



PO BOX 1500  
YELLOWKNIFE NT X1A 2R3

October 14, 2020

### Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending October 3, 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 August 13, 25, 2020 and September 18, 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 September 18, 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 September 18 and 21, 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 September 21, 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> |
|--------------------|---------------------------------------|------------------------------|
| September 27, 2020 | 1.2                                   | 0.2                          |
| September 28, 2020 | 1.4                                   | 0.1                          |
| September 29, 2020 | 0.8                                   | 0.0                          |
| September 30, 2020 | 6.3                                   | 0.7                          |
| October 01, 2020   | 0.9                                   | 0.2                          |
| October 02, 2020   | 2.9                                   | 0.7                          |
| October 03, 2020   | 1.4                                   | 0.0                          |

General Operation

- Integrated sampling for TSP, PM<sub>10</sub>, and trace metals (including arsenic) was conducted on September 27, 30 and October 3, 2020. The next regularly scheduled sampling is October 6, 2020;
- Data completeness for the reporting period was 100% for continuous TSP and 100% for continuous PM<sub>10</sub> concentrations measured at the site perimeter monitoring stations;
- The AAQM program operated as specified during the week ending October 3, with the following exception:
  - Monthly community station quality control checks were conducted on September 28, 2020 resulting in invalidation of one hour of PM<sub>2.5</sub> and PM<sub>10</sub> data at YKB and NDL and two hours at NVN.

Sincerely,



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