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September 28, 2020

Distribution List

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending September 12, 2020 is as follows:

Site Perimeter Stations

- 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 site perimeter monitoring stations during the week. PM₁₀ concentrations measured at the site perimeter monitoring locations during the week were typical of seasonal background concentrations;
- A total of three (3) 15-minute average total suspended particulate (TSP) concentrations above the established RBAL of 333 µg/m³ were measured at the Site Perimeter monitoring station H-NW Pond on September 10, 2020. Heavy fog was observed on this day and was the likely cause of the measured TSP exceedances. No site activities that may have contributed to the reported exceedances were observed by or reported to SLR personnel. Filter media collected from all Site Perimeter stations on September 10, 2020 were submitted for laboratory analysis.
 - Three (3) 15-minute average TSP concentrations of 688 µg/m³, 344 µg/m³, and 344 µg/m³ above the established RBAL of 333 µg/m³ were measured at site perimeter station H-NW Pond at 02:15, 02:30, and 02:45 MST, respectively. During this time winds were calm.
- Laboratory results for integrated TSP, PM₁₀, and trace metals (including arsenic) analyses from samples collected on August 22, 28 and 31, 2020 at the site perimeter monitoring stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of integrated 24-hour arsenic, PM₁₀, and TSP filter samples collected at the site perimeter stations on July 20, 2020, August 13 and 25, 2020, and after August 31, 2020 are pending.

Community Stations

- No continuous PM_{2.5} or PM₁₀ 24-hour average concentrations above the referenced standards for each were measured at any of the community stations during the week. PM_{2.5} and PM₁₀ concentrations during the week were typically representative of seasonal background concentrations;



- Laboratory results for integrated TSP, PM₁₀, and trace metals (including arsenic) analyses from samples collected on August 25, 28, and 31, 2020 at the community stations were less than the analytical detection limit and/or below the referenced standard. Laboratory analyses of community station filters collected after August 31, 2020 are pending;
- There were no NO₂ concentrations measured at the Niven Lake Community Station above the NWT Ambient Air Quality 24-hour Standard of 106 parts per billion (ppb) or the one-hour Standard of 213 ppb during the week. Table 1 summarizes each day's maximum hourly concentration and each day's 24-hour average concentration at the Niven Lake community station during the week.

Table 1
Niven Lake Community Station NO₂ Concentrations

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
September 06, 2020	1.3	0.0
September 07, 2020	1.4	0.1
September 08, 2020	1.8	0.2
September 09, 2020	2.3	0.1
September 10, 2020	1.7	0.5
September 11, 2020	1.2	-0.1
September 12, 2020	0.3	0.0

General Operation

- Integrated sampling for TSP, PM₁₀, and trace metals (including arsenic) was conducted on September 6, 9, and 12, 2020. The next regularly scheduled sampling is September 15, 2020;
- Data completeness for the reporting period was 99.64% for continuous TSP and 99.54% for continuous PM₁₀ concentrations measured at the site perimeter monitoring stations;
- The AAQM program operated as specified during the week ending September 12, 2020, with the following exceptions:

- The PM₁₀ and TSP samplers at Site Perimeter monitoring location I-South Pond did not collect data from 20:00 MST on September 9, 2020 until 00:30 MST on September 10, 2020 due to a loss of AC power at that location;
- The new meteorological tower installation was completed and began producing data on September 12, 2020 at 16:45 MST.

Sincerely,

A handwritten signature in blue ink that reads "Natalie Plato". The signature is written in a cursive, flowing style.

Natalie Plato
Deputy Director
Giant Mine Remediation Project
c.c.: Distribution List