

MVLWB Registry

From: Fallon Morton <Fallon.Morton@aandc-aadnc.gc.ca>
Sent: Friday, October 24, 2014 3:05 PM
To: NWTLands
Subject: Giant Mine AQM Weekly Summary for the Week Ending October 18, 2014
Attachments: AQM Weekly Summary Oct 12-18, 2014.pdf

Greetings,

Attached is the AQM weekly summary report for Giant Mine for week ending October 18, 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:

- No 15-minute average particulate matter less than 10 microns in diameter (PM₁₀) concentrations above the established Risk Based Action Level (RBAL) criteria were measured at the fenceline locations during the week;
- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL were measured at the fenceline locations during the week;
- One (1) 15-minute average PM₁₀ concentration above the established RBAL criteria was measured at the UBC Portal (Sampler E10) underground vent location during the week. The concentration above the RBAL was likely the result of road maintenance equipment passing near the UBC Portal. The established RBAL criterion for the underground vents is 390 µg/m³ at the underground vent locations.
- Thirteen (13) 15-minute average PM₁₀ concentrations above the established fenceline RBAL were measured in the vicinity of the Central and North Tailings Ponds monitor locations during the week. Concentrations above the RBAL were measured near the Tailings Reprocessing Plant (Sampler E08) and near Dam 6 (Sampler E02) that separates the Central and North Ponds, occurring between midnight and 4:30 AM local time. Winds were light, blowing from the north-northwest, and entire mine site was covered in fog during the event, indicating that concentrations above the RBAL were likely caused by interference from fog;
- Analytical 24-hour arsenic results measured at underground vents and North and Central tailings ponds September 25 and September 29, 2014 were less than the analytical detection limit and/or below the referenced criteria. Analysis of filter results collected after September 29, 2014 is pending;
- Laboratory results from 24-hour and 8-hour asbestos samples collected at three sites surrounding the Conveyor Gallery cleanup area on October 12, October 13, October 14, October 15, October 16, October 17, and October 18, 2014 were below the referenced criteria for protection of public health and worker safety. Analysis of asbestos samples collected after October 18, 2014 are pending;
- No real time 15-minute average PM₁₀ 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;

- There were no continuous 24-hour average concentrations of particulate matter less than 2.5 microns in diameter (PM_{2.5}) and no continuous 24-hour average PM₁₀ concentrations above the referenced criteria measured at the community stations during the week. The PM₁₀ BAM monitor at the National Air Pollution Surveillance station was down for the entire week;
- Laboratory results from TSP, PM₁₀, and trace metals (including arsenic) samples measured on September 29, 2014 were less than the analytical detection limit and/or below the reference criteria at the community stations. Laboratory results from samples collected after September 29, 2014 are pending;
- Laboratory results from asbestos samples collected at the community stations after September 26, 2014 are pending;
- Laboratory results from samples collected on October 8 – 9, October 9 – 10, and October 11 – 12, 2014 for the roaster deconstruction specific air quality monitoring program, indicated 24-hour average arsenic, PM₁₀, and TSP concentrations were below the referenced applicable criteria;
- The Air Quality Monitoring Program operated as specified during the week ending October 18, 2014.

Regards,

Fallon Morton
Giant Mine Remediation Project
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October 24, 2014

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

Dear: Mr. Hagen,

RE: Water Licence MV2012L8-0010 – Air Quality Reports for the Week of October 12

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.

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 October 12 – October 18, 2014, 2014:

- No 15-minute average particulate matter less than 10 microns in diameter (PM₁₀) concentrations above the established Risk Based Action Level (RBAL) criteria were measured at the fenceline locations during the week;
- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL were measured at the fenceline locations during the week;

- One (1) 15-minute average PM₁₀ concentration above the established RBAL criteria was measured at the UBC Portal (Sampler E10) underground vent location during the week. The concentration above the RBAL was likely the result of road maintenance equipment passing near the UBC Portal. The established RBAL criterion for the underground vents is 390 µg/m³ at the underground vent locations.
- Thirteen (13) 15-minute average PM₁₀ concentrations above the established fence-line RBAL were measured in the vicinity of the Central and North Tailings Ponds monitor locations during the week. Concentrations above the RBAL were measured near the Tailings Reprocessing Plant (Sampler E08) and near Dam 6 (Sampler E02) that separates the Central and North Ponds, occurring between midnight and 4:30 AM local time. Winds were light, blowing from the north-northwest, and entire mine site was covered in fog during the event, indicating that concentrations above the RBAL were likely caused by interference from fog;
- Analytical 24-hour arsenic results measured at underground vents and North and Central tailings ponds September 25 and September 29, 2014 were less than the analytical detection limit and/or below the referenced criteria. Analysis of filter results collected after September 29, 2014 is pending;
- Laboratory results from 24-hour and 8-hour asbestos samples collected at three sites surrounding the Conveyor Gallery cleanup area on October 12, October 13, October 14, October 15, October 16, October 17, and October 18, 2014 were below the referenced criteria for protection of public health and worker safety. Analysis of asbestos samples collected after October 18, 2014 are pending;
- No real time 15-minute average PM₁₀ 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;
- There were no continuous 24-hour average concentrations of particulate matter less than 2.5 microns in diameter (PM_{2.5}) and no continuous 24-hour average PM₁₀ concentrations above the referenced criteria measured at the community stations during the week. The PM₁₀ BAM monitor at the National Air Pollution Surveillance station was down for the entire week;
- Laboratory results from TSP, PM₁₀, and trace metals (including arsenic) samples measured on September 29, 2014 were less than the analytical detection limit and/or below the reference criteria at the community stations. Laboratory results from samples collected after September 29, 2014 are pending;
- Laboratory results from asbestos samples collected at the community stations after September 26, 2014 are pending;

- Laboratory results from samples collected on October 8 – 9, October 9 – 10, and October 11 – 12, 2014 for the roaster deconstruction specific air quality monitoring program, indicated 24-hour average arsenic, PM₁₀, and TSP concentrations were below the referenced applicable criteria;
- The Air Quality Monitoring Program operated as specified during the week ending October 18, 2014.

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.

Sincerely,

A handwritten signature in blue ink, appearing to read 'A. Paradis', is positioned above the typed name.

Adrian Paradis
Regulatory Manager
Giant Mine Remediation Project

c.c.: Distribution List