



WHALE TAIL PROJECT

Monitoring Program Summary Report

April 2022

Type A Water License 2AM-WTP1830

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SECTION 1 • BACKGROUND

On May 13, 2020, Agnico received the minister's approval for the Water License 2AM-WTP1830 Amendment No.1. This amendment was required to authorize changes to the previously-approved uses of water and deposit of wastes needed to reflect the expansion of the Whale Tail Pit Project.

As required under Part I, Item 22 of Type A Water License 2AM-WTP1830, this report documents the water management and monitoring activities at the mine site for the month. This includes water usage, water and seepage monitoring around site, sewage treatment plant discharge and Attenuation Pond discharge.

In addition, a summary of spills/actions for the month is reported.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Fresh water usage for the month is summarized in Table 2.1 below

Table 2.1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	March	April	Total
Camp	Nemo	2,022	2,819	3,084	3,162	11,087
Construction/Operation	Nemo	739	1,978	2,101	3,191	8,010
Dust Suppression	Nemo / WTHR Pond	0	0	0	0	0
Explosive	Mammoth Lake	0	0	0	0	0
Drilling	Proximal Sources	0	0	0	0	0
Total Freshwater Usage (m³)		2,761	4,797	5,185	6,438	19,181

2.2 LAKE WATER MONITORING

Lake around the Whale Tail Project were monitored on a monthly basis during the open water season. In April, no samples were taken at Lake A16 (ST-WT-14) or Lake A15 (ST-WT-15) due to freezing conditions.

2.3 WHALE TAIL SOUTH CHANNEL

The Whale Tail South Channel was not operational in April due to freezing conditions.

2.4 WHALE TAIL DIKE SEEPAGE MONITORING

Seepage at the toe of Whale Tail dike (WTD) was still observed during the month. Agnico continues to manage seepage water from WTD as part of the Whale Tail Attenuation Pond.

Seepage water quality is monitored as per requirements of the Water License. The sampling station is ST-WT-17 and is sampled minimally on a monthly basis for Group 1 parameters.

2.5 SEWAGE TREATMENT PLANT

Effluent from the sewage treatment plant (STP) is discharged to the IVR Attenuation Pond. As per Water License Schedule I Sampling Station ST-WT-11, effluent is to be sampled four times per calendar year. Agnico is currently sampling the STP monthly and thus a sample was taken in April. A total of 2,966.10 m³ was discharged during the month.

2.6 WHALE TAIL/IVR ATTENUATION PONDS

Water from the IVR Attenuation Pond was discharged during the month of April in Whale Tail South Lake. Discharge to the Whale Tail South permanent diffuser was from April 3 to 6 and

April 24 to 25. Water was treated by the Water Treatment Plan before discharge. A total of 63,796 m³ was discharged to Whale Tail South.

As per Water License Part F Item 5, the effluent from this discharge shall not exceed the limits detailed in Table 2.6.1 below. In April, the level of Total arsenic (As) concentrations from the treated discharge into Whale Tail South Lake (ST-MDMER-11/ST-WT-24) exceeded the maximum limits set out in 2AM-WTP1830 Part F Item 5 for maximum authorized concentration in a grab sample (0.20mg/L) on April 3 and maximum authorized monthly mean concentration (0.10mg/L), and MDMER Schedule 4, Table 2, for the maximum authorized monthly mean concentration (0.30mg/L). See Section 3 below for complete explanation regarding the arsenic exceedance during the month of April.

Table 2.6.1: IVR Attenuation Pond Discharge to Whale Tail South Permanent Diffuser (ST-WT-24)

Parameter	Maximum Authorized Concentration Grab Sample	Maximum Authorized Monthly Mean Concentration	Unit	Sample Date		Monthly Average
				4/3/2022	4/25/2022	
Field Measured						
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.30	7.15	7.23
Conventional Parameters						
Total suspended solids	30	15	mg/L	1	< 2	1.5
Nutrients						
Total phosphorus	0.6	0.3	mg/L	0.0029	0.0056	0.0043
Total ammonia (NH3-N)	32	16	mg/L	3.0	2.3	2.7
General Organics						
Total petroleum hydrocarbons	6	3	mg/L	<0.2	<0.2	0.1
Total Metals						
Aluminum	1	0.5	mg/L	0.0100	0.0065	0.0083
Arsenic	0.2	0.1	mg/L	0.448	0.185	0.317
Cadmium	0.004	0.002	mg/L	0.000014	0.000014	0.000014
Chromium	0.04	0.02	mg/L	< 0.0010	< 0.0010	0.0005
Copper	0.2	0.1	mg/L	0.00352	0.00387	0.00370
Iron	2	1	mg/L	0.105	0.254	0.180
Lead	0.1	0.05	mg/L	0.00023	< 0.00020	0.0001
Mercury	0.008	0.004	mg/L	< 0.00001	< 0.00001	0.000005
Nickel	0.5	0.25	mg/L	0.215	0.189	0.202
Zinc	0.2	0.1	mg/L	0.0071	0.0126	0.0099

SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2022 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for April.

