



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

October 15, 2019

Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending October 5, 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 stations 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 at fence line monitoring stations 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 September 12, 15, and 18, 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 September 18, 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 September 15 and 18, 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 September 18, 2019 are pending;
- Laboratory results from asbestos samples collected on September 15, and 18, 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 September 18, 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 each day's maximum hourly concentration and each day's 24-hour average concentration 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)
September 29, 2019	4.7	1.5
September 30, 2019	1.8	1.1
October 01, 2019	7.0	2.4
October 02, 2019	3.6	2.1
October 03, 2019	5.3	2.5
October 04, 2019	1.1	0.3
October 05, 2019	8.9	2.1

General Operation

- Data completeness for the reporting period was 99.92% for continuous PM₁₀ concentrations and 100% for continuous TSP concentrations measured at the fence line monitoring stations;
- The AAQM program operated as specified during the week ending October 5, 2019.

Weekly Summary of Reported Exceedances

Table 2
Summary of Reported Exceedances

Date	Standard	Jurisdiction	Number of Reported
15-Minute Fence Line PM ₁₀	159 µg/m ³	--	0
15-Minute Fence Line TSP	333 µg/m ³	--	0
24-Hour Fence Line PM ₁₀	50 µg/m ³	Ontario	0
24-Hour Fence Line PM ₁₀ Arsenic	0.3 µg/m ³	Ontario	0
24-Hour Fence Line TSP	120 µg/m ³	Northwest Territories	0
24-Hour Fence Line TSP Arsenic	0.3 µg/m ³	Ontario	0
24-Hour Fence Line TSP Lead	0.5 µg/m ³	Ontario	0
24-Hour Fence Line TSP Antimony	25 µg/m ³	Ontario	0
24-Hour Fence Line TSP Nickel	0.2 µg/m ³	Ontario	0
24-Hour Fence Line TSP Iron	4.0 µg/m ³	Ontario	0
Continuous Community Station PM ₁₀	50 µg/m ³	Ontario	0
Continuous Community Station PM _{2.5}	28 µg/m ³	CCME CAAQS	0
24-Hour Community Station PM ₁₀	50 µg/m ³	Ontario	0
24-Hour Community Station TSP	120 µg/m ³	Northwest Territories	0
24-Hour Community Station Asbestos	0.04 fibres/cm ³	Ontario	0
1-Hour Community Station NO ₂	213 ppb	Northwest Territories	0
24-Hour Community Station NO ₂	106 ppb	Northwest Territories	0

Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List