

## Permits

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**From:** Adrian Paradis <Adrian.Paradis@aandc-aadnc.gc.ca>  
**Sent:** Friday, October 2, 2015 10:39 AM  
**Subject:** Giant Mine Remediation AQM weekly summary report for the week ending September 26, 2015  
**Attachments:** YELLOWKN-#758092-v1-giant\_monitoring\_weekly\_air\_quality\_report\_for\_26\_sept\_2015.PDF; Adrian Paradis.vcf

A summary of the Giant Mine ambient air quality monitoring program for the week ending September 26, 2015 is as follows:

### Fenceline Network:

- 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 (159 µg/m<sup>3</sup>) were measured at the fenceline monitoring stations during the week. PM<sub>10</sub> 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/m<sup>3</sup>) were measured at the fenceline monitoring stations during the week. TSP concentrations measured at fenceline locations during the week were typical of seasonal background concentrations;

### Community Stations:

- No twenty-four (24) hour average concentrations of PM<sub>2.5</sub> and PM<sub>10</sub> were measured above the referenced criteria at the community stations during the week. PM<sub>2.5</sub> and PM<sub>10</sub> concentrations during the week were typical of seasonal background concentrations;
- Laboratory results from available TSP, PM<sub>10</sub>, and trace metals (including arsenic) samples collected on September 9 and 12, 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 after September 12, 2015 are pending;
- Laboratory results from available asbestos samples collected on September 9 and 12, 2015 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 September 12, 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;  
and

3. Four (4) locations at the mine vents and intake openings.

- No 15-minute average PM<sub>10</sub> concentrations were measured above the surface drilling RBAL (260 µg/m<sup>3</sup>) during the week. Concentrations during the week were typical of background levels;
- No 15-minute average PM<sub>10</sub> concentrations above the tailings pond work RBAL (180 µg/m<sup>3</sup>) were measured at the perimeter of the tailings pond work during the week. Concentrations during the week were typical of background levels;
- No 15-minute average PM<sub>10</sub> concentrations above the underground vent monitoring RBAL (300 µg/m<sup>3</sup>) were measured at the mine intakes and vent openings during the week. Concentrations during the week were typical of background levels;
- Laboratory results from available arsenic filter samples collected August 13 and September 12 and 15, 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 on after September 15, 2015 at the IUS locations are pending.

General Operations:

- The AQM program operated as specified during the week ending September 26, 2015 with exception to the following:
  1. The PM<sub>10</sub> BAM sampler at the YCC station was down for eight (8) hours on September 22, 2015 due to power system failure.

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

Regards,

Adrian Paradis

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**NT 758088**

October 2, 2015

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

**RE: Water Licence MV2012L8-0010 – Air Quality Reports for the Week of  
September 26, 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:

- 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.

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during the week. TSP concentrations measured at fenceline locations during the week were typical of seasonal background concentrations;

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Sincerely,



Adrian Paradis  
Regulatory Manager  
Giant Mine Remediation Project

c.c.: Distribution List