

From: Irwin, Geneva (AADNC/AANDC)
Subject: Air Quality Monitoring Weekly Summary - Week Ending in November 4
Date: November 10, 2017 11:36:40 AM
Attachments: [November 4.pdf](#)

Good Morning,

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending November 4, 2017 is as follows:

Fenceline 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 fenceline monitoring stations during the week. PM₁₀ 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/m³) 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 for TSP, PM₁₀, and trace metals (including arsenic) analyses from samples collected on October 10 and 13, 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, PM₁₀, and TSP filter samples collected at the fenceline sampling locations after October 13, 2017 are pending.

Community Stations:

- No 24-hour average concentrations of PM_{2.5} and PM₁₀ were measured above the referenced standards at the community stations during the week. PM_{2.5} and PM₁₀ concentrations during the week were typically representative of seasonal background concentrations;
- Laboratory results from TSP, PM₁₀, and trace metals (including arsenic) samples collected on October 13 and 16, 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 October 16, 2017 are pending;
- Laboratory results for asbestos analyses from samples collected on October 7, 10, 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 October 22, 2017 are pending;
- There were no NO₂ 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 NO₂ Concentrations

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
October 29, 2017	3.6	0.8
October 30, 2017	4.5	0.8
October 31, 2017	1.1	0.3
November 01, 2017	1.5	0.5
November 02, 2017	8.0	1.9
November 03, 2017	4.0	2.1
November 04, 2017	1.4	0.1

General Operation:

- The AQM program operated as specified during the week ending November 4, 2017.

Sincerely,

Natalie Plato



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YELLOWKNIFE NT X1A 2R3

NT 930401

November 10, 2017

Distribution List

RE: Air Quality Reports for the Week of November 4, 2017.

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending November 4, 2017 is as follows:

Fenceline Network:

- No 15-minute average particulate matter less than 10 microns in diameter (PM_{10}) concentrations above the established Risk Based Action Level (RBAL) of $159 \mu\text{g}/\text{m}^3$ were measured at the fenceline monitoring stations during the week. PM_{10} 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 ($333 \mu\text{g}/\text{m}^3$) 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 for TSP, PM_{10} , and trace metals (including arsenic) analyses from samples collected on October 10 and 13, 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_{10} , and TSP filter samples collected at the fenceline sampling locations after October 13, 2017 are pending.

Community Stations:

- No 24-hour average concentrations of $PM_{2.5}$ and PM_{10} were measured above the referenced standards at the community stations during the week. $PM_{2.5}$ and PM_{10} concentrations during the week were typically representative of seasonal background concentrations;
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Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List