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June 24, 2020

Distribution List

Giant Mine Remediation Project Ambient Air Quality Monitoring Program summary for the week ending June 6, 2020

A summary of the Giant Mine Remediation Project ambient air quality monitoring program for the week ending June 6, 2020 is as follows:

Site Perimeter Stations

- No 15-minute average particulate matter less than 10 microns in diameter (PM_{10}) concentrations above the established Risk Based Action Level (RBAL) of 159 $\mu g/m^3$ were measured at the site perimeter monitoring stations during the week. PM_{10} concentrations measured at the site perimeter monitoring locations during the week were typical of seasonal background concentrations;
- No 15-minute average total suspended particulate (TSP) concentrations above the established RBAL of 333 $\mu g/m^3$ were measured at the site perimeter monitoring stations during the week. TSP concentrations measured at the site perimeter monitoring locations during the week were typical of seasonal background concentrations;
- Laboratory results for integrated TSP, PM_{10}, and trace metals (including arsenic) analyses from samples collected on May 12, 18, 21, 24, and 27, 2020 at the site perimeter monitoring stations were less than the analytical detection limit and/or below the referenced standard. The PM_{10} filter collected on May 12, 2020 at site perimeter station H-NW Pond was invalidated due to suspected contamination from a handling error. Laboratory analyses of integrated 24-hour arsenic, PM_{10}, and TSP filter samples collected at the site perimeter stations after May 27, 2020 are pending.

Community Stations

- No continuous $PM_{2.5}$ or PM_{10} 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 PM_{10} concentrations during the week were typically representative of seasonal background concentrations;
- Laboratory results from integrated TSP, PM_{10}, and trace metals (including arsenic) samples collected on May 18, 21, 24, and 27, 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 May 27, 2020 are pending;
- There were no NO_2 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 NO_2 Concentrations

Date	Maximum One-hour Average (ppb)	24-hour Average (ppb)
May 31, 2020	0.3	0.1
June 01, 2020	18.2	1.7
June 02, 2020	0.6	0.1
June 03, 2020	0.5	0.1
June 04, 2020	0.8	0.4
June 05, 2020	1.5	0.3
June 06, 2020	0.8	0.4

General Operation

- Integrated sampling for TSP, PM_{10}, and trace metals (including arsenic) was conducted on June 2 and 5, 2020. The next regularly scheduled sampling is June 8, 2020;
- Data completeness for the reporting period was 99.50% for continuous TSP and 99.64% for continuous PM_{10} concentrations measured at the site perimeter monitoring stations;
- The AAQM program operated as specified during the week ending June 6, 2020, with the following exceptions:
    - Site perimeter station 24-hour integrated filters were not collected on June 3, 2020, due to site operational constraints. These filters were collected but not submitted to laboratory on June 5, 2020 after sampling for approximately 54 hours;
    - Site Perimeter station 24-hour filter collection schedule was temporarily modified to 05:00 MST to 05:00 MST on June 6, 2020 due to site operational constraints.

Sincerely,

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