

From: [Garbutt, Nicole \(AADNC/AANDC\)](#)
Subject: Giant Mine AQMP summary report for the week ending in August 3
Date: August 13, 2019 12:16:25 PM
Attachments: [August 3.pdf](#)

Good Afternoon,

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending in August 3, 2019 is attached and as follows.

Fence Line Stations

- 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 fence line monitoring stations during the week. PM₁₀ concentrations measured at the fence line 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 fence line monitoring stations during the week. TSP concentrations measured the fence line 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 July 11, 14, and 17, 2019 at the fence line stations 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 fence line stations after July 17, 2019 are pending.

Community Stations

- No continuous 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 results from TSP, PM₁₀, and trace metals (including arsenic) samples collected on July 14 and 17, 2019 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 July 17, 2019 are pending;
- Laboratory results from asbestos samples collected on July 17, 2019 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 July 17, 2019 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 Station NO₂ Concentrations

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
July 28, 2019	0.8	0.2
July 29, 2019	1.2	0.4
July 30, 2019	1.6	0.5
July 31, 2019	3.8	1.1
August 01, 2019	2.4	0.9
August 02, 2019	1.3	0.5
August 03, 2019	13.0	2.2

General Operation

- Data completeness for the reporting period was 100% for continuous PM₁₀ and 99.64% for continuous TSP concentrations measured at the fence line monitoring stations.
- The AQM program operated as specified during the week ending August 3, 2019, with the following exception:
 - A total of 5.5 hours of continuous TSP data measured at fence line monitoring Station H-NW Pond from 6:30 PM MST to 11:45 PM MST on July 28, 2019 were invalidated due to instrumental malfunction following the quality control checks conducted at the station on that day;

Two hours of PM_{2.5} and PM₁₀ data at the NDL community station were invalid on August 1, 2019 due to a local power outage

Nicole Garbutt

Administrative Project Coordinator

Giant Mine Remediation Project

Crown-Indigenous Relations and Northern Affairs Canada

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August 12, 2019

Distribution List

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Sincerely,

Candace DeCoste
a/c Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List