# NEW GOLD RAINY RIVER MINE APPENDIX K EXCEEDANCE LETTERS SUBMITTED TO MECP



January 6, 2023

Jason Tittlemier
Senior Environmental Officer
Ministry of Environment, Conservation and Parks
808 Robertson St.
Kenora, ON P9N 1X9
Via email; Jason.tittlemier@ontario.ca

Dear Mr. Tittlemler,

# JANUARY 5, 2023 OVERPRESSURE EXCEEDANCE FROM OPEN PIT BLAST

On January 5, 2023, New Gold detected 3 overpressure exceedances over the peak limit of 128.0 dB(L) during a scheduled blast in the Open Pit. A notification was received from Explotech as well as a neighbor inquiry and two additional complaints after the blast. The below table shows the location and magnitude of the 3 exceedances.

		Location Highway	1 - 4298 71	Location Highway	2 - 1340 600	Location Marr Roa		Location Highway	4 - 2899 600
Blast Date	Blast Time	PVS (mm/s)	OP (dB(L))	PVS (mm/s)	OP (dB(L))	PVS (mm/s)	OP (dB(L))	PVS (mm/s)	OP (dB(L))
January 5, 2023	3:00 pm	0.147	129	0.266	133	0.408	127.6	0.315	128.1

PVS = Particle velocity limit (vibration)
OP = Overpressure (concussion/noise)

The details below identify why the blast created a noise exceedance:

- 1. The blast consisted of 5 patterns overall (1 frost shot 433 holes, 1 production and 3 toes combined 379 holes) with a total hole count of 812 holes. This larger blast was originally planned to be separated into two separate blats but due to sequencing needs it was required to be shot together.
- All shots were located close to the crest of the Open Plt In the Phase 4 pushback (310m and 320m benches).
- 3. Due to relatively short drill depths and close proximity of neighboring blasts, rapid timing was employed to minimize the chance of a cut off within the blast. This led to a total initiation time of ~1.8 seconds for the frost shot which would have compounded the noise level. Short holes also allow for less stemming which leads to lower confinement and greater noise potential.

Going forward, Rainy River does not intend to have another blast of this style/magnitude. If operational needs arise to continue proper development sequencing in the Open Pit, a warning will be provided to the surrounding neighbors 24 hours prior to blasting.

Please reach out to the undersigned if you have any questions or concerns via email at <u>Garnet.Cornell@newgold.com</u> or via phone (807) 276-0106.

**Garnet Cornell** 

**Environment Superintendent** 



January 07, 2023

Jason Tittlemier Senior Environmental Officer Ministry of the Environment, Conservation and Parks; Kenora Area Office 808 Robertson St. Kenora, ON P9N 1X9

Dear Mr. Tittlemier,

NOTIFICATION OF EXCEEDANCES: TOTAL SUSPENDED PARTICULATE (TSP) OF 24-HOUR BENCHMARK 1 VALUE (STANDARD) AND IRON OF 24-HOUR BENCHMARK AT NORTHWEST STATION

Please see attached Notifications of Exceedance regarding a TSP exceedance of the Standard Benchmark 1 of 166%, and an iron exceedance of the Standard Benchmark 1 value of 124% on December 20<sup>th</sup>, 2023 at the New Gold Rainy River Mine (RRM) Northwest Station.

During the review of the December air quality results, it was noted that on December 20<sup>th</sup>, 2023, the concentrations of TSP and iron at the Northwest Station were 199.2  $\mu$ g/ m³, and 4.96  $\mu$ g/ m³, respectively. These exceeded the ministry approved limits of 120  $\mu$ g/ m³ and 4.00  $\mu$ g/ m³. The wind rose from the Barron Weather Station Wind indicates the primary wind direction was from the East, indicating that this was due to activities in the TMA. A dust inspection using a portable aerosol spectrometer from this day also indicate there was a high level of dust in the TMA and at the Northwest Station, and visible dust in the air over the TMA with was reported via phone call to yourself on December 21, 2023.

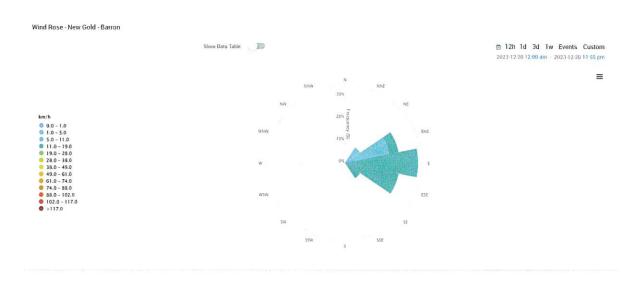


Figure 1: Wind Rose for December 20, 2023, at the Barron Weather Station



Should you have any questions or concerns, please contact the undersigned at (807) 276-0106.

