and Water quality parameters;
 - c) a summary of proposed contingency measures for controlling runoff and seepage Water volume, routing, and quality; and
 - iv. Any other information required to describe how Waste Rock will be managed and operated such that the objectives listed in Part G, item 1 of this Licence are achieved.
 - b) Information regarding monitoring activities:
 - i. details and rationale for monitoring and inspection, including geotechnical stability, thermal characterization, seepage quality and quantity, and run-off for all components:
 - a) monitoring locations, types of instrumentation used, and frequency of monitoring, including a site map to scale;
 - ii. linkages to other monitoring programs required in this Licence; and
 - iii. any other information about the monitoring that will be performed to meet the objectives in Part G, item 1 of this Licence.

The Licensee shall not commence Construction until the Board has approved the Plan.

4. A minimum of sixty (60) days prior to commencement of Construction, the Licensee shall submit a **Geochemical Characterization and Management Plan** to the Board for approval. The Plan shall meet the objectives listed in Part G, item 1, and detail how the Licensee will characterize and manage Waste Rock to prevent the use of the material with the potential for Acid Rock Drainage and Metal Leaching in Construction. The Plan shall also include, at a minimum, the following:
 - a) Sampling and testing plans to identify PAG materials and/or materials with Metal Leaching potential, including sampling frequencies, rock units, and volumes;
 - b) Criteria for defining PAG materials;

- c) Post-construction monitoring plans, including inspection of the rock used in the roads and infrastructure areas for the presence of sulphides, confirmation sampling of the rock, and any proposed seepage surveys. Monitoring plans shall include monitoring locations and frequencies;
- d) Information regarding contingencies and responses to monitoring results for managing ARD and ML including a description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part G, item 1 of this Licence are met. This description shall include:
 - i. Definitions, with rationale for Action Levels applicable to the performance of the Geochemical Characterization and Management Plan with respect to geochemical stability as well as Seepage and runoff quality and quantity; and
 - ii. For each Action Level, a description of how exceedances of the Action Level will be assessed and generally which types of actions may be taken by the Licensee if the Action Level is exceeded; and
 - iii. Any other information about the monitoring that will be performed to meet the objectives in Part G, item 1 of this Licence.

The Licensee shall not commence Construction until the Board has approved the Plan.

- 5. The Licensee shall annually review the Waste Management Plan (Part G, item 2); Waste Rock Management Plan (Part G, item 3), Geochemical Characterization and Management Plan (Part G, item 4) and make any necessary revisions to reflect changes in operations. Revised plans shall include a brief summary of the changes made, and shall be presented in a format consistent with the Mackenzie Valley Land and Water Board's *Standard Outline for Management Plans*. Revised Plans shall be submitted to the Board for approval at the following times:
 - a) At least sixty (60) days prior to any proposed changes to the requirements in the approved Plan; and
 - b) Upon the request of the Board.
- 6. The Licensee shall conduct weekly inspections of the structures referred to in Part E, item 1 when operating, or more frequently as directed by the Inspector. Records of these inspections shall be kept for review upon request of an Inspector.
- 7. The Licensee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan, unless otherwise authorized in writing by an Inspector.
- 8. The Licensee shall direct Water removed from the underground to the surface Minewater Sump, as described in the approved Waste Management Plan, unless otherwise authorized in writing by an Inspector.

9. Any Water or Waste Discharged from the surface Minewater Sump shall meet the following effluent quality criteria at SNP 02, prior to Discharge to the Receiving Environment:

| Parameter | Maximum Average Concentration (mg/L) | Maximum Grab Concentration (mg/L) |
|------------------------|---|--|
| Arsenic | 0.5 | 1.0 |
| Copper | 0.3 | 0.6 |
| Lead | 0.2 | 0.4 |
| Nickel | 0.5 | 1.0 |
| Zinc | 0.5 | 1.0 |
| Ammonia | - | 5.9 |
| Total Suspended Solids | 15 | 30 |

