



PO BOX 1500  
YELLOWKNIFE NT X1A 2R3

July 6, 2020

Distribution List

## **Giant Mine Remediation Project Ambient Air Quality Monitoring Program summary for the week ending June 27, 2020**

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending June 27, 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 results for integrated TSP, PM<sub>10</sub>, and trace metals (including arsenic) analyses from samples collected on June 8, 11, and 14, 2020 at the site perimeter monitoring stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of integrated 24-hour arsenic, PM<sub>10</sub>, and TSP filter samples collected at the site perimeter stations after June 14, 2020 are pending.

### Community Stations

- No continuous PM<sub>2.5</sub> or PM<sub>10</sub> 24-hour average concentrations above the referenced standards for each were measured at any of the community stations during the week. PM<sub>2.5</sub> and PM<sub>10</sub> concentrations during the week were typically representative of seasonal background concentrations;
- Laboratory results for integrated TSP, PM<sub>10</sub>, and trace metals (including arsenic) analyses from samples collected on June 8, 11, and 14, 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 June 14, 2020 are pending;



- 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> |
|---------------|---------------------------------------|------------------------------|
| June 21, 2020 | 1.1                                   | 0.6                          |
| June 22, 2020 | 1.4                                   | 0.6                          |
| June 23, 2020 | 1.2                                   | 0.6                          |
| June 24, 2020 | 3.4                                   | 0.8                          |
| June 25, 2020 | 3.8                                   | 0.6                          |
| June 26, 2020 | 1.2                                   | 0.6                          |
| June 27, 2020 | 15.8                                  | 2.4                          |

General Operation

- Integrated sampling for TSP, PM<sub>10</sub>, and trace metals (including arsenic) was conducted on June 23 and 26, 2020. The next regularly scheduled sampling is June 29, 2020;
- Data completeness for the reporting period was 99.97% for continuous TSP and 99.95% for continuous PM<sub>10</sub> concentrations measured at the site perimeter monitoring stations;
- The AAQM program operated as specified during the week ending June 27, 2020.

Sincerely,



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