

From: Cooper, Kayla (AADNC/AANDC)
To: [Cooper, Kayla \(AADNC/AANDC\)](#)
Subject: Giant Mine Remediation AQMP summary report for the week ending May 26, 2018
Date: June 1, 2018 10:29:34 AM
Attachments: [GIANT - REGULATORY AND MONITORING - AQM WEEKLY SUMMARY - WEEK ENDING IN May 26, 2018.pdf](#)

Good morning,

A summary of the Giant Mine ambient air quality monitoring program (AQMP) for the week ending May 26, 2018 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 the fenceline 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 fenceline monitoring stations during the week. TSP concentrations measured the fenceline monitoring 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 April 29, May 2, and May 5, 2018 at the fenceline monitoring locations 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 May 5, 2018 are pending.

Community Stations:

- No PM_{2.5} or PM₁₀ 24-hour average concentrations above the referenced standards for each were measured at any of the community stations during the week.
- Laboratory analyses of community station filters collected after April 29, 2018 are pending;
- Laboratory results for asbestos analyses from samples collected on May 11, 2018 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 11, 2018 are pending;
- There were no NO₂ concentrations measured at the 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)
May 20, 2018	0.4	0.1
May 21, 2018	1.4	0.4
May 22, 2018	3.3	1.4
May 23, 2018	29.9	3.6
May 24, 2018	0.8	0.2
May 25, 2018	5.0	0.9
May 26, 2018	1.9	0.5

C5-09 Stope Stabilization Program:

- Air quality monitoring specific to the C5-09 stope stabilization program was conducted throughout the week at four locations within the vicinity of UBC Pit, at three locations within the vicinity of the North, Central, and South Tailings Ponds, and one location near the Brock Pit;
- There were no 15-minute average PM₁₀ concentrations above the RBAL measured at the monitors associated with the C5-09 stope stabilization program during the week;
- Laboratory analyses of C5-09 PM₁₀ and arsenic filter samples collected after May 5, 2018 are pending.

General Operation:

- The AQM program operated as specified during the week ending May 26, 2018, with the following exceptions:
 - The PM₁₀ sampler at monitoring location H – Northwest Pond did not record data from 04:30 MST to 09:45 MST on May 25, 2018 due to a battery failure;
 - The PM₁₀ sampler at monitoring location H – Northwest Pond did not record data from 22:45 MST to 00:00 MST on May 25, 2018 due to a battery failure;
 - The PM₁₀ sampler at monitoring location H – Northwest Pond did not record data from 20:00 MST to 00:00 MST on May 26, 2018 due to a battery failure;
 - The PM₁₀ sampler at the Brock Pit C5-09 monitoring location did not record data from 02:30 MST to 06:00 MST on May 26, 2018 due to a battery failure.

Kind regards,

Kayla Cooper

Administrative Project Coordinator

Giant Mine Remediation Project, Indigenous and Northern Affairs Canada

867-669-2425



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

June 1, 2018

Distribution List

RE: Air Quality Reports for the Week of May 26, 2018.

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending May 26, 2018 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 the fenceline 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 fenceline monitoring stations during the week. TSP concentrations measured the fenceline monitoring 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 April 29, May 2, and May 5, 2018 at the fenceline monitoring locations 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 May 5, 2018 are pending.

Community Stations:

- No PM_{2.5} or PM₁₀ 24-hour average concentrations above the referenced standards for each were measured at any of the community stations during the week.
- Laboratory analyses of community station filters collected after April 29, 2018 are pending;

- Laboratory results for asbestos analyses from samples collected on May 11, 2018 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 11, 2018 are pending;
- There were no NO₂ concentrations measured at the 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)
May 20, 2018	0.4	0.1
May 21, 2018	1.4	0.4
May 22, 2018	3.3	1.4
May 23, 2018	29.9	3.6
May 24, 2018	0.8	0.2
May 25, 2018	5.0	0.9
May 26, 2018	1.9	0.5

C5-09 Stope Stabilization Program:

- Air quality monitoring specific to the C5-09 stope stabilization program was conducted throughout the week at four locations within the vicinity of UBC Pit, at three locations within the vicinity of the North, Central, and South Tailings Ponds, and one location near the Brock Pit;
- There were no 15-minute average PM₁₀ concentrations above the RBAL measured at the monitors associated with the C5-09 stope stabilization program during the week;
- Laboratory analyses of C5-09 PM₁₀ and arsenic filter samples collected after May 5, 2018 are pending.

General Operation:

- The AQM program operated as specified during the week ending May 26, 2018, with the following exceptions:
 - o The PM₁₀ sampler at monitoring location H – Northwest Pond did not record data from 04:30 MST to 09:45 MST on May 25, 2018 due to a battery failure;

- o The PM₁₀ sampler at monitoring location H – Northwest Pond did not record data from 22:45 MST to 00:00 MST on May 25, 2018 due to a battery failure;
- o The PM₁₀ sampler at monitoring location H – Northwest Pond did not record data from 20:00 MST to 00:00 MST on May 26, 2018 due to a battery failure;
- o The PM₁₀ sampler at the Brock Pit C5-09 monitoring location did not record data from 02:30 MST to 06:00 MST on May 26, 2018 due to a battery failure.

Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List