

From: [Geneva Irwin](#)
Subject: Air Quality Monitoring Weekly Summary - Week Ending in September 24
Date: Friday, September 30, 2016 9:49:10 AM
Attachments: [September 24.pdf](#)

Good Morning,

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending September 24, 2016 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 fenceline locations during the week were typical of seasonal background concentrations;

No 15-minute average total suspended particulate (TSP) concentrations above the established fenceline RBAL of 333 µg/m³ were measured at the fenceline monitoring stations during the week. TSP concentrations measured at the fenceline locations during the week were typical of seasonal background concentrations;

Laboratory results of arsenic concentrations from samples collected on August 30, September 3, and 6, 2016 at the Fenceline E-Sampler locations were less than the analytical detection limit and/or below the referenced standards. Laboratory analyses of arsenic filter samples collected after September 6, 2016 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. All other 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 August 28, 31, September 3, and 6, 2016 at the community stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analysis of community station filters collected after September 6, 2016 are pending;

- Laboratory results from asbestos samples collected on September 3 and 6, 2016 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 on September 6, 2016 are pending.

Stope Borehole Drilling Program:

Air quality monitoring specific to the stope borehole drilling program was conducted near active drilling operations at three locations within the vicinity of the former site of the Roaster Complex on September 17 and 18, 2016, at three locations within the vicinity of the A-Shaft headframe on September 19 and 20, 2016, and at three locations within the vicinity of the A2 Pit on September 21, 22, 23, and 24, 2016;

There were no 15-minute average PM₁₀ concentrations above the surface drilling RBAL of 260 µg/m³ measured at the monitors located in the vicinity of drilling operations during the week;

Laboratory results of arsenic concentrations from samples collected on September 3 and 6, 2016 at the stope borehole locations were less than the analytical detection limit and/or below the referenced standards. Laboratory analyses of arsenic filter samples collected after September 6, 2016 are pending.

General Operation:

The AQM program operated as specified during the week ending September 24, 2016, with the following exception:

- o Fenceline DustTrak instruments have been affected by an intermittent internal software error causing sporadic loss of PM₁₀ and TSP 15-minute concentration data. SLR has been working with the manufacturer to identify and correct this issue, but has yet to determine a cause.

Best,

Natalie Plato



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

NT 856767

September 30, 2016

Distribution List

RE: Air Quality Reports for the Week of September 24, 2016.

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending September 24, 2016 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 fenceline locations during the week were typical of seasonal background concentrations;
- No 15-minute average total suspended particulate (TSP) concentrations above the established fenceline RBAL of $333 \mu\text{g}/\text{m}^3$ were measured at the fenceline monitoring stations during the week. TSP concentrations measured at the fenceline locations during the week were typical of seasonal background concentrations;
- Laboratory results of arsenic concentrations from samples collected on August 30, September 3, and 6, 2016 at the Fenceline E-Sampler locations were less than the analytical detection limit and/or below the referenced standards. Laboratory analyses of arsenic filter samples collected after September 6, 2016 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. All other $PM_{2.5}$ and PM_{10} concentrations during the week were typically representative of seasonal background concentrations;
- Laboratory results from TSP, PM_{10} , and trace metals (including arsenic) samples collected on August 28, 31, September 3, and 6, 2016 at the community stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analysis of community station filters collected after September 6, 2016 are pending;
- Laboratory results from asbestos samples collected on September 3 and 6, 2016 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 on September 6, 2016 are pending.

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- Air quality monitoring specific to the stope borehole drilling program was conducted near active drilling operations at three locations within the vicinity of the former site of the Roaster Complex on September 17 and 18, 2016, at three locations within the vicinity of the A-Shaft headframe on September 19 and 20, 2016, and at three locations within the vicinity of the A2 Pit on September 21, 22, 23, and 24, 2016;
- There were no 15-minute average PM₁₀ concentrations above the surface drilling RBAL of 260 µg/m³ measured at the monitors located in the vicinity of drilling operations during the week;
- Laboratory results of arsenic concentrations from samples collected on September 3 and 6, 2016 at the stope borehole locations were less than the analytical detection limit and/or below the referenced standards. Laboratory analyses of arsenic filter samples collected after September 6, 2016 are pending.

General Operation:

- The AQM program operated as specified during the week ending September 24, 2016, with the following exception:
 - Fenceline DustTrak instruments have been affected by an intermittent internal software error causing sporadic loss of PM₁₀ and TSP 15-minute concentration data. SLR has been working with the manufacturer to identify and correct this issue, but has yet to determine a cause.

Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List