Regards,

Garnet Cornell

**Environment Manager** 

CotCu



2023-04-19

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

## RE: Marr Ditch Sediment Release to West Creek Diversion - SAC Reference #1-3DKNO1

At 1400 on April  $11^{th}$ , New Gold Environment Staff noticed sediment laden water entering the West Creek Diversion (WCD) from the Marr Ditch (MD) culverts under Roen Road .



Photo 1: Sediment laden water from MD entering WCD





Photo 2: MD culverts

Total Suspended Solids (TSS) samples were collected along with field NTU samples at MD and at Surface Water Sample Site #25 (SW25). At the time MD was found to be at an NTU of 505.7 and a TSS of 710 mg/L, WCD at SW25 was at an NTU of 74.1 and a TSS of 104 mg/L.

An investigation into the cause of this issue began immediately upon discovery and the following factors contributed to this event.

- 1. Dewatering for remnant Marr and Loslo creeks was occurring to keep clean water out of the Tailings Management Area at 800 m³ per hour. Not all lines were discharging onto rock splash pads but onto disturbed ground.
- 2. New dam extension and seepage collection ditch cut off MD without a proper tie-in for overland flow to enter the
- 3. Grubbing had occurred in winter without proper sediment and erosion control measures for spring in place.
- 4. A berm was constructed along the seepage collection ditch of Breana clay without geotextile liner or rock armor to keep overland flow from entering the seepage collection ditch.
- 5. Spring freshet occurred.

Plans have been put into place to address most of these issues, some of which are still on-going at the time of writing this letter, those plans, and their status are as follows.

- Dewatering lines have been extended as needed and placed on rock splash pads to reduce the energy of the pumped water. Complete.
- Dewatering is halted or adjusted during times of downstream work or TSS is observed in excess of 30 mg/L. Ongoing.
- 3. Where MD now receives overland flow from Marr and Loslo, rock armoring of MD has occurred. New rock check dams have been installed along MD. **Complete.**
- 4. Where overland flow interacts with the seepage collection berm rock armoring has been added. Complete.
- 5. After observing the path of water as it interacts with grubbing rock, check dams have been added. Complete.
- Freshet continues and monitoring will be on-going into summer for this newly disturbed location. When conditions improve as the ground dries, more sediment and erosion controls will be added as well as revegetation efforts where needed.





Photo 3: Area of event



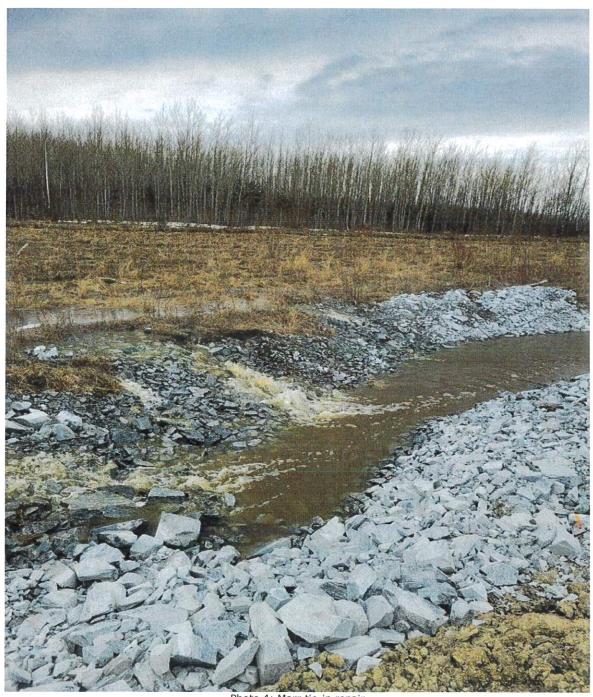


Photo 4: Marr tie-in repair





Photo 5: New rock check dam





Photo 6: Berm armoring.



New Gold continues to monitor sediment level at MD and SW25 and available numbers are presented below.

MD	NTU	TSS	SW25	NTU	TSS
2023-04-11	505.7	710	2023-04-11	74.1	104
2023-04-12	92.6	108	2023-04-12	66.5	133
2023-04-13	155	37.0	2023-04-13	22.9	N/A
2023-04-14	52	N/A	2023-04-14	13.9	N/A
2023-04-15	5.9	N/A	2023-04-15	2.4	N/A
2023-04-17	78	N/A	2023-04-17	19.9	N/A
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The variability of the NTU and TSS data is caused by periods of improvement work to MD area and times when pumps are not running (i.e. pumps are turned off when work is occurring. When turned on, water may contain sediment for a time when encountering newly worked area then stabilize). Monitoring will continue daily until a steady state is observed. Gaps in data are a result of samples that are awaiting results or are in transit. A breakdown of all samples collected will be provided in the April 2023 Monthly Water Quality Report.