10. Any Water or Waste from the Project that enters the Receiving Environment shall have a pH between 6 and 9.5, and no visible sheen of oil and grease.
11. The Licensee shall provide Water sampling results to an Inspector a minimum of five (5) days prior to any planned Discharges of Water or Waste from the Project. Discharge shall not commence until authorized by an Inspector.
12. Within one (1) year of commencement of Construction, the Licensee shall submit a **Water Quality Monitoring Program** to the Board for approval. The Program shall include, but not be limited to, the following:
- a) A summary of the potential impacts from Project-related activities on the Receiving Environment;
 - b) Identification, with rationale, of parameters of concern that should be used as indicators of potential impacts from Project-related activities on the Receiving environment;
 - c) A description of the site-specific monitoring activities required to identify impacts from Project-related activities on the Receiving Environment, this shall include any proposed groundwater monitoring;
 - d) A map and attached table or detailed legend illustrating monitoring and sampling locations;
 - e) A description of monitoring protocols, methodologies, parameters, and frequencies specific to each type of monitoring identified in Part G, item 18(c);
 - f) A description of the quality assurance and quality control measures followed for each monitoring type; and

- g) Information about responses to monitoring results and a description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part G, item 1 of this Licence are met. This description shall include:
 - i. definitions, with rationale, for Action Levels in the Receiving Environment for the parameters of concern identified in Part G, item 18(b); and
 - ii. for each Action Level, a description of actions to be taken in response to any Action Level exceedances under the Program.

Part H: Conditions Applying to Contingency Planning

1. A minimum of sixty (60) days prior to the commencement of Construction, the Licensee shall submit a revised **Spill Contingency Plan** to the Board for approval, in accordance with Indian and Northern Affairs Canada's *Guidelines for Spill Contingency Planning, 2007*, or subsequent editions. The Licensee shall not commence the Project until the Board has approved the Plan.
2. The Licensee shall annually review the Spill Contingency Plan referred to in Part H, item 1 and make any necessary revisions to reflect changes in operations, technology, chemicals, or fuels. The revised Plan shall include a brief summary of the changes made, and shall be submitted to the Board for approval at the following times:
 - a) At least sixty (60) days prior to any proposed changes to the requirements in the approved Plan; and
 - b) Upon the request of the Board.
3. If, during the period of this Licence, an Unauthorized Discharge occurs or is foreseeable, the Licensee shall:
 - a) Implement the Spill Contingency Plan;
 - b) Report the incident immediately via the 24 Hour Spill Reporting Line (867) 920-8130 in accordance with the instructions contained in the Spill Report Form NWT 1752/0593 or subsequent editions;
 - c) Report each spill and Unauthorized Discharge to an Inspector within 24 hours; and
 - d) Submit a detailed report on each spill to the Board and an Inspector within thirty (30) days.
4. All spills and Unauthorized Discharges of Water or Waste shall be reclaimed to the satisfaction of an Inspector.

Part I: Conditions Applying to Closure and Reclamation

1. The Licensee shall within six (6) months of issuance, submit to the Board an **Interim Closure and Reclamation Plan** for approval by the Board.

2. The Licensee shall annually review the Interim Closure and Reclamation Plan referred to in Part I, item 1 and make any necessary revisions to reflect changes in plans. The revised Plan shall include a brief summary of the changes made, and shall be submitted to the Board for approval at the following times:
 - a) At least sixty (60) days prior to any proposed changes to the requirements in the approved Plan; and
 - b) Upon the request of the Board.
3. The Licensee shall implement the Interim Closure and Reclamation Plan as approved by the Board and shall endeavor to carry out progressive Reclamation of areas as soon as is reasonably practicable.
4. The Licensee shall, one year prior to the expiration of this Licence, submit a **Final Closure and Reclamation Plan** to the Board for approval, in accordance with the Mackenzie Valley Land and Water Board and Aboriginal Affairs and Northern Development's *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*, or subsequent editions.
5. The Licensee shall implement the Final Closure and Reclamation Plan as approved by the Board.
6. The Licensee shall submit a revised Final Closure and Reclamation Plan upon request of the Board.

