

From: Cooper, Kayla (AADNC/AANDC)
To: [Cooper, Kayla \(AADNC/AANDC\)](#)
Subject: Giant Mine ambient AQMP summary report for the week ending April 14, 2018
Date: April 25, 2018 1:37:50 PM
Attachments: [GIANT - REGULATORY AND MONITORING - AQM WEEKLY SUMMARY - WEEK ENDING IN April 14, 2018.pdf](#)

A summary of the Giant Mine ambient air quality monitoring program (AQMP) for the week ending April 14, 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 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 March 21 and 24, 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 March 24, 2018 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 March 24 and 27, 2018 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 March 27, 2018 are pending;
- Laboratory results for asbestos analyses from samples collected on March 27, 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 March 27, 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) |
|----------------|---------------------------------------|------------------------------|
| April 08, 2018 | 3.5 | 2.3 |
| April 09, 2018 | 2.5 | 1.1 |
| April 10, 2018 | 4.5 | 1.7 |
| April 11, 2018 | 15.6 | 3.0 |
| April 12, 2018 | 11.7 | 3.1 |
| April 13, 2018 | 3.8 | 2.1 |
| April 14, 2018 | 4.0 | 2.2 |

General Operation:

- The AQM program operated as specified during the week ending April 14, 2018, with the following exceptions:
 - The PM₁₀ sampler at monitoring location A–North did not record data from 06:45 MST to 7:30 MST on April 12, 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

April 23, 2018

Distribution List

RE: Air Quality Reports for the Week of April 14, 2018.

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending April 14, 2018 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 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 March 21 and 24, 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, PM_{10} , and TSP filter samples collected at the fenceline sampling locations after March 24, 2018 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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- Laboratory results for asbestos analyses from samples collected on March 27, 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 March 27, 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.

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Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List