Once you have the opportunity to review this report, please contact the undersigned at (807) 271-3190 or Garnet Cornell at (807) 276-0106 with any questions or concerns.

Regards,

Environmental Supervisor

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2023-05-01

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

### RE: Water Discharge Pond Pipeline Spill - SAC Reference #1-3FSP8J

At 11:55 on May 01, a pipeline pumping water from the Water Discharge Pond (WDP) to Water Management Pond (WMP) was found leaking. Site Services was called upon discovery, and the pump was shut off at 13:00 for repairs to be completed. It was determined that a gasket failure caused the spill. The pipe was not leaking during a routine check by Site Services at 04:00 that morning, so the duration of the spill is estimated to be 9 hours in a worst-case scenario. Based on the flow rate of the spill, it is estimated that 0.78m³ of water was lost. Water samples taken from the source included discharge monitoring kits and acute toxicity.

There is no evidence that the spill will reach fish bearing water. No cleanup was undertaken due to the low risk of environmental damage, and concerns with sediment and erosion control during a cleanup. Water from this spill is expected to report to the outflow basin. The gasket has been replaced, and the fittings were tightened to prevent further spills of this nature.

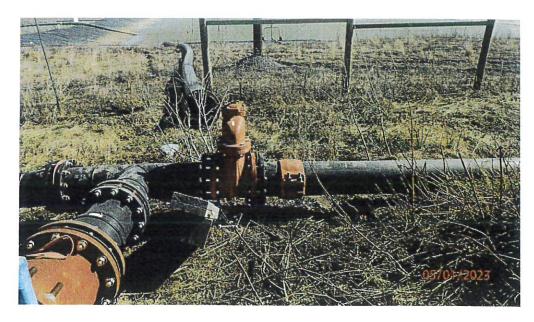


Photo 1: Repaired pipe, outflow basin in the background.

Preliminary water quality results indicate no discharge criteria were exceeded. At the time of writing this letter, Radium-226 remains in process for testing with ALS laboratory in Thunder Bay. Results of this test will be made known to MECP immediately upon receipt if found in exceedance of daily or monthly limits. Acute toxicity testing showed no mortality or stress, confirming no significant adverse effects to the environment.



Once you have the opportunity to review this report, please contact the undersigned at (705)-930-7112 or Garnet Cornell at (807) 276-0106 with any questions or concerns.

Regards,

Robyn Lloyd

Environmental Technician



May 12, 2023

Jason Tittlemier Senior Environmental Officer Ministry of the Environment, Conservation and Parks; Kenora Area Office 808 Robertson St. Kenora, ON P9N 1X9

Dear Mr. Tittlemier,

NOTIFICATION OF EXCEEDANCES: TOTAL SUSPENDED PARTICULATE EXCEEDANCE OF 24-HOUR BENCHMARK 1 VALUE (STANDARD) ON MARCH 01, 2023 AND MARCH 07, 2023 AT THE SOUTH AIR QUALITY STATION.

Please see attached Notifications of Exceedance regarding:

- A total suspended particulate (TSP) exceedance of the Standard Benchmark 1 value on March 01 at the New Gold Rainy River Mine (RRM) South Station of 135.8%
- A TSP exceedance of the Standard Benchmark 1 value on March 07 at the New Gold Rainy River Mine (RRM) South Station of 126.7%

During the review of the first quarter air quality report, it was noted that on March 01 and March 07, 2023, the TSP concentration at the Northwest Ambient Air Quality Monitoring Station had exceeded Ministry approved limits of 120 ug/m3 during a 24-hour period. The TSP concentrations were 162.99 µg/m³, and 152.10 µg/m³, respectively.

The South Ambient Air Quality Monitoring Station is located on McMillan Road, South of the Rainy River Mine Site (Figure 1). During this 24-hour period, predominant wind direction was from the Northeast (Figure 2). With this wind direction, the source of dust was likely from the RRM site activities.





