



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

September 10, 2019

Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending August 31, 2019 is as follows:

Fence Line Stations

- No 15-minute average particulate matter less than 10 microns in diameter (PM₁₀) concentrations above the established Risk Based Action Level (RBAL) of 159 µg/m³ were measured at the fence line monitoring stations during the week. PM₁₀ 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/m³ 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 integrated TSP, PM₁₀, and trace metals (including arsenic) analyses from samples collected on August 7, 10, and 11, 2019 at the fence line stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of fence line station filters collected at the fence line stations after August 11, 2019 are pending.

Community Stations

- No continuous PM_{2.5} or PM₁₀ 24-hour average concentrations above the referenced standards for each were measured at any of the community stations during the week;
- Laboratory results from integrated TSP, PM₁₀, and trace metals (including arsenic) samples collected on August 7 and 10, 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 August 10, 2019 are pending;



- Laboratory results from asbestos samples collected on August 10, 13, and 16, 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 August 16, 2019 are pending;
- There were no NO₂ 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 NO₂ Concentrations**

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
August 25, 2019	3.8	0.6
August 26, 2019	2.4	0.6
August 27, 2019	3.7	1.0
August 28, 2019	4.4	0.6
August 29, 2019	0.5	0.1
August 30, 2019	1.4	0.2
August 31, 2019	1.5	0.4

Tailings Pond Drilling Program:

- The Tailings Pond Drilling program was completed on August 25, 2019;
- There were no reported 15-minute average concentrations above the RBAL of 260 µg/m³ for PM₁₀ or 333 µg/m³ for TSP measured at the locations associated with the tailings pond drilling program on August 25, 2019;
- Laboratory results for integrated TSP, PM₁₀, and trace metals (including arsenic) analyses from samples collected on August 13 and 16, 2019 at the tailings pond stations were submitted and analyzed due to a clerical error and were less than the analytical detection limit and/or below the referenced standard;

Contaminated Soils Program

- The Contaminated Soils test pitting excavation in the vicinity of the roaster complex was completed on August 13, 2019;
- Laboratory results for integrated TSP, PM₁₀, and trace metals (including arsenic) analyses from samples collected on August 13, 2019 at the Contaminated Soils test pitting stations were submitted and analyzed due to a clerical error and were less than the analytical detection limit and/or below the referenced standard.

General Operation

- Data completeness for the reporting period was 99.70% for continuous PM₁₀ and 99.72% for continuous TSP concentrations measured at the fence line monitoring stations; 100% for continuous PM₁₀ and continuous TSP monitors associated with the tailings pond stations;
- The AQM program operated as specified during the week ending August 31, 2019, with the following exceptions:
 - One hour of both PM_{2.5} and PM₁₀ data at all community stations (YCC, ND, and NVN) were invalidated on August 30, 2019 during monthly quality control checks.

Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List