



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

March 1, 2022

Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending February 19, 2022 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.

Community Station Monitoring Network

- No continuous PM2.5 or PM10 24-hour average concentrations above the referenced standards for each were measured at any of the community stations during the week. PM2.5 and PM10 concentrations during the week were typically representative of seasonal background concentrations.
- Laboratory analyses of community station filters collected after January 29, 2022 are pending.
- 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 the maximum hourly concentration each day and the corresponding 24-hour average concentration measured at the Niven Lake community station.

Table 1: Niven Lake Community Station NO₂ Concentrations

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
February 13, 2022	27.4	5.5
February 14, 2022	6.8	0.9
February 15, 2022	4.3	0.3
February 16, 2022	16.9	5.2
February 17, 2022	1.7	0.0
February 18, 2022	9.3	3.5
February 19, 2022	4.4	1.0



General Operation

- Community station integrated sampling for TSP, PM10, and trace metals was conducted on February 16, 2022. The next regularly scheduled sampling date is February 22, 2022.
- Data completeness at the site perimeter monitoring stations for the reporting period was 98.50% for continuous TSP and 98.83% for continuous PM10.
- Data completeness for the community stations was 100% for PM10 and PM2.5 at the NVN and YKB stations, 99.4% for PM10 and PM2.5 at the NDL Station, and 97.02% for NO2 at the NVN community station.
- The AAQMP operated as specified during the week ending February 19, 2022 with the following exceptions:
 - One hour of PM10 and PM2.5 data were invalid at the NDL station on February 18, 2022 due to a data acquisition system error.
 - During the overnight hours the site perimeter monitoring Station H-NW Pond did not record TSP data from 18:30 to 22:15 on February 14, 2022 and from 01:30 to 06:15 on February 18, 2022, and site perimeter monitoring Station D-Beach did not record PM10 data from 02:30 to 06:30 on February 16, 2022. Outages were due to battery failure.

Sincerely,

Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List