Figure 1: South Air Quality Station, located South of mine site



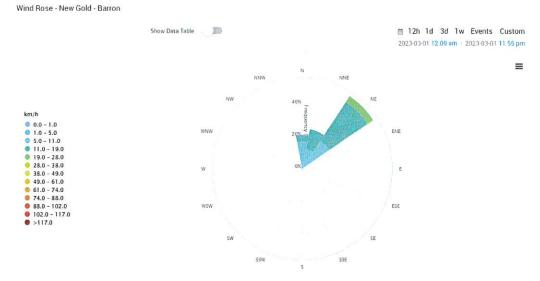


Figure 2: Windrose from March 01, 2023 at Barron Weather Station

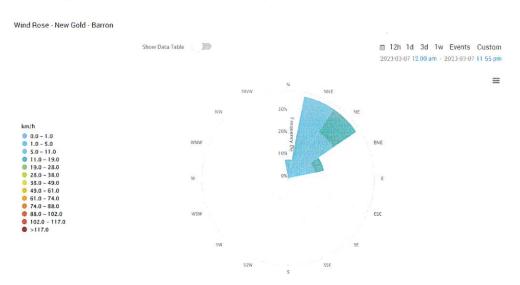


Figure 3: Windrose from March 01, 2023 at Barron Weather Station

Should you have any questions or concerns, please contact the undersigned at (807) 276-0106.

Regards,

Garnet Cornell

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**Environment Manager** 



2023-05-17

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

## RE: Propylene Glycol Spill in Pinewood River - SAC Reference #1-3206IG

At approximately 8:00 on February 27, 2023, during an inspection of the Heat King glycol heater that was being used to thaw the ice at Effluent Discharge Location #1 (EDL1), it was noted that the glycol heater had automatically turned off sometime in the night due to a low-level alarm. Upon further investigation it was noticed that the glycol line had small tooth-like punctures in multiple areas along the glycol line that leaked approximately 110L of glycol into the Pinewood River. The glycol heater was expected to have shut off sometime overnight which left the glycol line frozen in the Pinewood River. The glycol heater was disconnected from the line and removed from the site for repairs. The glycol line was first attempted to be recovered with manual tools (ie. sledge hammer, chisels, etc.) but due to the hardness of the ice and safety concerns, an additional glycol heater was mobilized to thaw the ice and extract the remaining trapped glycol line.



Photo 1: Chewed glycol line trapped in ice morning of February 27, 2023.





Photo 2: Clean-up of spill location with thawing of ice and removal of glycol line and insulated tarps.

Sampling commenced at SW24 location on February 28, 2023 and no downstream effects were observed at that time. Water quality results indicate no discharge criteria were exceeded. See below photos of before and after clean up. Also attached is the Safety Data Sheet for Propylene Glycol.

Once you have had the opportunity to review this report, please contact the undersigned at (807) 276-0106 or <a href="mailto:Garnet.Cornell@newgold.com">Garnet.Cornell@newgold.com</a> with any questions or concerns.

Regards,

Garnet Cornell
Environment Manager

Cotall



2023-05-18

Jason Tittlemier
Senior Environment Officer, Kenora Area
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808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

# RE: Mine Rock Pond Dam Contact Water Catchment Area Spill - SAC Reference #1-3GINW3

At 1200 on May 11th, the New Gold Environment Department discovered the catchment that collects contact water and other run-off from the downstream side of the Mine Rock Pond (MRP) dam and surrounding area was overtopping. Water samples including acute toxicity were collected, as well as an instream flow measure to estimate volume lost to the environment. There is a pump back system set up at this location to collect this water in the MRP, however the pump installed malfunctioned repeatedly and during repairs the volume of water exceeded the pumps ability to capture the water and the catchments ability to hold it.



Figure 1: Catchment area (green/white boarder) and spill location (arrow).

An instream flow measurement was taken to estimate the volume lost to the environment and fish bearing waters immediately downstream of the spill location. This measurement came to 16 L/s and reviewing weather station data for when the storm event began (0200 2023-05-11) and when the spill was observed to have stopped (1500 2023-05-11) and



estimated  $748.8 \text{ m}^3$  was lost from this catchment as a worst-case scenario. This assumes the catchment was 100% full at the time of storm beginning and that the pump did not run at all until noticed by the Environmental Department and the flow remained at 16 L/s during this entire time. We do not believe this to be the case, but we have no way of proving it was not at this time.



Photo 1; Spill location at time of discovery.





Photo 2; Flow measurement.

There is a plan in place to install an electric pump with a float to keep this catchment dewatered. Currently the estimated installation target is early 2024.

At the time of writing this report, few results are available online and once data is available it will be forwarded to you.

Once you have the opportunity to review this report, please contact the undersigned at (807) 271-3190 or Garnet Cornell at (807) 276-0106 with any questions or concerns.

Regards, Wather Bew of

Environmental Supervisor



August 18, 2023

Jason Tittlemier Senior Environmental Officer Ministry of the Environment, Conservation and Parks; Kenora Area Office 808 Robertson St. Kenora, ON P9N 1X9

Dear Mr. Tittlemier.

