



PO BOX 1500  
YELLOWKNIFE NT X1A 2R3

May 15, 2020

Distribution List

## **Giant Mine Remediation Project Ambient Air Quality Monitoring Program summary for the week ending May 9, 2020**

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending May 9, 2020 is as follows:

### Site Perimeter 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. PM<sub>10</sub> 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/m<sup>3</sup> 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 analyses of integrated 24-hour arsenic, PM<sub>10</sub>, and TSP filter samples collected at the site perimeter stations on and after May 3, 2019 are pending.

### Community Stations

- A 24-hour average PM<sub>10</sub> concentrations was measured above the referenced standard of 50 µg/m<sup>3</sup> at the NDL community station on May 5, 2020;
  - PM<sub>10</sub> 24-hour average concentrations of 51.9 µg/m<sup>3</sup> was measured at the NDL community station on May 5, 2020. On this day the winds were on average from the east placing NDL upwind from Giant Mine, indicating measurements on this day were not from transient dust traveling from Giant Mine. The SLR on-site technician observed road dust being generated by street sweeping activities in the area of the monitoring station and throughout Yellowknife and the community of Ndilo and this is likely the cause of elevated PM measurements on this day. No other stations measured 24-hour average PM<sub>10</sub> concentrations above the Ontario 24-Hour Standard for PM<sub>10</sub>;
- No 24-hour average concentrations of PM<sub>2.5</sub> were measured above the referenced standard at the community stations during the week. PM<sub>2.5</sub> concentrations during the week were typically representative of seasonal background concentrations;
- Laboratory results from integrated TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples collected on April 21 and 27, 2020 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 April 27, 2020 are pending;

- Laboratory results from asbestos samples collected on April 21 and 27, 2020 at the community stations were less than the analytical detection limit and/or below the referenced standard. The last asbestos sample was submitted for laboratory analysis on April 27, 2020;
- There were no NO<sub>2</sub> 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.

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

| <b>Date</b>  | <b>Maximum One-hour Average (ppb)</b> | <b>24-hour Average (ppb)</b> |
|--------------|---------------------------------------|------------------------------|
| May 03, 2020 | 2.4                                   | 0.9                          |
| May 04, 2020 | 0.5                                   | 0.2                          |
| May 05, 2020 | 0.8                                   | 0.5                          |
| May 06, 2020 | 1.3                                   | 0.6                          |
| May 07, 2020 | 15.9                                  | 3.5                          |
| May 08, 2020 | 5.3                                   | 0.5                          |
| May 09, 2020 | 0.4                                   | 0.2                          |

General Operation

- Integrated sampling for TSP, PM<sub>10</sub>, and trace metals (including arsenic) was conducted on May 6 and 9, 2020. The next regularly scheduled sampling is May 12, 2020;
- Data completeness for the reporting period was 99.95% for continuous TSP and 99.95% for continuous PM<sub>10</sub> concentrations measured at the site perimeter monitoring stations.

Sincerely,



Natalie Plato  
Deputy Director Giant Mine Remediation Project

c.c.: Distribution List