

## MVLWB Registry

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**From:** Fallon Morton <Fallon.Morton@aandc-aadnc.gc.ca>  
**Sent:** Friday, November 14, 2014 4:24 PM  
**To:** NWTLands  
**Subject:** Giant Mine AQM Weekly Summary for the Week Ending November 8, 2014  
**Attachments:** Weekly AQM Summary Nov 2-8, 2014.pdf

Greetings,

Attached is the AQM weekly summary report for Giant Mine for week ending November 8, 2014.

In discussions with the Giant Mine Working Group, in lieu of the detailed weekly reports the project has decided to provide weekly summaries and a detailed monthly report. This is done to make the reporting more useful to users, while still maintaining the level of details previously provided.

A summary of the report is provided below:

### Fenceline for Giant Mine Remediation Project

- No 15-minute average particulate matter less than 10 microns in diameter (PM<sub>10</sub>) concentrations above the established Risk Based Action Level (RBAL) criteria were measured at the fenceline locations during the week. PM<sub>10</sub> concentrations measured at the fenceline locations remained typical of background concentrations;
- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL were measured at the fenceline locations during the week;

### Underground and Tailings Work

- Underground drilling was completed on October 25, 2014 as such, air quality monitoring at the underground vent locations was not conducted during the week ending November 8, 2014;
- Analytical 24-hour arsenic results measured at underground vents, North and Central tailings ponds, and Northwest tailings pond (arsenic barrel re-packing) on October 20, October 23, October 25, and October 26, 2014 were less than the analytical detection limit and/or below the referenced criteria. Analysis of filter results collected after October 26, 2014 is pending;
- There were no 15-minute average PM<sub>10</sub> concentrations above the established tailings pond remediation RBAL (180 µg/m<sup>3</sup>) measured in the vicinity of the tailings ponds during the week;
- No 15-minute average PM<sub>10</sub> concentrations above the established RBAL (260 µg/m<sup>3</sup>) were measured at monitors located within the vicinity of arsenic barrel repackaging activities during the week;

### Roaster Deconstruction

- No real time 15-minute average PM<sub>10</sub> concentrations above the established RBAL were measured during the week at each perimeter monitoring location (upwind and downwind) for the Roaster deconstruction specific air quality monitoring program;

- Laboratory results from TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples measured on October 17, October 20, and October 23, 2014 were less than the analytical detection limit and/or below the reference criteria at the community stations. The TSP and PM<sub>10</sub> samplers at YCC failed to start on October 17, 2014, as such, a make-up sample was collected on October 18, 2014. Laboratory results from TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples measured at YCC on that day were less than the analytical detection limit and/or below the reference criteria at the community stations. Laboratory results from samples collected after October 23, 2014 are pending;
- Laboratory results from samples collected on October 29 – 30, and November 1 – 2, 2014 for the roaster deconstruction specific air quality monitoring program, indicated 24-hour average arsenic, PM<sub>10</sub>, and TSP concentrations were below the referenced applicable criteria.

#### Community Monitoring Stations

- There were no continuous 24-hour average concentrations of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) and no continuous 24-hour average PM<sub>10</sub> concentrations above the referenced criteria measured at the community stations during the week. The PM<sub>10</sub> BAM monitor at the NAPS station was not operating during the week due to water damage to the monitor;
- Laboratory results from asbestos samples collected on October 17, October 20, and October 23, 2014 at the community stations were less than the analytical detection limit and/or below the referenced criteria. Laboratory results from asbestos samples collected at the community stations after October 23, 2014 are pending;

The AQM program operated as specified during the week ending November 8, 2014 with the exception of the NAPS PM<sub>10</sub> BAM monitor being down for the week.

Regards,

Fallon Morton  
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Aboriginal Affairs and Northern Development Canada  
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Yellowknife, NT X1A 2R3  
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November 14, 2014

Mr. Willard Hagen, Chair  
Mackenzie Valley Land and Water Board  
7<sup>TH</sup> FLOOR – 4922, 48<sup>TH</sup> ST., PO BOX 2130  
YELLOWKNIFE, NT X1A 2P6

Dear: Mr. Hagen,

**RE: Water Licence MV2012L8-0010 – Air Quality Reports for the Week of November 2**

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:

- PM<sub>10</sub> 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.

In discussions with the Giant Mine Working Group, in lieu of the detailed weekly reports the project has decided to provide weekly summaries and a detailed monthly report. This is done to make the reporting more useful to users, while still maintaining the level of details previously provided.

In summary for the week of November 2 – November 8, 2014, 2014:

**Fenceline for Giant Mine Remediation Project**

- No 15-minute average particulate matter less than 10 microns in diameter (PM<sub>10</sub>) concentrations above the established Risk Based Action Level (RBAL) criteria were measured at the fenceline locations during the week. PM<sub>10</sub> concentrations measured at the fenceline locations remained typical of background concentrations;

- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL were measured at the fence line locations during the week;

#### Underground and Tailings Work

- Underground drilling was completed on October 25, 2014 as such, air quality monitoring at the underground vent locations was not conducted during the week ending November 8, 2014;
- Analytical 24-hour arsenic results measured at underground vents, North and Central tailings ponds, and Northwest tailings pond (arsenic barrel re-packing) on October 20, October 23, October 25, and October 26, 2014 were less than the analytical detection limit and/or below the referenced criteria. Analysis of filter results collected after October 26, 2014 is pending;
- There were no 15-minute average PM<sub>10</sub> concentrations above the established tailings pond remediation RBAL (180 µg/m<sup>3</sup>) measured in the vicinity of the tailings ponds during the week;
- No 15-minute average PM<sub>10</sub> concentrations above the established RBAL (260 µg/m<sup>3</sup>) were measured at monitors located within the vicinity of arsenic barrel repackaging activities during the week;

#### Roaster Deconstruction

- No real time 15-minute average PM<sub>10</sub> concentrations above the established RBAL were measured during the week at each perimeter monitoring location (upwind and downwind) for the Roaster deconstruction specific air quality monitoring program;
- Laboratory results from TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples measured on October 17, October 20, and October 23, 2014 were less than the analytical detection limit and/or below the reference criteria at the community stations. The TSP and PM<sub>10</sub> samplers at YCC failed to start on October 17, 2014, as such, a make-up sample was collected on October 18, 2014. Laboratory results from TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples measured at YCC on that day were less than the analytical detection limit and/or below the reference criteria at the community stations. Laboratory results from samples collected after October 23, 2014 are pending;
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- Laboratory results from asbestos samples collected on October 17, October 20, and October 23, 2014 at the community stations were less than the analytical detection limit and/or below the referenced criteria. Laboratory results from asbestos samples collected at the community stations after October 23, 2014 are pending;

The AQM program operated as specified during the week ending November 8, 2014 with the exception of the NAPS PM<sub>10</sub> BAM monitor being down for the week.

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>.

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](mailto:Adrian.Paradis@aandc-aadnc.gc.ca).

Sincerely,



Adrian Paradis  
Regulatory Manager  
Giant Mine Remediation Project

c.c.: Distribution List