NOTIFICATION OF EXCEEDANCES: TOTAL SUSPENDED PARTICULATE EXCEEDANCE OF 24-HOUR BENCHMARK 1 VALUE (STANDARD) AT SOUTH AND NORTHWEST STATIONS, PM2.5 EXCEEDANCE OF 24-HOUR BENCHMARK 1 VALUE (STANDARD) AT NORTH, SOUTH, AND NORTHWEST STATIONS, AND DUSTFALL EXCEEDANCE OF MONTHLY TOTAL BENCHMARK 1 VALUE (STANDARD) AT NORTH STATION.

Please see attached Notifications of Exceedance regarding:

- A total suspended particulate (TSP) exceedance of the Standard Benchmark 1 value on April 18, 2023 and May 06, 2023 at the New Gold Rainy River Mine (RRM) Northwest Station of 132.4%, and 101.2%, respectively.
- A TSP exceedance of the Standard Benchmark 1 value on April 30, 2023 at the RRM South Station of 103.2%.
- An Iron Exceedance of the Standard Benchmark 1 value on April 30, 2023 at the RRM South Station of 101.78%, and May 06, 2023 at the RRM Northwest Station of 127.62%.
- A PM2.5 exceedance of the Standard Benchmark 1 value on May 18, 2023 at the RRM North Station, South Station, and Northwest Station of 135.1%, 141.4%, 129.7%, respectively.
- A Dustfall exceedance of the Standard Benchmark 1 value at the RRM North station over the month of June, 2023, of 197.6%

During the review of the second quarterly air quality report, three instances of TSP concentrations exceeding the Ministry approved limit of 120  $\mu$ g/m³ during a 24-hour period were noted. On April 18, 2023, and May 06, 2023, the TSP concentration at the Northwest Ambient Air Quality Monitoring Station were 158.89  $\mu$ g/m³ and 121.51  $\mu$ g/m³ respectively. On April 30, 2023, the TSP concentration at the South Ambient Air Quality Monitoring Station (McMillan Road) was 123.83  $\mu$ g/m³. With the TSP exceedances on April 30, 2023 at South Station, and May 06·2023 at Northwest Station, there were exceedances of the Ministry limit of 4  $\mu$ g/m³ for Iron, with concentrations of 4.07  $\mu$ g/m³ and 5.10  $\mu$ g/m³, respectively. Primary wind direction for exceedances at the Northwest Station were from the Northeast and East, indicating the high TSP concentrations were due to activities in the TMA. The primary wind direction on April 30\h, 2023, was from the North, indicating that the TSP exceedance at South Station was caused by activities in the pit.



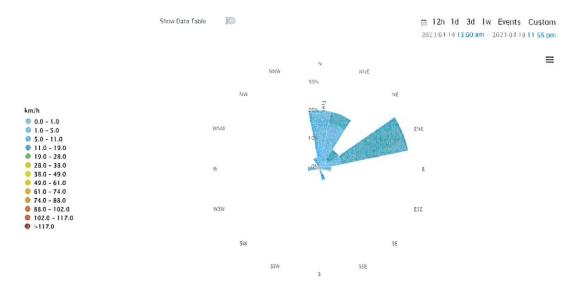


Figure 1: Wind Rose from April 18, 2023 at the Barron Site

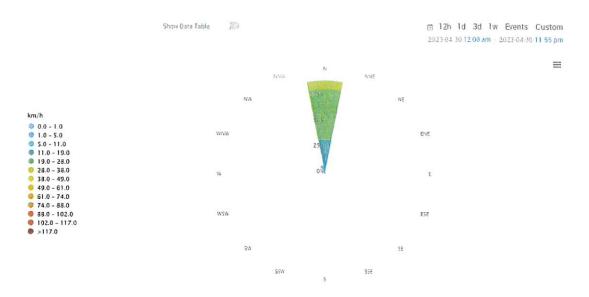


Figure 2: Wind Rose from April 30, 2023 at the Barron Site



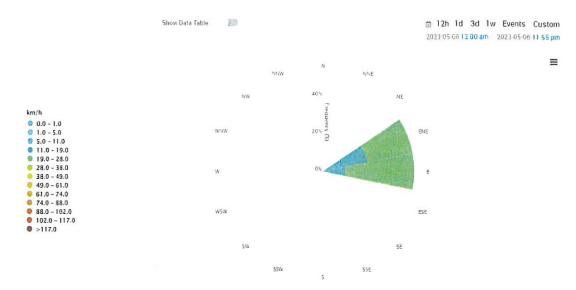


Figure 3: Wind Rose from May 06, 2023 at the Barron Site

On May 18, 2023, the PM2.5 concentration at North, South, and Northwest Station exceeded the Ministry approved limit of 27  $\mu$ g/m³. The concentrations were 36.47  $\mu$ g/m³, 38.17  $\mu$ g/m³, and 35.02  $\mu$ g/m³, respectively. As shown in Figure 4, PM2.5 concentrations were elevated on May 18, as a smoke plume from forest fires with PM2.5 concentrations between 28  $\mu$ g/m³ and 120  $\mu$ g/m³ passed through the area. Figure 5 shows a photo of the North Air Quality Station, with visible haziness caused by the smoke plume.

