

MVLWB Registry

From: Adrian Paradis <Adrian.Paradis@aandc-aadnc.gc.ca>
Sent: Friday, July 31, 2015 1:37 PM
Subject: Giant Mine Remediation air quality monitoring program weekly summary for the week ending July 25, 2015
Attachments: Giant Monitoring Weekly Air Quality Report for July 25, 2015.pdf; Adrian Paradis.vcf

A summary of the Giant Mine ambient air quality monitoring program for the week ending July 25, 2015 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) criteria (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 RBAL (333 µg/m³) were measured at the fenceline monitoring stations on during the week. TSP concentrations measured at fenceline locations during the week were typical of seasonal background concentrations;

Community Stations:

- There were no continuous 24-hour average concentrations of PM_{2.5} and no 24-hour average concentrations of PM₁₀ measured above the referenced criteria at the community stations during the week;
- Laboratory results from available TSP, PM₁₀, and trace metals (including arsenic) samples collected on July 8 and 14, 2015 at the community stations were less than the analytical detection limit and/or below the referenced criteria. Laboratory analysis of community station filters collected on July 11, and after July 14, 2015 are pending;
- Laboratory results from asbestos samples collected at the community stations on after July 8, 2015 are pending;

Interim Underground Stabilization (IUS) (tailings work):

- Air quality monitoring specific to the IUS program was conducted at:
 1. Four (4) locations within the vicinity of paste fill operations in the B1 and A1 Pits;
 2. Four (4) locations set on the west, north, and south perimeters of the Central and South Tailings Ponds;
 3. Four (4) locations at the mine vents and intake openings.

- There were no 15-minute average PM₁₀ concentrations above the surface drilling RBAL (260 µg/m³) measured at the monitors located in the vicinity of paste fill operations during the week. Concentrations were typical of background levels during the week;
- There were no 15-minute average PM₁₀ concentrations above the tailings pond work RBAL (180 µg/m³) measured at the perimeter of the tailings pond work areas during the week. Concentrations were typical of background levels during the week;
- There were no 15-minute average PM₁₀ concentrations above the underground vent monitoring RBAL (300 µg/m³) measured at the monitors located at mine vents and intake openings during the week. Concentrations were typical of background levels during the week;
- Laboratory results from available arsenic filter samples collected July 2, 5, and 11, 2015 at the IUS locations were less than the analytical detection limit and/or below the referenced criteria. Laboratory results from available arsenic filter samples collected after July 11, 2015 at the IUS locations are pending.

General Operations:

- The AQM program operated as specified during the week ending July 25, 2015 with exception to the following:
 1. NAPS PM₁₀ BAM sampler was down on July 20 and 21, 2015 for a total of twenty-nine (29) hours due to unknown causes.
 2. YCC PM_{2.5} BAM sampler data was missing for a total of fourteen hours on July 23 and 24, 2015 due to pinched tape media. The tape was repaired and sampler restarted and leak checked 2 AM July 24, 2015.

Additional air quality information for the Giant Mine can be found on the NWT Air Quality Monitoring Network web page: <http://aqm.enr.gov.nt.ca>.

For information on RBALs, TSP, PM₁₀ and for answers to other commonly asked questions about Air Quality Monitoring, please see the Giant Mine Remediation Project Team's [online FAQs](#). Should you have any questions or comments, please contact Adrian Paradis by Telephone: (867) 669-2425 or by E-mail: Adrian.Paradis@aandc-aadnc.gc.ca.

Sincerely,

Adrian Paradis

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NT 709141

July 31, 2015

Mr. Willard Hagen, Chair
Mackenzie Valley Land and Water Board
7TH FLOOR – 4910, 50TH AVE., PO BOX 2130
YELLOWKNIFE, NT X1A 2P6

RE: Water Licence MV2012L8-0010 – Air Quality Reports for the Week of July 25, 2015

Dear: Mr. Hagen,

This report is meant to satisfy commitments made in the May 21, 2013, responses to review comments on the roaster plans. Our commitment was to provide weekly summaries of the following data:

- PM₁₀ measurements captured by the contractor and the fence-line program;
- All other available and quality assured data, including TSP, trace elements (metals) and asbestos data.

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

Community Stations:

- There were no continuous 24-hour average concentrations of PM_{2.5} and no 24-hour average concentrations of PM₁₀ measured above the referenced criteria at the community stations during the week;
- Laboratory results from available TSP, PM₁₀, and trace metals (including arsenic) samples collected on July 8 and 14, 2015 at the community stations were less than the analytical detection limit and/or below the referenced criteria. Laboratory analysis of community station filters collected on July 11, and after July 14, 2015 are pending;
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Interim Underground Stabilization (IUS) (tailings work):

- Air quality monitoring specific to the IUS program was conducted at:
 1. Four (4) locations within the vicinity of paste fill operations in the B1 and A1 Pits;
 2. Four (4) locations set on the west, north, and south perimeters of the Central and South Tailings Ponds;
 3. Four (4) locations at the mine vents and intake openings.
- There were no 15-minute average PM₁₀ concentrations above the surface drilling RBAL (260 µg/m³) measured at the monitors located in the vicinity of paste fill operations during the week. Concentrations were typical of background levels during the week;
- There were no 15-minute average PM₁₀ concentrations above the tailings pond work RBAL (180 µg/m³) measured at the perimeter of the tailings pond work areas during the week. Concentrations were typical of background levels during the week;
- There were no 15-minute average PM₁₀ concentrations above the underground vent monitoring RBAL (300 µg/m³) measured at the monitors located at mine vents and intake openings during the week. Concentrations were typical of background levels during the week;
- Laboratory results from available arsenic filter samples collected July 2, 5, and 11, 2015 at the IUS locations were less than the analytical detection limit and/or below the referenced criteria. Laboratory results from available arsenic filter samples collected after July 11, 2015 at the IUS locations are pending.

General Operations:

- The AQM program operated as specified during the week ending July 25, 2015 with exception to the following:
 1. NAPS PM10 BAM sampler was down on July 20 and 21, 2015 for a total of twenty-nine (29) hours due to unknown causes.

2. YCC PM2.5 BAM sampler data was missing for a total of fourteen hours on July 23 and 24, 2015 due to pinched tape media. The tape was repaired and sampler restarted and leak checked 2 AM July 24, 2015.

Additional air quality information for the Giant Mine can be found on the NWT Air Quality Monitoring Network web page: <http://aqm.enr.gov.nt.ca>.

For information on RBALs, TSP, PM10 and for answers to other commonly asked questions about Air Quality Monitoring, please see the Giant Mine Remediation Project Team's [online FAQs](#). Should you have any questions or comments, please contact Adrian Paradis by Telephone: (867) 669-2425 or by E-mail: Adrian.Paradis@aandc-aadnc.gc.ca.

Sincerely,



Adrian Paradis
Regulatory Manager
Giant Mine Remediation Project

c.c.: Distribution List