Twenty-nine (29) spills occurred on site during the month with three (3) reported to regulators. Spills were contained and cleaned, contaminated material was disposed to the appropriate area, and the clean-up actions were monitored closely by the Environment Department. There was no off-site impact to any watercourses.

As required by Government of Nunavut's Environmental Protection Act, paragraph 5.1(a), Water License 2AM-WTP1830 Part H, Item 8(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act, Subsections 38(5) of the Fisheries Act and Section 24(1)(a) of the Metal and Diamond Mining Effluent Regulations, Agnico Eagle Mine Ltd. Meadowbank Complex reported via email on April 29, 2022, that the level of Total arsenic (As) concentrations from the treated discharge into Whale Tail South Lake (ST-MDMER-11/ST-WT-24) exceeded the maximum limits set out in 2AM-WTP1830 Part F Item 5 for maximum authorized concentration in a grab sample (0.20 mg/L) and maximum authorized monthly mean concentration (0.10 mg/L), and MDMER Schedule 4, Table 2, for the maximum authorized monthly mean concentration (0.30 mg/L).

The treated discharge from IVR Attenuation Pond was discharged into Whale Tail South Lake from April 3, 3:00 PM CT, through April 6, 7:10 PM Central, for a total of 44,474 m³, and from April 24, 1:00 AM CT, through April 25, 11:50 AM CT, for a total of 19,323 m³. An exceedance of the maximum authorized concentration in a grab sample outlined in 2AM-WTP1830 occurred on April 3, leading to an exceedance of the maximum authorized monthly mean concentration outlined in 2AM-WTP1830 and in the MDMER Schedule 4, Table 2.

Applying the average measured concentration of ST-MDMER-11 and ST-WT-24 on April 3 of 0.445 mg/L to the entire volume discharged between April 3 and 6, as well as the average measured concentration of ST-MDMER-11 and ST-WT-24 on April 25 of 0.186mg/L to the entire volume discharged between 24 and 25 results with a total arsenic discharged in Whale Tail South Lake of 23.38 kg in the month of April.

An acute lethality testing to *Daphnia Magna* and *Rainbow Trout* was performed on April 3, which demonstrated the effluent to be non-toxic to *Rainbow Trout* and *Daphnia Magna*. Through the analysis of all of the available data, specifically the non-toxic results of the acute lethality testing performed on April 3, Agnico Eagle is confident that the aquatic environment was protected. The Core Receiving Environment Monitoring Program includes the Whale Tail South Lake and will validate this finding. In compliance with section 31.1 (1) of the Metal and Diamond Mining Effluent Regulations, an acute lethality test sample was collected on May 23

upon resumption of the water treatment plant following the April monthly average concentration exceedance. Results of these samples are pending.

The delay in sampling the effluent on April 3 and the reporting of the exceedance on April 29 was caused by the delay in receiving the results from the external laboratory. The final results were sent to Agnico Eagle via email on April 28, and only reviewed by Agnico Eagle that evening. Automatic alarms have since been integrated into the online database to flag potential arsenic exceedances at the Whale Tail site.

Following the internal investigation, the elevated source of arsenic is believed to have originated from a new pit sump in Whale Tail Pit. Water reporting into this sump is ultimately transferred into the IVR Attenuation Pond for storage prior to treatment in the water treatment plan, for final discharge in Whale Tail South Lake through the permanent diffusor. Due to the delay in receiving sample analysis from the accredited laboratories, a new process was integrated to be able to perform analysis of arsenic content in water to the precision of 0.01 mg/L on site. This process will provide high precision, quality information to the water treatment plant operator to improve treatment efficiency, as opposed to the color scale paper strip method previously used in the plant.