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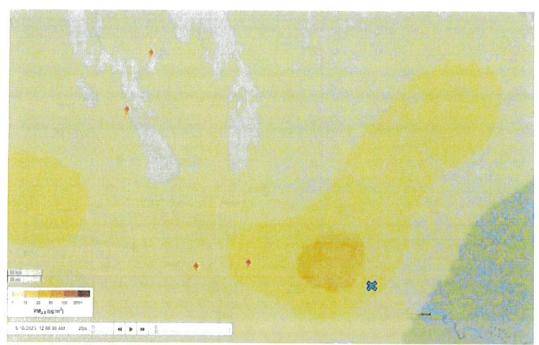


Figure 4: Air Quality Map showing expected elevated PM2.5 concentrations due to forest fires in the area surrounding the Rainy River Mine on May 18, 2023.



Figure 5: North Air Quality Station on May 18, 2023, with forest fire smoke in the background.



Over the month of June, the Dustfall total concentration at North Station exceeded the Ministry approved limit of 7  $\mu$ g/m³. This concentration was due to contamination from organic material in the sample. The concentration including organics was 13.83  $\mu$ g/m³, but once organic material was removed, the fixed dustfall concentration was below the Ministry limit, at 3.66  $\mu$ g/m³.



Figure 5: North Station Dustfall jar after sampling during the month of June, 2023, before shipping to certified laboratory.

Should you have any questions or concerns, please contact the undersigned at (807) 276-0106. Regards,

Garnet Cornell Environment Manager



2023-09-01

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

# RE: Outflow Basin Spill - SAC Reference #1-3R850N

At 18:35 on August 18th, the New Gold Capital Projects Construction crew noticed a stream of water going straight up from beside the Outflow Basin pumps. Site Services was contacted immediately and quickly mobilized to the area. The control room was contacted, and the pumps were powered down at 18:50. The line continued to gradually leak for 54 minutes as the pressure reduced from 122 kPa to 0 kPa. A temporary fix was completed on August 18<sup>th</sup> at 20:45 and pumps restarted shortly after. Permanent parts were ordered August 21<sup>st</sup> and repairs planned to be completed the week of August 28<sup>th</sup>. Water volume loss is estimated at 4,797 L using the total spill duration and gradual pressure reduction within the line.

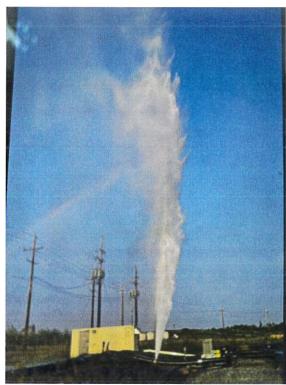


Figure 1 shows the Outflow Basin spill when Site Services arrived to shut down the pumps.

A call to Spills Action Center occurred on August 21<sup>st</sup> at 09:06 as the incident was not reported internally until August 20<sup>th</sup> at 18:43. To mitigate delayed reporting in the future, a side-wide reminder was distributed to ensure internal procedures are followed to report all environmental incidents within 24 hours.

Once notification was received of the incident the morning of August 21st, the Environmental Department initiated sampling at the below locations:



- 1. Outflow Basin Sampled with Discharge Kit
- 2. Remnant Loslo Creek and Old Hwy 600 crossing Sampled with Discharge Kit and Acute Toxicity
- 3. SW22A Sampled with Discharge Kit



Figure 2 August 21st incident response sampling locations completed by Environmental Department.

It is expected the water quality from the Outflow Basin source is compliant with all discharge criteria in Rainy River's Environmental Compliance Approval 2290-CAVKGN except for unionized ammonia as Biochemical Reactor #2 and Outflow Basin were currently treating Tailings Management Area water at the time of the incident.

At the time of writing this report, few results are available online and once data is available it will be forwarded to you.

Once you have the opportunity to review this report, please contact the undersigned at (807) 276-0106 or <a href="mailto:Garnet.Cornell@newgold.com">Garnet.Cornell@newgold.com</a> with any questions or concerns.

