



PO BOX 1500  
YELLOWKNIFE NT X1A 2R3

July 28, 2022

## Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program (AAQMP) for the week ending July 16, 2022 is as follows:

### Site Perimeter Monitoring 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 Site Perimeter Monitoring Stations during the week. Intermittent PM<sub>10</sub> concentrations measured during the week were elevated above typical seasonal background concentrations due to smoke from regional forest fires.
- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL of 333 µg/m<sup>3</sup> were measured at the Site Perimeter Monitoring Stations during the week. Intermittent TSP concentrations measured during the week were elevated above typical seasonal background concentrations due to smoke from regional forest fires.
- Laboratory results for integrated TSP, PM<sub>10</sub>, and trace metals (including arsenic) analyses from samples collected on June 22, 25, and 28, 2022, at the Site Perimeter Monitoring Stations were less than the analytical detection limit and/or below the program referenced standard. Laboratory analyses of integrated 24-hour arsenic, PM<sub>10</sub>, and TSP filter samples collected at the Site Perimeter Monitoring Stations after June 28, 2022, are pending.
- Data completeness at the Site Perimeter Monitoring Stations for the week was 99.92% for continuous TSP and 99.92% for continuous PM<sub>10</sub>.

### Community Monitoring Stations

- No continuous PM<sub>2.5</sub> or PM<sub>10</sub> 24-hour average concentrations above the program standards for each were measured at any of the Community Monitoring Stations during the week. PM<sub>2.5</sub> and PM<sub>10</sub> concentrations during the week were elevated above typical seasonal background concentrations due to smoke from regional forest fires.
- Laboratory results for integrated TSP, PM<sub>10</sub>, and trace metals analyses from samples collected on June 25, 2022, at the Community Monitoring Stations were less than the analytical detection limit and/or below program standards. Laboratory analyses results for samples collected after June 25, 2022, are pending.



- There were no NO<sub>2</sub> concentrations measured at the Niven Lake Community Monitoring 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 the maximum hourly concentration each day and the corresponding 24-hour average concentration measured at the Niven Lake Community Monitoring Station.
- Data completeness at the Community Monitoring Stations during the week was:
  - 97.6% for PM<sub>10</sub> and PM<sub>2.5</sub> at the Yellowknife Bay Community Monitoring Station.
  - 99.4% and 97.0% for PM<sub>10</sub> and PM<sub>2.5</sub> at the Niven Lake Community Monitoring Station.
  - 98.2% for PM<sub>10</sub> and PM<sub>2.5</sub> at the Ndilo Community Monitoring Station.
  - 98.8% for NO<sub>2</sub> at the Niven Lake Community Monitoring Station.

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

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
July 10, 2022	3.7	0.8
July 11, 2022	1.4	0.5
July 12, 2022	2.0	0.6
July 13, 2022	1.3	0.4
July 14, 2022	1.6	0.3
July 15, 2022	0.9	0.0
July 16, 2022	0.9	0.1

## General Operation

- Integrated sampling for TSP, PM10, and trace metals was conducted at all three Community Monitoring Stations on July 10, 13, and 16, 2022.
- The AAQMP operated as specified during the week ending July 16, 2022, with the following exceptions:
  - Minor data loss of continuous PM10 and TSP at some of the Site Perimeter Monitoring Stations due to battery failure.
  - Minor data loss of continuous PM2.5 and PM10 at the Ndilq and Niven Lake Community Monitoring Stations.

Sincerely,

A handwritten signature in blue ink that reads "Natalie Plato". The signature is cursive and somewhat stylized.

Natalie Plato  
Deputy Director  
Giant Mine Remediation Project

c.c.: Distribution List