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August 19, 2010

Angela Plautz
Regulatory Officer
Mackenzie Valley Land and Water Board
4910 50th Ave, Yellowknife NT, X1A 2P6

Dear Ms. Plautz

RE: Modifications to Monitoring Plan submitted as condition D.34 and D35 of Tundra water license MV2009L8-0008

This letter is to document modifications to the Monitoring Plan submitted to the Mackenzie Valley Land and Water Board on April 1st 2010 as part of conditions D.34 and D.35 of Tundra water license MV2009L8-0008. The monitoring plan is entitled: *Development of Tundra Mine Construction Monitoring, Long-Term Monitoring, and Status of the Environment Programs.* This supersedes a letter documenting proposed changes that was submitted previously on July 14th, 2010.

In many cases the description of the SNP Stations are not consistent with the Water License. The SNP Station descriptions should read as follows in the below table:

Station Number	Description
0014-1	Potable water and dust suppression – Matthews Lake
0014-2.1	Seep 1
0014-2.2	Seep 2
0014-2.3	Seep 3
0014-2.4	Seep 4
0014-2.5	CI Trench
0014-2.6	Seep 6
0014-3	Landfill leachate
0014-4	Wetland between landfill and Bulldog Lake directly downstream of diversion ditches
0014-5	Northeast corner of landfill ditches immediately upstream of landfill

0014-6A	Lower Pond to the TCA
0014-6B	Hambone Lake near original inlet at the northeast corner of the Lower Pond
0014-6C	Hambone Lake near the outlet
0014-6D	Trans Saddle Lake near the outlet
0014-6E	Powder Mag Lake
0014-6F	Sandy Lake
0014-6G	Powder Mag Outflow
0014-6H	Between Sandy and Whaletail lakes, immediately upstream of the road crossing
0014-7A	Upper Pond to the TCA
0014-7B	Mill Pond (east of the Upper Pond)
0014-7C	Bulldog Lake (downstream of landfill and main mine site)
0014-8	Control Lake
0014-9	Between Sandy and Powder Mag Lakes, immediately downstream of the road crossing

Baseline Monitoring:

1. Monthly sampling of 14-6G and 14-6H for *Solids* instead of Weekly (Table 3.3-1). Erosion issues at these particular sites are of minor concern only, as treated water is "buffered" by 3 - 6 ponds/lakes before these sites. Monthly sampling and historic results have allowed us to confidently determine "baseline" conditions.
2. Sampling for cyanide of the surface seepage sites (14-2.1 to 14-2.6) in the spring instead of monthly (Table 6.3-1). Historic results are adequate to determine baseline levels and more frequent and expensive analysis of these parameters is not warranted. The current SNP does not require any cyanide sampling at these sites.
3. Benthic and sediment surveys to be completed in depositional areas (shallow and mid-depth) not the inflow and outflow of each of the exposure lakes (Table 3.3.-2). Benthic organisms and sediment only occur in depositional areas.
4. Additional samples of Phytoplankton taxonomy and biomass samples to be collected because these organisms were consistently found to be the most susceptible organisms to toxicants in several lakes during past toxicology experiments. (Section 3.3.2.3).
5. It is proposed to use another reference water body than the Control Lake for the Aquatic Ecology Baseline Construction Monitoring Program (Table 3.3-2). The recommended Control Lake to be sampled as a reference water body for both Matthews and Sandy Lakes is only known to contain Arctic grayling and both forage *and* predatory fish are required to compare with the exposure lakes.

Construction Monitoring (Water Treatment and Discharge)

6. Weekly sampling of 14-6H and 14-9 instead of monthly for standard parameters, solids, major ions, nutrients, total metals, water level and turbidity (Table 3.4-1). These locations were included to monitor for potential erosion at the two road

crossings.

7. Monthly sampling of Whale-Tail Outflow instead of Weekly (Table 3.4-1). Weekly sampling is very difficult logistically as WhaleTail is only accessible by foot or helicopter and the lake is located a significant distance from the Tundra mine site.

Long Term Monitoring

8. It is proposed that sampling sites (lakes, seeps and groundwater) be monitored in the spring (Tables 4.2-1 and 6.4-1). However, as "spring" isn't defined in the report, we suggest a July sampling date to be consistent with "Baseline Monitoring". Groundwater and larger lakes often take considerable time to break-up and are frequently frozen until the beginning of July.

If you have further questions please do not hesitate to contact me at (867) 669-2773.

Sincerely,

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