Regards,

**Environment Manager** 



2023-11-10

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

## RE: Sediment Pond 2 Allowable Discharge Volume Exceedance - SAC Reference #1-4705H7

During routine monitoring of water quality results from the ALS Solutions website (formerly ALS WebTrieve) on October 30th, the New Gold Environment Department discovered that the Sediment Pond 2 (Sed 2) water quality did not meet criteria to be discharged at a 1:1 ratio. On 2023-10-30 at 1450 a call was made to shut down the Sed 2 pump for the day and return to the allowable 10:1 ratio the next day. At that point in time an estimated volume of 77,304m³ had been discharged as Sed 2 resumed discharge on 2023-10-20 after having not been discharged since 2023-06-06. Water samples including acute and sublethal toxicity were collected, both toxicity samples passed however Zinc and Copper were found to exceed CCME limits.

New Gold Rainy River Mine remained in compliance with effluent discharge limits found within Environment Compliance Approval (ECA) #2290-CAVKGN Table 4.

However, in the description of Sediment Ponds #1,2 and 3 the ECA states "Sediment Pond 2 may be discharged to the environment, via a splash pad, at a ratio of 10:1 with the Pinewood River should water meet discharge criteria as listed in Table 4 of this Approval. If water discharged from Sediment Pond #2 meets all applicable provincial and federal water quality criteria (i.e., Provincial Water Quality Objectives and Canadian Water Quality Guidelines for the Protection of Aquatic Life) for all parameters sampled in accordance with Table 6 of the Approval, Sediment Pond 2 may be discharged to the environment, via a splash pad, at a ratio of 1:1 with the Pinewood River."

Sample results from 2023-10-04 indicated that the 1:1 ratio could be used due to the more stringent criteria being met for all applicable limits.

Sed 2 was then sampled on the day it began discharging, again on the 22<sup>nd</sup> and again on the 24<sup>th</sup> and has been sampled weekly as per the ECA since. When the results for the 20<sup>th</sup> and 22<sup>nd</sup> where available it was noticed that the CCME limit for Zinc (0.007mg/L) had been exceeded at 0.0144mg/L and 0.0236mg/L respectively and Copper was over the CCME limit (0.004mg/L) reported at 0.00578mg/L and 0.00529mg/L respectively. Copper was found to be back in compliance with CCME limits during the sample collected on the 24<sup>th</sup> with an estimated 16,863m³ discharged from Sed 2 up until that point.



The cause of this discrepancy in water quality is unknown, samples were re-run by ALS and found accurate. No cleanup was undertaken as ECA limits were not exceeded and no harm to the environment was evident.

New Gold intends to continue discharging Sed 2 until the end of November as permitted in the ECA and will continue to monitor water quality results as per the ECA. If the criteria for a 1:1 ratio is met again New Gold will consider returning to discharging in that manner as opposed to the current 10:1 ratio.

Certificates of Analysis relevant to this matter will be forwarded to yourself when they are available. The COA for 2023-10-04 which is the sample the discharge ratio was based off is attached as Appendix A.

Once you have the opportunity to review this report, please contact the undersigned at (807) 271-3190 or Garnet Cornell at (807) 276-0106 with any questions or concerns.

Regards,

Environmental Supervisor

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2023-11-13

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

## RE: EDL2 Booster Pump Spill - SAC Reference #1-4F8VLI

At 10:00 on November 11, a spill of effluent bound to a final discharge point occurred at the EDL2 booster pump on old Loslo road, 400m Northeast of the final discharge point. This occurred during commissioning of the booster pump, when an increase in feed pressure caused the discharge line to disconnect from the crimped end of the pump. The spill duration was 5 minutes, 45 seconds. The volume lost was calculated using the recorded flow rate of 942m³/h and assuming 100% of effluent from the pipeline spilled during the timeframe, the volume lost would be 75.575 m³ in a worst-case scenario. The effluent entered the ditch beside the road and is expected to have migrated towards the Pinewood River.



Figure 1: EDL2 Booster Pump and spilled effluent water in the ditch beside old Loslo Road.

The spill was reported to the Spills Action Center on November 11 at 18:40. The Environment Department sampled the source of the pumping, at Water Management Pond Pump 36. Samples included a discharge kit and acute toxicity. The water quality from the source was found to be compliant with all discharge criteria in Rainy River's Environmental Compliance Approval 2290-CAVKGN as reported in ALS Solutions Webtrieve online system. No cleanup was initiated, as the effluent is expected to have no environmental impact.



At the time of writing this report, finalized sampling results are not yet available. Once a Certificate of Analysis is available it will be forwarded to you.

