



PO BOX 1500  
YELLOWKNIFE NT X1A 2R3

May 27, 2019

#### Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending May 18, 2019 is as follows:

#### Fence Line Stations:

- No 15-minute average particulate matter less than 10 microns in diameter (PM<sub>10</sub>) concentrations above the established Risk Based Action Level (RBAL) of 159 µg/m<sup>3</sup> were measured at the fence line monitoring stations during the week. PM<sub>10</sub> concentrations measured at the fence line monitoring locations during the week were typical of seasonal background concentrations;
- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL of 333 µg/m<sup>3</sup> were measured at the fence line monitoring stations during the week. TSP concentrations measured the fence line monitoring locations during the week were typical of seasonal background concentrations;
- Laboratory results for TSP, PM<sub>10</sub>, and trace metals (including arsenic) analyses from samples collected on April 30, 2019 at the fence line stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of integrated 24-hour arsenic, PM<sub>10</sub>, and TSP filter samples collected at the fence line stations after April 30, 2019 are pending.

#### Community Stations:

- No real-time PM<sub>2.5</sub> or PM<sub>10</sub> 24-hour average concentrations above the referenced standards for each were measured at any of the community stations during the week;
- Laboratory results from TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples collected on April 24, 27 and 30, 2019 at the community stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of community station filters collected after April 30, 2019 are pending;
- Laboratory results from asbestos samples collected on April 27 and 30, 2019 at the community stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of asbestos samples collected at the community stations after April 30, 2019 are pending;
- There were no NO<sub>2</sub> concentrations measured at the Niven Lake community air monitoring station above the NWT Ambient Air Quality 24-Hour Standard of 106 parts per billion (ppb) or the 1-Hour Standard of 213 ppb during the week. Table 1 summarizes the daily hourly maximum concentrations and the daily 24-hour average concentrations measured at the Niven Lake community station during the week.



**Niven Lake Community Station NO<sub>2</sub> Concentrations**

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
May 12, 2019	0.7	0.6
May 13, 2019	6.3	1.1
May 14, 2019	1.4	0.5
May 15, 2019	0.9	0.5
May 16, 2019	1.6	0.9
May 17, 2019	1.0	0.7
May 18, 2019	1.5	0.8

**Tailings Pond Drilling Program:**

- There were no 15-minute average PM<sub>10</sub> concentrations above the RBAL of 260 µg/m<sup>3</sup> measured at the activity specific stations associated with the tailings pond drilling program during the week;
- No laboratory analyses of tailings pond PM<sub>10</sub> and TSP filter samples are currently scheduled and these samples will only be analyzed if requested, a RBAL exceedance occurs, or laboratory analysis of any filter from the fence line stations results in a measurement above a relevant standard.

**General Operation:**

- Data completeness for the reporting period was 100% for real time PM<sub>10</sub> and TSP samplers associated with the fence line monitoring stations, and 99.55% for real time PM<sub>10</sub> and TSP samplers associated with the tailings pond stations;
- The AQM program operated as specified during the week ending May 18, 2019, with the following exception:
  - A total of 1.5 hours of real-time PM<sub>10</sub> and TSP data were invalidated from the tailings pond sampling locations during sampler relocation associated with drill movement;
  - The continuous PM<sub>2.5</sub> particulate sampler at the YCC community station did not collect data from 07:00 PM MST to 10:00 PM MST on May 13, 2019 due to an intermittent malfunction in the tape feed mechanism, which has been identified.

Sincerely,



Natalie Plato  
Deputy Director  
Giant Mine Remediation Project

c.c.: Distribution List