Mackenzie Valley Land and Water Board



Chair



Witness



Annex A: Surveillance Network Program

Licensee: New Discovery Mines Ltd. –
Mon Gold Mine

Licence number: MV2014L2-0002

Effective date of Licence: July 3, 2014

Effective date of Surveillance Network Program (SNP): July 3, 2014

Part A: Reporting Requirements

1. The effective date of this Surveillance Network Program is July 3, 2014.
2. Beginning July 3, 2014, and for every month thereafter, the Licensee shall submit a **Surveillance Network Program Report** to the Board and an Inspector, which shall include, but not be limited to the following:
 - a) Electronic and tabular summaries of all data and information generated under the SNP for the month being reported, including rationale for SNP sites where samples were not collected and results and interpretation of quality assurance/quality control procedures;
 - b) Graphical summaries and interpretation of the analytical results from the SNP samples collected at the point of compliance (SNP site 02) compared to the Effluent Quality Criteria under Part G of this Licence, for the previous two (2) consecutive years;
 - c) An explanation of any actions taken in response to any exceedances of the Effluent Quality Criteria;
 - d) Information regarding the calibration and status of the meters and devices referred to in Part B, item 7 of this Licence;
 - e) The coordinates of all SNP sites which were established within the month being reported, including an updated map identifying the locations of all the SNP sites; and
 - f) A tabular summary of cumulative Water Use.
3. More frequent sample collection may be required at the request of an Inspector.
4. All sampling, sample preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of American Public Health Association's (APHA) *Standard Methods for the Examination of Water and Wastewater* at the time of analysis, or by other such methods approved by an Analyst.

- All analyses shall be performed in a laboratory accredited by the Canadian Association for Laboratory Accreditation (CALA) for the specific analyses to be performed or as approved by an Analyst.

Part B: Site Descriptions and Monitoring Requirements

- The location of sampling sites is subject to approval of the Inspector.
- The location of sampling sites and site-specific monitoring requirements are as follows:

SNP 01

| | | |
|--|--|--|
| Description | Underground Minewater Sump | |
| Location | | |
| Sampling Frequency | Daily (when Sump is active) | Monthly (when Sump is active) |
| Operational Sampling Parameters | Flow and volume ^(*) | Total ammonia, total suspended solids, total dissolved solids, pH, conductivity, total and dissolved metals ^(a) , extractable petroleum hydrocarbons, BTEX ^(b) |
| Rationale | To monitor the quantity and quality of groundwater and Minewater collected in the underground sump prior to discharge to the surface sump. | |
| Status | Active when the underground Sump contains Water or Waste. | |

Note: Footnotes are defined after the final table in Part B.

SNP 02

| | | |
|--|---|---|
| Description | Surface Minewater Sump | |
| Location | | |
| Sampling Frequency | Daily (during Discharge) | Once prior to each Discharge period, and then weekly during Discharge |
| Operational Sampling Parameters | Flow and volume ^(*) | Total ammonia, total suspended solids, total dissolved solids, temperature, pH, conductivity, total and dissolved metals ^(a) , extractable petroleum hydrocarbons, BTEX ^(b) |
| Rationale | To monitor the quantity and quality of water in the surface Sump prior to discharge to the Receiving Environment. | |
| Status | Active prior to and during Discharge periods. | |

SNP 03

| | | |
|---|---|---|
| Description | Seepage survey - Waste Rock pile | |
| Location | Any areas where seepage is encountered. | |
| Sampling Frequency | Twice a year (during freshet, and in late summer or fall) | Following major storm events |
| Construction and Operational Sampling Parameters | Flow ^(*) , volume ^(*) , total ammonia, total suspended solids, alkalinity, temperature, pH, conductivity, sulphate, total and dissolved metals ^(a) | Total and dissolved metals ^(a) , physical parameters ^(c) , major ions ^(d) , nutrients ^(e) |
| Rationale | To monitor the quality and quantity of Seepage from Waste Rock pile. | |
| Status | | |

