



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

January 5, 2021

Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending December 5, 2020 is as follows:

Site Perimeter Monitoring Network

- 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 site perimeter monitoring stations during the week. PM₁₀ concentrations measured at the site perimeter 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 site perimeter monitoring stations during the week. TSP concentrations measured at the site perimeter 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 November 20, 23, and 29, 2020 at the site perimeter monitoring stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of integrated filter samples collected at the site perimeter stations on November 26, 2020 are pending.
- Air quality monitoring on the site perimeter was concluded for the winter season as of November 30, 2020. Site perimeter air monitoring is scheduled to resume at the commencement of the winter drilling program.

Community Station Monitoring Network

- 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. PM_{2.5} and PM₁₀ concentrations during the week were typically representative of seasonal background concentrations.
- Laboratory results for integrated TSP, PM₁₀, and trace metals (including arsenic) analyses from samples collected on November 17, 20, and 23, 2020 at the community stations were less than the analytical detection limit and/or below the referenced standard.



- There were no NO₂ concentrations measured at the Niven Lake Community Station above the NWT Ambient Air Quality 24-hour Standard of 106 parts per billion (ppb) or the one-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.
- The community station sampling schedule for integrated 24-hour PM₁₀ and TSP filter samples from the high-volume samplers was reduced from a 1:3 day sampling schedule to a 1:6 day sampling schedule on November 29, 2020 with the seasonal suspension of the site perimeter monitoring. Sampling will resume a 1:3 day schedule at the commencement of the winter drilling program.

**Table 1
Niven Lake Community Station NO₂ Concentrations**

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
November 29, 2020	13.0	5.2
November 30, 2020	8.1	1.0
December 01, 2020	16.7	3.4
December 02, 2020	14.7	5.8
December 03, 2020	8.4	2.4
December 04, 2020	16.1	5.1
December 05, 2020	11.5	4.7

General Operation

- Community station integrated sampling for TSP, PM₁₀, and trace metals (including arsenic) was conducted on November 29 and December 5, 2020. The next regularly scheduled sampling is December 11, 2020.
- Data completeness for the reporting period ending on November 30, 2020 was 99.25% for continuous TSP and 99.54% for continuous PM₁₀ concentrations measured at the site perimeter monitoring stations.
- The AAQM program operated as specified during the week ending December 5, 2020, with the following exceptions:
 - One hour of PM₁₀ data at the YKB community station were invalidated on December 1, 2020 due to a tape error in the instrument;
 - One hour of PM₁₀ and PM_{2.5} data at NVN, NDL, and YKB community stations were invalidated on December 1, 2020 during monthly quality control checks;

- One hour of PM₁₀ data were invalidated at the NDL and NVN community stations on December 3, 2020 due to instrument errors;
- Two hours of PM₁₀ data were invalidated at the NDL and NVN community stations on December 3, 2020 due to reported concentrations of less than - 3 µg/m³.

Sincerely,

A handwritten signature in blue ink that reads "Natalie Plato".

Natalie Plato
Deputy Director
Giant Mine Remediation Project
c.c.: Distribution List