

Mackenzie Land and Water Board
Box 2130
7th Floor, 4922 48th St.,
Yellowknife, NT
X1A 2P6

Tuesday, February 04, 2014

Attn: Tyree Mullaney

Re: MV2013C0021 / MV2014L2-002

Dear Tyree Mullaney

Please find our responses to your questions and comments.

- 1. There are inconsistencies between each of the above noted applications and also within the applications as to the total amount of water being used for the entire operation (i.e. camp, drilling, winter road construction), please clarify;***

There are several references to water use in these applications, and the inconsistencies in water usage are in total <1 to 3 m³ per day, but to clarify.

Item	maximum usage
Domestic Usage (camp)	<3 m ³ per day
Drilling ¹	<3 m ³ per day
Mining ^{1,2}	<3 m ³ per day
Initial Dewatering ²	<15 m ³ in total, <3 m ³ per day
Winter road ^{2,3}	None

Notes: ¹ Drilling and Mining will not occur concurrently

² Mining and Initial dewatering will not occur concurrently

³ Initial Dewatering and Winter Road operations will not occur concurrently

So in summary, total water use will not exceed 6 m³ per day, but may come from different sources, always domestic usage, but also one of drilling, dewatering, or mining.

- 2. Please provide the location of where the water will be drawn from for both the works at the site as well as for the winter road;***

Water will be drawn from Discovery Lake at UTM NAD83 Z11 Easting 635,928.9 m Northing 6,977,040.8 or 62° 53'52.91" Latitude, 114° 19' 30.66" Longitude at the north-end of the lake near the west shore.

As mentioned above, we have not used water in winter road construction for any of the ten years that we had used it in the past, and we do not anticipate any change to that.

3. *There are inconsistencies between each of the above noted applications and also within the applications as to the total number of people on site, please clarify;*

I see that in one place on the application we said that there would be 7 people, and on the waste Management Plan we said 8 people. Please accept 8 as the maximum number of people on site at any given time. In the Water License Questionnaire we said that there would be 4 to 5 employees, plus owners. Please accept that there may be 2 to 3 owners on site who will not be employees, bring the total up to 8 persons.

4. *Please provide information relating to tenure and/or rights to the site (a list of mineral leases, mineral claims)*

As provided on our letter dated Tuesday, December 17, 2013 to you regarding the Land Use Application, the attached list on Mining Leases on which this work will be conducted has been provided.

All work except for access will be on the Mon Leases listed below:

Lease	Location	Owner
ML3004	85J16	New Discovery Mines Ltd.
ML3005	85J16	New Discovery Mines Ltd.
ML3006	85J16	New Discovery Mines Ltd.
ML3007	85J16	New Discovery Mines Ltd.
ML3008	85J16	New Discovery Mines Ltd.
ML3009	85J16	New Discovery Mines Ltd.
ML3010	85J16	New Discovery Mines Ltd.
ML3011	85J16	New Discovery Mines Ltd.
ML3012	85J16	New Discovery Mines Ltd.
ML3013	85J16	New Discovery Mines Ltd.
ML3014	85J16	New Discovery Mines Ltd.

5. *Please provide information on the type and amount of drill cuttings reporting to the sump;*

Drill cuttings will come from mining as well as diamond drilling. Both will deal with quartz, and Burwash Group turbidites either ground < 0.2 mm (diamond drilling) or as chips, primarily <2 and >0.2 mm. Burwash Group turbidites will constitute >90% of diamond drill cuttings and >70% of the mining drill cuttings.

Diamond drill cuttings will not exceed 1 tonne (dry weight) and mining cuttings will not exceed 15 tonnes.

6. Please identify which portal will be used (and how it relates to where waste will be deposited);

The plan is to use the North Portal as shown on Map 6 (attached to the original application). The coordinates of this portal are UTM NAD83 Z11 635,778.0 mE and 6,977,093.4 mN.

Map 4 of that application show the waste rock storage to be immediately outside of the portal, south and west of the GerMac tailing containment facility, in an area labeled New_Waste_Storage.

With respect to your comments regarding the Water License:

1. Section 8 of the application requires information in regards to the quantity, quality, treatment, and disposal of waste to be deposited. According to the project description, there will be several types of waste generated including: groundwater from the decline, sewage, greywater, solid waste and potentially contaminated run-off from waste rock piles (i.e., from acid rock drainage or metal leaching). The management of some of these items is mentioned in New Discovery's draft Waste Management Plan, however, several pieces of information are missing including:

- a. With respect to groundwater from the decline, information is required to confirm the expected quality and quantity of groundwater that will have to be managed during this phase of the project, including the rationale for the predictions made and any limitations to those predictions. Also, the proponent is required to describe greater detail for how the collected groundwater will be disposed of and any contingencies that will be in place if predictions are wrong;**

The decline was in an area of permafrost, as such there was no ground water flow. All water in the declines in the past was pumped in from Discovery Lake. Site visits in June and July of 2012 and 2013 have confirmed that the ground is still frozen.