SNP 04

| | | |
|---|---|--|
| Description | Freshwater intake Discovery Lake | |
| Location | | |
| Sampling Frequency | Daily (when the camp is in use) | |
| Construction and Operational Sampling Parameters | Flow ^(*) , volume ^(*) , turbidity, pH, conductivity, total coliforms, <i>Escherichia coli</i> | |
| Rationale | To determine whether the intake Water is potable. | |
| Status | | |

SNP 05

| | |
|---|--|
| Description | Discovery Lake |
| Location | One or more locations in the Lake near areas where drainage from the Project site enters the Lake. |
| Sampling Frequency | Monthly (during open Water) |
| Construction and Operational Phase Sampling Parameters | pH, conductivity, temperature, total ammonia, total and dissolved metals ^(a) |
| Rationale | To monitor impacts of runoff and Discharge from the Project on Water quality in Discovery Lake. |
| Status | |

Footnotes:

- (*) Flow and volume measurements shall be measured during periods of flow or pumping, and reported in cubic metres.
- (a) Total and dissolved Metals from Water samples shall include the following parameters, at a minimum: Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Cobalt, Copper, Chromium, Hexavalent Chromium, Iron, Lead, Lithium, Manganese, Mercury, Molybdenum, Nickel, Rubidium, Selenium, Silver, Strontium, Thallium, Titanium, Uranium, Vanadium, Zinc.
- (b) BTEX shall include: Benzene, Toluene, Ethyl benzene, and Xylene.
- (c) Physical parameters shall include the following measurements: Dissolved Oxygen, pH, Specific Conductivity, Temperature, Total Suspended Solids (TSS), and Turbidity.
- (d) Major ions shall include the following parameters: Bicarbonate, Calcium, Carbonate, Chloride, Fluoride, Hardness, Hydroxide, Magnesium, Potassium, Reactive Silica (as SiO₂), Sodium, Sulphate, Total Alkalinity, Total Dissolved Solids.
- (e) Nutrients shall include the following measurements/parameters: Biological Oxygen Demand (BOD – 5 day; where indicated), Dissolved Inorganic Phosphorus, Dissolved Organic Phosphorus, Nitrate (as N) calculated, Nitrate/Nitrite (as N), Nitrite (as N), Orthophosphate (as P), Total Ammonia (as N), Total Dissolved Phosphorus, Total Inorganic Phosphorus, Total Kjeldahl Nitrogen, Total Organic Carbon, Total Phosphorus.

Mackenzie Valley Land and Water Board



Chair



Witness

Annex B: Concordance Table of Items Requiring Submission

| # | Part of WL | Item | Date |
|----|------------|--|--|
| 1 | B2 | Water Use Fees | - Annually upon License anniversary date |
| 2 | B9 | Annual Water Licence Report | - April 1, 2015 - Annually on each April 1 |
| 3 | B10 | Engagement Plan | - Annual review |
| 4 | C1 | Security Deposit | - Prior to commencement of Construction |
| 5 | E4 | Final Detailed Construction Plan | - 60 days prior to commencement of Construction |
| 6 | E6 | Written notifications to Board and Inspector prior to commencement of Construction | - 10 days prior to commencement of Construction |
| 7 | E5 | As-built Reports | - 90 days following completion of Construction |
| 8 | F1, 2 | Reports on Modifications | - 60 days prior to carrying out modification - 90 days following completion of modification |
| 9 | G2 | Waste Management Plan | - 60 days prior to commencement of Construction - Annual Review |
| 10 | G3 | Waste Rock Management Plan | - 60 days prior to commencement of Construction - Annual Review |
| 11 | G4 | Geochemical Characterization and Management Plan | - 60 days prior to commencement of Construction - Annual Review |
| 12 | G12 | Water Quality Monitoring Program | - Within 1 year of commencement of Construction |
| 13 | H1 | Spill Contingency Plan | - Within 60 days of issuance - Annual Review |
| 14 | H3 | Detailed Spill/Unauthorized Discharge Report | - Within 30 days of each spill/Unauthorized Discharge |
| 15 | I1 | Interim Closure and Reclamation Plan | - Within 6 months of issuance - Annual Review |
| 16 | I4 | Final Closure And Reclamation Plan | - 1 year prior to expiry of Licence |
| 17 | SNP | Surveillance Network Program Reports | - Monthly |