Once you have the opportunity to review this report, please contact the undersigned at (807) 276-0106 or <a href="mailto:Garnet.Cornell@newgold.com">Garnet.Cornell@newgold.com</a> with any questions or concerns.

Regards,

**Environment Manager** 



2023-12-22

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

## RE: Eluik Road Seep - SAC Reference #1-4HC9J4

A natural seep or spring has been known to New Gold since the early stages of construction on the north end of Eluik road near the current location of the TMA Booster Station. This seep comes to surface in various locations within the laydown that occupies the space between the Booster Station and the Wildlife Exclusion Fence gate and flow rates appear to vary throughout the year. On 2023-11-28 a noticeable steady increase in flow from this seep occurred and water samples were collected to determine if this increase in flow was a result of New Gold operations. Total Cyanide was detected in the seep sample at 0.611 mg/L (other Cyanide speciation's were tested for and found but for the purpose of reporting Total Cyanide will be the focus) and the only source of cyanide known to New Gold in the area is from water that has been involved in the milling process.

During the investigation into this seep's increase in flow and the presence of cyanide, New Gold has determined the most likely cause to be a leak in the TMA Booster Station's emergency dump pond liner. The booster station has never been run in winter before and it appears a pump designed to maintain the water level in the dump pond failed. This resulted in higher-than-normal water levels within the emergency dump pond. The pond itself does not show any signs of overtopping but New Gold suspects a gland water drain line that goes through the liner is not well sealed (Figure 1) allowing water from the dump pond to leach through the blast rock laydown and mix with the existing seep.

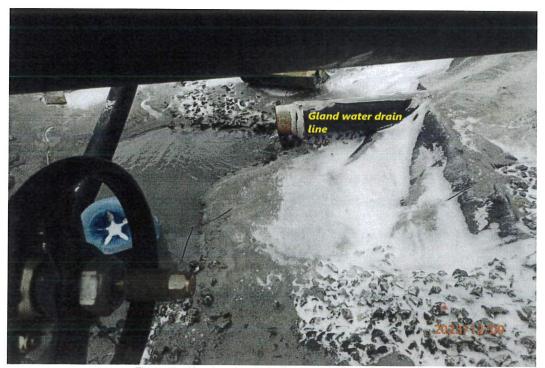


Figure 1: Gland water drain line and Booster Station.



To mitigate the release to environment a small sump (Figure 2) was dug to capture the seep on 2023-12-10. The booster station emergency dump pond was also pumped down as much as possible and will remain in a near dry state going forward until repairs can be completed.



Figure 2: Collection sump constructed at seep location.

To date, weekly water quality monitoring of the newly created sump has shown a decreasing trend in cyanide levels (Figure 3). Monitoring will continue at this frequency until baseline cyanide levels return to normal (below detection limit). Freezing conditions have played a factor in the seeps flow rate and sampling may not be possible over winter of this new sump. Once low to no cyanide is detected in the sump, monitoring with follow quarterly monitoring frequency of the TMA seepage monitoring program.

To assess off site migration of this seepage, a water sample was collected on the same day (2023-12-09) as the seep and the Booster Station emergency dump pond at a small swamp 500 meters South of the Booster Station along Eluik road. No cyanide was detected in the swamp. Figure 4 shows cyanide levels over time at the seep location and levels found at other locations.



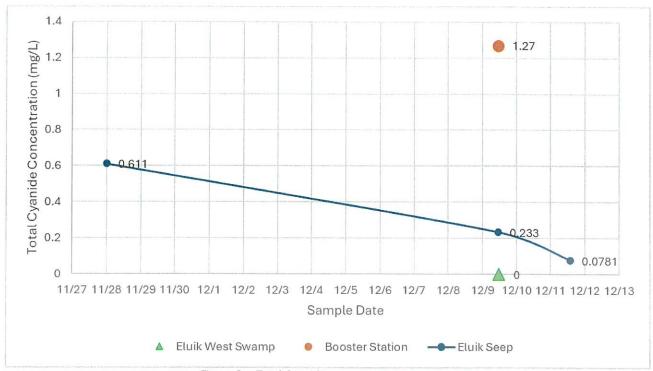


Figure 3 – Total Cyanide concentration over time.

Permanent solutions to this area are being investigated with the TMA Engineer-of-Record which will include secondary containment. We are also reviewing additional alarm mitigation measures for the Booster Station.

A volume is estimated to be between  $5~\text{m}^3$  and  $11.5~\text{m}^3$ . This estimate considers the current pumping rate of the sump and when the increase in flow was noted.

Once you have the opportunity to review this report, please contact the undersigned at (807) 271-3190 or Garnet Cornell at (807) 276-0106 with any questions or concerns.

Regards,

Environmental Supervisor

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