Small amounts of water may have flown in from surface run-off, and would freeze near the portal. This surface ice may have to be removed to gain access to the decline. It should be noted that the first 10 m of the decline has been drive at an uphill inclination so surface water will flow out and not into the portal.

Any water in the decline will be surface water as the decline is in permafrost. The only access to the decline would be from the portal, and given that water flows downhill, and it does limited flowing when frozen, it is expected that any water accessing the decline would freeze at the portal.

There are three likely scenarios considered, all affecting only the first 10 m +/- of the decline at the Portal.

Scenario	Best case	Worst case
1. No ice	Zero discharge	Zero discharge
2. Part ice	Note 1	Note 1a
3. Full ice	Note 2	Note 2a

Note 1 It is possible that some surface water entered the portal due to the establishment of ice dams. The surface water chemistry is expected to be the same as the surface water in the area as determined at SNP 1598-1 from NWT Water License N1L2-1598. The total volume would be 15 m³ (3m x 0.5m x 10m).

Note 1a The water may have come into equilibrium with broken rock and established a chemistry similar to that found near broken rock in the past, as determined at SNP 1598-5 from NWT Water License N1L2-1598. The total volume would be 15 m³ (3m x 0.5m x 10m).

Note 2 It is possible that some surface water entered the portal due to the establishment of ice dams. The surface water chemistry is expected to be the same as the surface water in the area as determined at SNP 1598-1 from NWT Water License N1L2-1598. The total volume would be 75 m³ (3m x 2.5m x 10m).

Note 2a The water may have come into equilibrium with broken rock and established a chemistry similar to that found near broken rock in the past, as determined at SNP 1598-5 from NWT Water License N1L2-1598. The total volume would be 75 m³ (3m x 2.5m x 10m).

Disposal of Dewatering Material

The water (ice) will be scrapped up using a 2 yard scoop tram and will most likely have entrained rock. This will be deposited in the waste muck pile and allowed to melt and drain naturally. Mining should commence immediately after this access is opened up so the ice will be buried in the ensuing muck. Given the area of the waste muck pile as applied for covers 4,000 m², the addition of 15 m³ of ice will be the equivalent of an additional 3.75 cm of ice, or 3.4 cm of water over this area. It will be deposited on the upslope of the currently disturbed area so its ability to directly access any waterbody is reduced. As ice, it is not likely to flow quickly, and once buried, its conversion to liquid will be slowed. In any event, previous activity and sampling (NWT Water License N1L2-1598) has determined that this rock has become weakly acidic after 8 years, and then become less acid subsequent to this. Sampling by DIAND inspectors during this time has shown no significant metals leaching over the subsequent except for iron, and manganese. The iron at 1.3 mg/L is within the 1.0 to 1.7 mg/L range recommended by the B.C. Government in their 2008 study Ambient Aquatic Life Guidelines for Iron. The manganese level of 0.628 mg/L is below the lowest level recommended by the B.C. Government in their 2008 study Ambient Aquatic Life Guidelines for Manganese of 0.7 to 3.0 mg/L. All other metals never attained any levels of concern. It is our belief that we should obtain the same results as has previously been obtained when mining the same rocks in the same manner as previous operators.

Contingencies plans will be to stop mining if we exceed our expectations for the volume or quality of water.

- 2. With respect to run-off from the waste rock pile, information is needed about the expected quality and quantity of run-off from waste rock piles. Information is also needed about how that wastewater will be treated and disposed of and the likelihood of it entering any surface or ground waters;***

As presented in Appendix 4 to the Water License Application, no current studies have been completed although some are underway. We rely on the results of the studies for NWT Water License N1L2-1598 and the various inspection reports related thereto. This license applied for a mine and mill operation at this site mining these rocks between 1989 and 1997.

The waste water off of the muck piles in the past, as tested and reported by DIAND inspectors show no treatment was necessary, and all parameters met CCME and BC guidelines for the protection of aquatic life. We plan to mine the same rocks and to deposit the waste rock in the same manner that has met standards in force then and appear to meet all standards today.

Once the drainage off of the waste rock piles and the mine water discharge enters the nearest body of water, there is no detectible impact (SNP 1598-1) as virtually all parameters are well within all guidelines available, including those for drinking water.

A total of <3 m of water per day will come from the mine operations, and drainage off of the waste piles will add to this. We expect an average of 280 mm of precipitation with a maximum of around 40 m in any given month, similar to what it has been during the past several decades when mining has occurred at this site. No problems relating to the waste rock has occurred during this time.

It should be noted that this is the same rock that CARD has used to cap the Discovery Mine tailings and reclaim that site. They have not noted any issues at the Discovery Mine.

