

From: [Geneva Irwin](#)
Subject: Air Quality Monitoring Weekly Summary Week Ending in September 10
Date: Friday, September 16, 2016 11:48:20 AM
Attachments: [September 10.pdf](#)

Good Morning,

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending September 10, 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 16, 19 and 22, 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 August 22, 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. 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 16 and 19, 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 August 13, 2016 are pending;

- Laboratory results from asbestos samples collected on August 16, 19, 22 and 25, 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 August 13, 2016 are pending.

Stope Borehole Drilling Program:

Air quality monitoring specific to the stope borehole drilling program was conducted near active drilling operations throughout the week at three locations within the vicinity of B3 Pit until September 8, 2016, at three locations within the vicinity of the C1 Pit on September 4, 2016, and three locations within the vicinity of the former site of the Roaster Complex from September 8, 2016 to September 10, 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;

There were no 15-minute average PM₁₀ concentrations above the underground vent monitoring RBAL (300 µg/m³) measured during the week;

Laboratory results of arsenic concentrations from samples collected on August 16, and 19, 2016 at the stope borehole and underground vent monitoring locations were less than the analytical detection limit and/or below the referenced standards. Laboratory analyses of arsenic filter samples collected after August 13, 2016 are pending.

General Operation:

The AQM program operated as specified during the week ending September 10, 2016, with the following exception:

- o On Thursday September 8, 2016 the DustTrak air monitor monitoring fenceline location G-West did not record two hours and 45 minutes of PM₁₀ and TSP 15-minute average concentrations from 10:15 PM to 12:45 AM MST. The outage was due to the overcast skies and shortening days preventing the solar power panels from providing adequate power to the Dustrak. The Dustrak power system has been switched to daily battery exchanges to prevent future day loss.

Best,

Natalie Plato



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

NT 855763

September 16, 2016

Distribution List

RE: Air Quality Reports for the Week of September 10, 2016.

A summary of the Giant Mine ambient air quality monitoring program (AQM) for the week ending September 10, 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 16, 19 and 22, 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 August 22, 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. $PM_{2.5}$ 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 16 and 19, 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 August 13, 2016 are pending;
- Laboratory results from asbestos samples collected on August 16, 19, 22 and 25, 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 August 13, 2016 are pending.

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- 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;
- There were no 15-minute average PM₁₀ concentrations above the underground vent monitoring RBAL (300 µg/m³) measured during the week;
- Laboratory results of arsenic concentrations from samples collected on August 16, and 19, 2016 at the stope borehole and underground vent monitoring locations were less than the analytical detection limit and/or below the referenced standards. Laboratory analyses of arsenic filter samples collected after August 13, 2016 are pending.

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Sincerely,



Natalie Plato
Deputy Director
Giant Mine Remediation Project

c.c.: Distribution List