Figure 3.1 2022 Reported and Non-Reported Spills

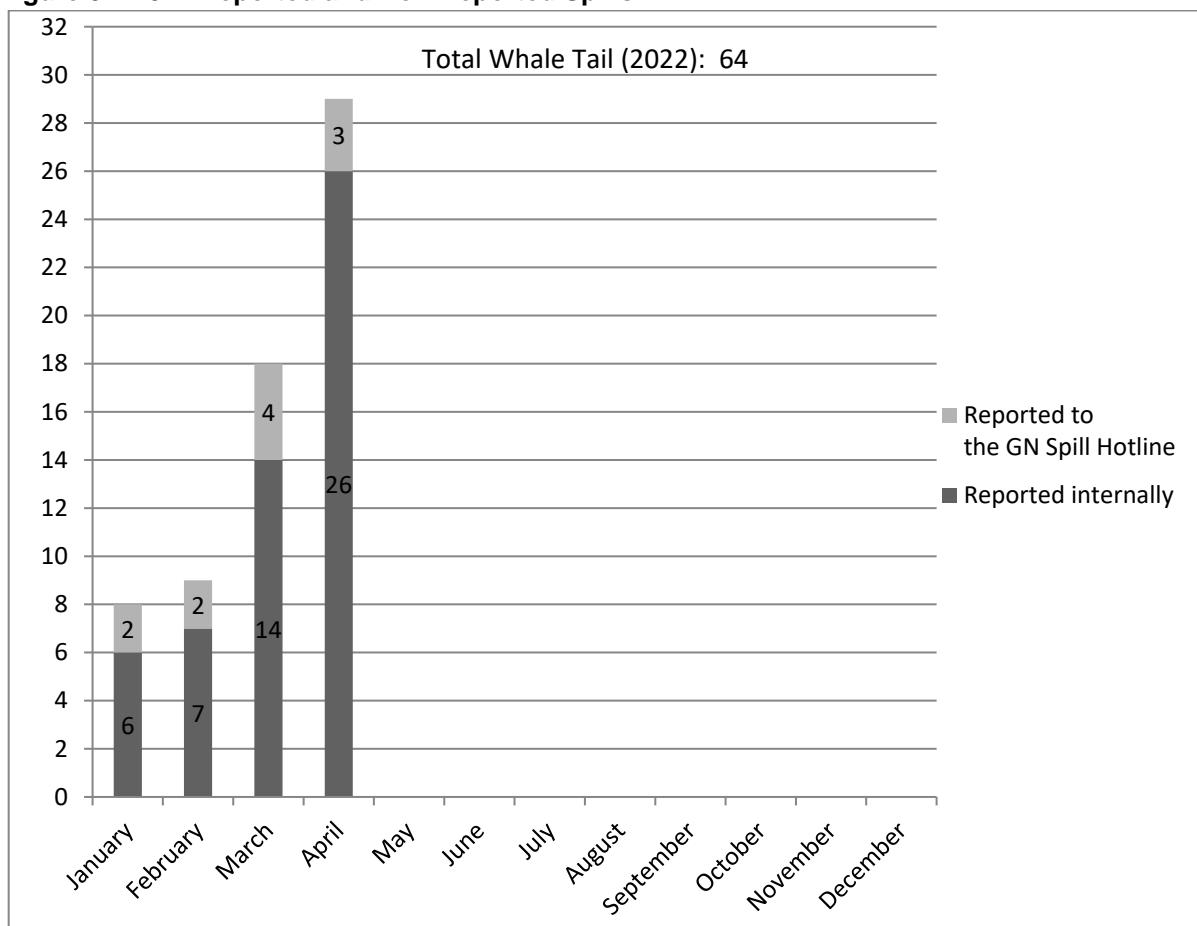


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, April 2022

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
4/1/2022	Glycol	5	L	WTHR KM 159	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/1/2022	Hydraulic Oil/Fuel	43	L	Drill 8 on Mammoth Lake	<p>The diesel fuel spill was occurred due to the fuel cell being too full and fuel escaping the cell via the breather valve during transportation.</p> <p>Due to a loose hydraulic fitting on the foot clamp of the drill and failure of secondary containment under the drill hydraulic oil leaked out onto the ice and was not visible until the drill move was complete.</p>	Spill pads were immediately placed around the spill area to collect the accessible hydraulic oil. Ice chippers and shovels were utilized to break ice that was contaminated with hydraulic oil. The spill was regularly inspected for ~one week to ensure contaminates was completely collected. A quatrex bag and four 45-gallon drums were filled with contaminated spill matting and ice/snow respectively. The drums & quatrex were brought to the AMQ Hazmat disposal area. A five-gallon pail was used to collected contaminated snow from the diesel fuel. This snow was sent to the yellow contaminated soil bin to be sent to the MBK Landfarm.
4/1/2022	Hydraulic Oil	35	L	Whale Tail Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/2/2022	Hydraulic Oil	20	L	EMR Road	Broken hydraulic line	Absorbent pads used. Contaminated soil was collected and brought to a yellow bin for disposal.
4/3/2022	Antifreeze	80	L	Whale Tail Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/3/2022	Hydraulic Oil	80	L	IVR Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/3/2022	Arsenic	23.38	Kg	Whale Tail South ST-MDMER-11/ST-WT-24	The treated discharge from IVR Attenuation Pond was discharged into Whale Tail South Lake from April 3rd, 3:00PM Central, through April 6th, 7:10PM Central, for a total of 44,474m3, and from April 24th, 1:00AM Central, through April 25th, 11:50AM Central, for a total of 19,323m3. An exceedance of	Due to the delay in receiving sample analysis from the accredited laboratories, a new process was integrated to be able to perform analysis of arsenic content in water to the precision of 0.01mg/L on site. This process will provide high precision, quality information to the water treatment plant operator to improve treatment efficiency, as opposed to the color scale paper strip method previously used in the plant.