These are the same rocks used by GNWT highways to build roadways throughout most of the southern Slave geologic province (Highway 3).

- 3. Information is needed about the expected rock characterization and run-off quality from the decline access walls, including any planned testing, monitoring, treatment, and planned contingencies for any wastewater.***

The rock in the decline consists of the same Burwash Group material that is to be excavated which is the same as what has been excavated in the past. There will be no difference. Please see item 2 (above) for characterization and run-off quality discussion.

Samples have been collected for additional ABA and SWEP testing. Samples will be collected during operations on a geologically controlled and monitored basis to quantify the nature of all waste rocks. These rocks have not required treatment at this site in the past, nor do they need treatment at CARD's Discovery Site nor the GNWT's roadways where Burwash Group rocks are quarried and used for construction purposes. Should this change, we will act to ameliorate any issues or deviations from the norm.

All of the referenced studies are detailed in Appendix 4 to our water license submission, entitled "Studies Completed at the Mon Mine". They are largely related to NWT Water License N1L2-1598 and the inspection reports related to that license.

- 4. With respect to run-off from the waste rock piles, please provide information on the placement of the pile, on mitigations related to collecting any run-off as well as any monitoring that will be necessary;***

The waste piles will be placed as detailed in the Land Use Application MV2013C0021 and the maps attached to that application. It can be seen from these documents that the waste rock is stored upslope from the previously disturbed area. All run-off will percolate through the rock piles and the underlying swamp more than 100 m from the nearest body of water. ALL PREVIOUS SAMPLING FROM THIS BODY OF WATER AT THIS LOCATION RETURNED WATER OF CANADIAN DRINKING WATER QUALITY. It is intended to sample and monitor this location during and after operations.

- 5. With respect to mine water quantity and quality and rock characterization, please expand on the predictions and extrapolations made (how they relate to this particular site and any limitations with the predictions). Include how predictions will be verified and any contingencies planned if predictions are wrong. Please note that mine water has been encountered at numerous northern sites that lie within permafrost and discontinuous permafrost zones. Please expand on the rationale for given for the prediction of limited mine water to be expected needs to be expanded on;***

Our predictions are very simple. No water was encountered when we mined this area before. The rock characterization is predicted that the same rock deposited the same way in the same location will behave the same as it has before.

We do not have humidity cell test results on small samples from a lab, we have actual results from tens of thousands of tonnes deposited and then analyzed in the field under

real life conditions. The test site IS the site we will be operating at! The predictions will be verified by sampling and monitoring as needed. We will halt operations if our predictions are incorrect.

The presence or absence of mine water at this site was carefully examined by driving 2.5 x 3 m declines into the rock at the location where we will be mining and monitoring for several years. No inflows were observed. Inflows were zero. The rocks frosted over from the breath of our survey technicians, but apart from that, no water was encountered.

We hope to continue to test this by driving another 200 m +/- of ramp in the area of interest, to collect rock and water samples (if present) for further testing.

6. Please clarify the total amount of explosives to be used at site and describe how explosives will be managed to minimize nitrogen species loading to the environment.

Explosives typically contain high concentrations of nitrogen, typically as nitrates. These will be delivered to the site in bags and boxes, and kept in a certified explosive locker. Explosives will be taken underground as needed and loaded using pneumatic tools into drillholes prepared for this purpose.

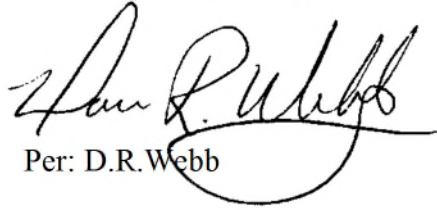
Nitrogen gets into the environment from explosives from spills in the powder magazine, during loading at the magazine, loading the pneumatic loader, spillage from the holes (overloading), and undetonated explosives admixed with the muck.

Nitrogen source to the environment	Location	Mitigation
Inside Powder Magazine	Powder magazine	Sweep, pick-up, dispose of according to MIS regulations
Outside Powder Magazine	Powder magazine	Inform employees, restrict personnel to trained individuals only
Loading pneumatic loader	Underground	Inform employees, train in spill awareness
Spillage from holes	Underground	Inform employees, train in spill awareness
Undetonated explosives	Underground and surface	Inform employees, use best blasting practices

As stated in our letter of December 17, 2013, we will have a total of 5,000 kgs of anfo explosives, 500 nonel detonator, and 4 150 m spools of B-line on site.

We hope this addresses all of your concerns.

Sincerely
New Discovery Mines Ltd.,

A handwritten signature in cursive script, appearing to read "D.R. Webb". The signature is written in black ink and is positioned above the printed name "Per: D.R. Webb".

Per: D.R. Webb