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April 29, 2019

Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending April 20, 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 March 25 and 28, 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 on and after March 28, 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 March 28 and 31, 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 March 31, 2019 are pending;
- Laboratory analyses of asbestos samples collected at the community stations after March 25, 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.



**Table 1**  
**Niven Lake Community Station NO<sub>2</sub> Concentrations**

<b>Date</b>	<b>Maximum One-hour Average (ppb)</b>	<b>24-hour Average (ppb)</b>
April 14, 2019	1.8	0.8
April 15, 2019	1.1	0.7
April 16, 2019	5.1	1.7
April 17, 2019	2.2	0.8
April 18, 2019	3.1	1.2
April 19, 2019	2.0	0.8
April 20, 2019	1.1	0.7

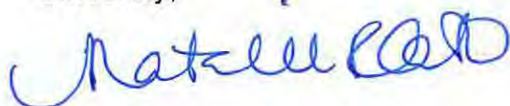
Tailings Pond Drilling Program:

- 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 99.80% for real time TSP samplers associated with the fence line monitoring stations, 99.87% for real time PM<sub>10</sub> samplers associated with the fence line monitoring stations, and 100% 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 April 20, 2019, with the following exceptions:
  - A total of 3 hours of real-time TSP data were invalidated from the fence line sampling locations during maintenance and repair;
  - A total of 2 hours of real-time PM<sub>10</sub> data were invalidated from the fence line sampling locations during maintenance and repair;

Sincerely,



Natalie Plato  
Deputy Director  
Giant Mine Remediation Project

c.c.: Distribution List