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
					<p>the maximum authorized concentration in a grab sample outlined in 2AM-WTP1830 occurred on April 3rd, leading to an exceedance of the maximum authorized monthly mean concentration outlined in 2AM-WTP1830 and in the MDMER Schedule 4, Table 2.</p> <p>Following the internal investigation, the elevated source of arsenic is believed to have originated from a new pit sump in Whale Tail Pit. Water reporting into this sump is ultimately transferred into the IVR Attenuation Pond for storage prior to treatment in the water treatment plan, for final discharge in Whale Tail South Lake through the permanent diffusor.</p>	
4/5/2022	Hydraulic Oil	30	L	Whale Tail Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/6/2022	Hydraulic Oil	50	L	Whale Tail Pit	Broken hydraulic line	Contaminated soil was collected and brought to a yellow bin for disposal.
4/6/2022	Coolant	10	L	Whale Tail Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/7/2022	Hydraulic Oil	40	L	WT WRSF	Broken hydraulic line	Contaminated soil was collected and brought to a yellow bin for disposal.
4/7/2022	Hydraulic Oil	20	L	WT WRSF	Broken hydraulic line	Contaminated soil was collected and brought to a yellow bin for disposal.
4/7/2022	Hydraulic Oil	30	L	WT WRSF	Broken hydraulic line	Contaminated soil was collected and brought to a yellow bin for disposal.
4/8/2022	Coolant	5	L	WTHR KM 163	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.

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4/11/2022	Hydraulic Oil	25	L	IVR Pit	Broken hydraulic line	Contaminated soil was collected and brought to a yellow bin for disposal.
4/12/2022	Hydraulic Oil	45	L	Whale Tail Pit	O-ring failure	Contaminated soil was picked up and disposed in the yellow bin.
4/18/2022	Hydraulic Oil	4	L	Underground Office	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/19/2022	Hydraulic Oil	75	L	Pad C	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/19/2022	Hydraulic Oil	20	L	IVR Pit	Equipment failure	Absorbent pads were used. Contaminated soil was collected and brought to a yellow bin for disposal.
4/19/2022	Hydraulic Oil	20	L	Camp Parking	Broken hydraulic line	Contaminated soil was collected and brought to a yellow bin for disposal.
4/19/2022	Hydraulic Oil	150	L	IVR Pit	Broken hydraulic hose.	The operator immediately shut down the equipment, called the mechanics to have the equipment fix and the environment department to assess the spill. Contaminated material was excavated and brought to the contaminated soil bin, to then be disposed of at the Meadowbank landfarm.
4/21/2022	Hydraulic Oil	50	L	IVR Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
4/24/2022	Hydraulic Oil	40	L	Whale Tail Pit	Equipment failure	Absorbent pads were used. Contaminated soil was collected and brought to a yellow bin for disposal.
4/25/2022	Diesel Fuel	80	L	Fuel Farm	Overflow during fuelling	Spill was contained, and contaminated soil and snow picked up and disposed of appropriately in a yellow bin. Spill pads and bin were used.
4/26/2022	Diesel Fuel	10	L	Whale Tail Pit	Equipment malfunction	Contaminated soil was collected and brought to a yellow bin for disposal.
4/27/2022	Hydraulic Oil	20	L	Sana Shop	Broken hydraulic line	Spill pads were used to collect the oil and contaminated soil was brought to the yellow bin for disposal.
4/29/2022	Hydraulic Oil	60	L	WT View Point	Equipment failure	Absorbent pads were used. Contaminated soil was collected and brought to a yellow bin for disposal.

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
4/29/2022	Engine coolant	20	L	WTHR KM 131	Equipment failure	Absorbent pads were used. Contaminated soil was collected and brought to a yellow bin for disposal.