

WHALE TAIL PROJECT

Monitoring Program Summary Report July 2021

Table of Contents

SECTION 1	L • BACKGROUND	3
SECTION 2	• WATER MANAGEMENT	4
2.1	WATER USAGE	.4
2.2	LAKE WATER MONITORING	.4
2.3	Whale Tail South Channel	.4
2.4	WHALE TAIL DIKE SEEPAGE MONITORING	.4
2.5	SEWAGE TREATMENT PLANT	.4
	Whale TaiL/IVR Attenuation Ponds	.4
	B • SPILL MANAGEMENT	

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: July 2021 – Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	March	April	May	June	July	Total
Camp	Nemo	2,713	2,428	2,823	2,827	2,759	2,642	2,836	19,028
Construction/Operation	Construction/Operation Nemo		2,184	2,287	2,319	2,273	1,534	1,823	14,494
Dust Suppression	Nemo / WTHR Pond	0	0	0	0	0	4,830	6,000	10,830
Explosive	Mammoth Lake	0	0	0	0	0	0	0	0
Drilling	Proximal Sources	0	0	0	0	0	0	0	0
Total Freshwater Usage (m³)		4,787	4,612	5,109	5,146	5,032	9,006	10,659	44,352

2.2 LAKE WATER MONITORING

Lake around the Whale Tail Project were monitored on a monthly basis during the open water season. In July, monthly samples were taken at Lake A16 (ST-WT-14) and Lake A15 (ST-WT-15).

2.3 WHALE TAIL SOUTH CHANNEL

The Whale Tail South Channel was operational in July. An estimated 317,682 m³ of water flowed from Whale Tail South Basin to Mammoth Lake.

2.4 WHALE TAIL DIKE SEEPAGE MONITORING

Seepage at the toe of Whale Tail dike 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 is discharged to the Whale Tail 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 July. A total of 2,861.2 m³ was discharged during the month.

2.6 WHALE TAIL/IVR ATTENUATION PONDS

Water from the IVR Attenuation Pond was discharged during the entire month of July in Mammoth Lake. Discharge in Mammoth Lake West Diffuser was from July 1 to 5 and July 18 to 31 and in Mammoth Lake East Diffuser from July 1 to 5 and July 18 to 30. Water was treated

by the Water Treatment Plan before discharge. A total of $304,654~\text{m}^3$ was discharged to Mammoth Lake.

As per Water License Part F Item 5, the effluent from this discharge shall not exceed the limits detailed in Table 2.6.1 to 2.6.2 below. No non-compliance observed during the month of July related to these discharges to the receiving environment. There were no exceedances of Water License or MDMER limits during the month.

Table 2.6.1: IVR Attenuation Pond Discharge to Mammoth Lake West Diffuser (ST-WT-2)

	Maximum	Maximum	Unit				
Parameter	Authorized Concentration Grab Sample	Authorized Monthly Mean Concentration		7/5/2021	7/19/2021	7/26/2021	Monthly Average
Field Measured							
pН	6.0 - 9.5	6.0 - 9.5	pH units	7.22	7.05	6.91	7.06
Conventional Para	meters				•		
Total suspended solids	30	15	mg/L	< 1	< 1	< 1	0.5
Nutrients							
Total phosphorus	0.6	0.3	mg/L	0.0030	0.0011	< 0.0010	0.0015
Total ammonia (NH3-N)	32	16	mg/L	0.8500	0.79	0.96	0.87
Total Petroleum hy	drocarbons (TPH)	*					
F2 (C10-C16)			mg/L	< 0.1	< 0.1	< 0.1	0.05
F3 (C16-C34)	6	3	mg/L	< 0.2	< 0.2	< 0.2	0.1
F4 (C34-C50)			mg/L	< 0.2	< 0.2	< 0.2	0.1
Total Metals							
Aluminum	1	0.5	mg/L	0.0106	0.0055	0.0046	0.0069
Arsenic	0.2	0.1	mg/L	0.00400	0.00503	0.00346	0.00416
Cadmium	0.004	0.002	mg/L	0.000012	< 0.000010	0.000011	0.000009
Chromium	0.04	0.02	mg/L	< 0.0010	< 0.0010	< 0.0010	0.0005
Copper	0.2	0.1	mg/L	0.00092	0.00121	0.00067	0.00093
Iron	2	1	mg/L	0.070	0.064	0.120	0.085
Lead	0.1	0.05	mg/L	< 0.00020	< 0.00020	< 0.00020	0.00010
Mercury	0.008	0.004	mg/L	< 0.00001	< 0.00001	< 0.00001	0.000005
Nickel	0.5	0.25	mg/L	0.0115	0.0092	0.0093	0.0100
Zinc	0.2	0.1	mg/L	< 0.0050	0.0050	< 0.0050	0.0033

^{*} Analysis for TPH was done as fractions by the lab. The fractions analyzed equal total petroleum hydrocarbon. All results were below detection limits.