Mackenzie Valley Land and Water Board
7th Floor - 4910 50th Avenue
P.O. Box 2130
YELLOWKNIFE NT X1A 2P6
Phone (867) 669-0506
FAX (867) 873-6610

Reasons for Decision

Issued pursuant to Section 54 of the *Waters Act*

| Type B Water Licence Application | |
|----------------------------------|------------------------------------|
| Preliminary Screener | MVLWB |
| Reference/File Number | MV2014L2-0002 |
| Applicant | New Discovery Mines Ltd. |
| Project | Mon Gold Mine – Discovery Lake, NT |

Decision from Mackenzie Valley Land and Water Board Meeting of

July 3, 2014

With respect to this application, notice was given in accordance with sections 63 and 64 of the *Mackenzie Valley Resource Management Act* (MVRMA) and section 43 of the *Waters Act*. There was no public hearing held in association with this application.

Background

Mineral exploration and milling have been previously permitted and licenced at this site under the following authorizations: N89C103, N1L2-1598, and MV2001F0095.

Decision

The Board is satisfied that:

- the development is exempt from Part 5 pursuant to Schedule 1, Paragraph 2 (a and b) of the Exemption List Regulations;
- any potential adverse environmental effects are insignificant or mitigable with known technology;
- the project is not likely to be a source of public concern; and
- Having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope and intent of the MVRMA and the *Waters Act* and Regulations made thereunder.

After reviewing the submission of the Applicant, the written comments received by the Board and the Staff Report prepared for the Board, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and the *Waters Act* and Regulations made thereunder, has determined that:

Water Licence MV2014L2-0002 be issued subject to the terms and conditions contained therein.

The Board's reasons for this decision are as follows:

- The Board is satisfied that adequate consultation has been conducted and that advice has been sought and considered in accordance with sections 63 and 64 of the MVRMA.
- No significant or unmitigable public concern was made known to the Board.
- It is the opinion of the Board that the conditions attached to MV2014L2-0002, pursuant to the *Waters Act*, will significantly reduce the potential environmental impacts resulting from water use and/or deposit of waste.
- The use of water and/or deposit of waste proposed by the Applicant is of a nature contemplated by the MVRMA and the *Waters Act*.
- The Board has notified the Applicant, through a statement included in the scope of this Licence, that compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of any other legislation.
- The operation will likely contribute to the socio-economic well-being and economic development of the region.
- The Board has reviewed the information contained in the July 3, 2014 Staff Report regarding environmental impacts and/or public concerns.
- The Board has requested New Discovery Mines Ltd. post security in the amount of \$165,000.00 to address costs of abandonment of the operation and restoration of the site, in accordance with section 35 of the *Waters Act* and section 11 of the Waters Regulations.
- The Board has requested that New Discovery Mines Ltd. pay water use fees in the amount of \$30.00, in accordance with the Mackenzie Valley Land and Water Board's March 2013 *Water Use Fee Policy*. This amount is based on the authorized volume of up to 6m³/day and up to 1500m³/year.

Water Licence MV2014L2-0002 contains provisions that the Board feels necessary to ensure and monitor compliance with the MVRMA and the *Waters Act* and the Regulations made thereunder and to provide appropriate safeguards in respect of the Applicant's use of the waters and/or deposit of waste affected by the Licence. The Board will provide additional referenced material or documents if requested in writing to do so.

SIGNATURE

Mackenzie Valley Land and Water Board



Chair

July 3, 2014

Date