

**From:** Geneva Irwin  
**Subject:** Air Quality Monitoring Weekly Summary - Week Ending in June 10  
**Date:** Friday, June 16, 2017 12:54:52 PM  
**Attachments:** [June 16.pdf](#)

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Good Afternoon,

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending June 10, 2017 is as follows:

Fenceline Network:

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 fenceline monitoring stations during the week. PM<sub>10</sub> concentrations measured at most of the fenceline locations during the week were typical of seasonal background concentrations;

No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL (333 µg/m<sup>3</sup>) were measured at the fenceline monitoring stations during the week. TSP concentrations measured at most of the fenceline locations during the week were typical of seasonal background concentrations;

Laboratory results from TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples collected on May 13, 16, 19, and 22, 2017 at the fenceline samplers 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 by the fenceline samplers after May 22, 2017 are pending.

Community Stations:

No 24-hour average concentrations of PM<sub>2.5</sub> and PM<sub>10</sub> were measured above the referenced standards at 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 from TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples collected on May 13, 16, 19, and 22, 2017 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 May 22, 2017 are pending;

- Laboratory results from asbestos samples collected on May 19 and 22, 2017 at the community stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of asbestos samples collected at the community stations after May 22, 2017 are pending;
- There were no NO<sub>2</sub> concentrations measured at the recently established Niven Lake community air monitoring station above the NWT Ambient Air Quality 24-Hour Standard of 106 parts per billion (ppb) or the 1-Hour Standard of 213 ppb during the week. Table 1 summarizes the daily hourly maximum concentrations and the daily 24-Hour average concentrations measured at the Niven Lake community station during the week.

Table 1

Niven Lake Community AQM Station NO<sub>2</sub> Concentrations

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
June 04, 2017	1.0	0.1
June 05, 2017	1.3	0.3
June 06, 2017	1.1	0.0

June 07, 2017	4.1	0.4
June 08, 2017	0.6	0.0
June 09, 2017	0.8	0.1
June 10, 2017	3.2	0.6

General Operation:

The AQM program operated as specified during the week ending June 10, 2017, with the following exceptions:

- o Annual three day zero background checks were conducted this week resulting in no data collected by the continuous PM<sub>10</sub> and PM<sub>2.5</sub> monitors at NDL on June 4<sup>th</sup>, at YCC June 5<sup>th</sup> through June 8<sup>th</sup>, and at NVN June 9<sup>th</sup> and 10<sup>th</sup>;
- o 24-hour integrated PM<sub>10</sub> particulate laboratory results for site H-Northwest on May 13, 2017 were unavailable due to a filter tare weight error at the laboratory. 24-hour arsenic results were reported as normal.

Sincerely,

Geneva Irwin



PO BOX 1500  
YELLOWKNIFE NT X1A 2R3

NT 884676

June 16, 2017

Distribution List

**RE: Air Quality Reports for the Week of June 10, 2017.**

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Sincerely,



Natalie Plato  
Deputy Director  
Giant Mine Remediation Project

c.c.: Distribution List