Table 2.6.2: Whale Tail Attenuation Pond Discharge to Mammoth Lake East Diffuser (ST-WT-2a)

	Maximum	Maximum Authorized Monthly Mean Concentration	Unit	Sample Date			
Parameter	Authorized Concentration Grab Sample			7/5/2021	7/19/2021	7/26/2021	Monthly Average
Field Measured							
рН	6.0 - 9.5	6.0 - 9.5	pH units	7.22	6.98	6.96	7.05
Conventional Parameter	s			•	•		
Total suspended solids	30	15	mg/L	1	< 1	< 1	0.7
Nutrients				•	•		
Total phosphorus	0.6	0.3	mg/L	< 0.0010	0.0032	< 0.0010	0.0014
Total ammonia (NH3-N)	32	16	mg/L	0.85	0.79	0.95	0.86
Total Petroleum hydroca	arbons (TPH) *			•	•		
F2 (C10-C16)			mg/L	< 0.1	< 0.1	< 0.1	0.05
F3 (C16-C34)	6	3	mg/L	< 0.2	< 0.2	< 0.2	0.1
F4 (C34-C50)			mg/L	< 0.2	< 0.2	< 0.2	0.1
Total Metals				•	•		
Aluminum	1	0.5	mg/L	0.0111	0.0078	0.0057	0.0082
Arsenic	0.2	0.1	mg/L	0.00388	0.00522	0.00344	0.00418
Cadmium	0.004	0.002	mg/L	0.000014	0.000014	0.000013	0.000014
Chromium	0.04	0.02	mg/L	< 0.0010	< 0.0010	< 0.0010	0.0005
Copper	0.2	0.1	mg/L	0.00090	0.00245	0.00068	0.00134
Iron	2	1	mg/L	0.067	0.079	0.120	0.089
Lead	0.1	0.05	mg/L	< 0.00020	< 0.00020	< 0.00020	0.00010
Mercury	0.008	0.004	mg/L	< 0.00001	< 0.00001	< 0.00001	0.000005
Nickel	0.5	0.25	mg/L	0.0113	0.0092	0.0090	0.0098
Zinc	0.2	0.1	mg/L	< 0.0050	0.0104	< 0.0050	0.0051

^{*} Analysis for TPH was done as fractions by the lab. The fractions analyzed equal total petroleum hydrocarbon. All results were below detection limits.

SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2021 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for July.

Sixteen (16) spills occurred on site during the month with two (2) 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.

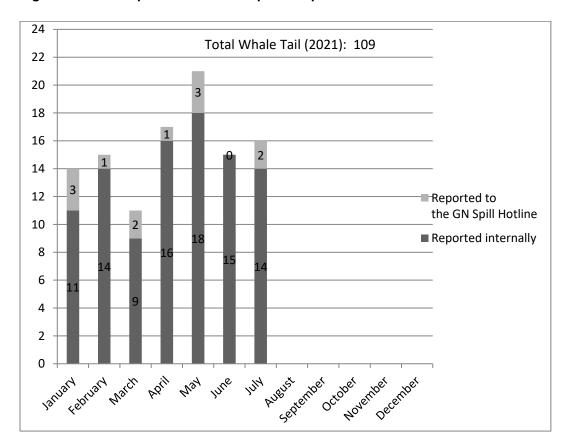


Figure 3.1 2021 Reported and Non-Reported Spills

Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, July 2021

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
7/2/2021	Diesel Fuel	5	L	WT WRSF	Fuel tank leakage	Contaminated soil was removed and adequately disposed of in the yellow bin
7/2/2021	Hydraulic Oil	10	L	Whale Tail Pit	Loose fitting	Contaminated soil was removed and adequately disposed of in the yellow bin
7/2/2021	Hydraulic Oil	5	٦	Whale Tail Pit	O-ring failure	Stopped equipment to contain spill. Contaminated material was removed and adequately disposed of in the yellow bin
7/2/2021	Diesel Fuel	20	L	KM 138 AMQ road	Malfunction of equipment and diesel fuel spilled from the valve.	Contaminated material was removed and adequately disposed in the contaminated bin at Meadowbank.
7/2/2021	Hydraulic Oil	78	L	Road 3 end of new ramp.	Track cylinder went off.	Mechanic was called to fix the cylinder. Contaminated material was removed and adequately disposed of.
7/3/2021	Hydraulic Oil	21	L	260-VT-N	Broken hydraulic hose	Spill was contained, spill pads were used and disposed of in Quatrex bin on surface. Contaminated material was removed and adequately disposed of
7/5/2021	Hydraulic Oil	45	L	Pad K	Broken brake line	Contaminated soil picked up and disposed in the yellow bin
7/5/2021	Petroleum Product	TBD	L	WT	Cracked line	Contaminated soil picked up and disposed in the yellow bin
7/5/2021	Hydraulic Oil	50	L	Pattern 5067MSK05	Broken hydraulic hose	Contaminated soil picked up and disposed of in the yellow bin
7/11/2021	Hydraulic Oil	400	L	IVR Pit Ramp	Hoist cylinder on HTR32 broke	Operator shut down the equipment once it was noticed and called mechanics to have the equipment fix. Contaminated

						material was collected and sent to the Meadowbank Landfarm.
7/11/2021	Diesel Fuel	20	L	Whale Tail Pit	Fuel leak from the breather	Used absorbent pads and removed contaminated soil with the loader. Contaminated soil picked up and adequately disposed of in the yellow bin.
7/21/2021	Oil	30	L	Truck parking	Lube station totes waste oil overflow from containment.	Oil and fuel was absorbed with pads and they were disposed of in proper waste containment drums. Area was cleaned up and contaminated soil picked up and disposed of in the yellow bin.
7/22/2021	Glycol	450	L	Pad Q	Coolant totes were being transported for storage to a shipping container on Pad Q. During transportation of a tote, the operator had noticed it was pierced, and leaking on the pad.	The operator placed the tote on its side to stop the leak. Spill pads were used to control the spill. The contaminated material was collected and brought to the tailings area at Meadowbank
7/23/2021	Coolant	25	L	WRSF	Equipment failure	Spill kit was use to contain the spill. Contaminated material was removed and adequately disposed of
7/25/2021	Coolant	30	L	Whale Tail Pit	Radiator fan motor broken)	Mechanic was called to assess the damage. Absorbent pads were put in place to contain the spill. Contaminated material was removed and adequately disposed of
7/30/2021	Engine oil	40	L	Underground	Broken oil pan	Spill was contained. Absorbent pads were disposed in the Quatrex bin. