



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

NT 928157

October 13, 2017

Distribution List

RE: Air Quality Reports for the Week of October 7, 2017.

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending October 7, 2017 is as follows:

Fenceline Network:

- No 15-minute average particulate matter less than 10 microns in diameter (PM_{10}) concentrations above the established Risk Based Action Level (RBAL) of $159 \mu\text{g}/\text{m}^3$ were measured at the fenceline monitoring stations during the week. PM_{10} concentrations measured at the fenceline locations during the week were typical of seasonal background concentrations;
- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL ($333 \mu\text{g}/\text{m}^3$) were measured at the fenceline monitoring stations during the week. TSP concentrations measured at the fenceline locations during the week were typical of seasonal background concentrations;
- Laboratory results for TSP, PM_{10} , and trace metals (including arsenic) analyses from samples collected on September 7, 13, and 14, 2017 at the fenceline samplers were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of integrated 24-hour arsenic, PM_{10} , and TSP filter samples collected at the fenceline sampling locations after September 14, 2017 are pending.

Community Stations:

- No 24-hour average concentrations of $PM_{2.5}$ and PM_{10} were measured above the referenced standards at the community stations during the week. $PM_{2.5}$ and PM_{10} concentrations during the week were typically representative of seasonal background concentrations;
- Laboratory results from TSP, PM_{10} , and trace metals (including arsenic) samples collected on 16, 2017 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 September 16, 2017 are pending;
- Laboratory results for asbestos analyses from samples collected on September 19 and 22, 2017 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 on September 16 and after September 22, 2017 are pending;

- There were no NO₂ concentrations measured at the recently established 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 AQM Station NO₂ Concentrations

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
October 01, 2017	1.0	-0.2
October 02, 2017	6.8	1.4
October 03, 2017	2.0	0.6
October 04, 2017	3.4	0.3
October 05, 2017	1.0	0.1
October 06, 2017	1.1	0.0
October 07, 2017	-0.1	-0.4

General Operation:

The AQM program operated as specified during the week ending October 7, 2017.

Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List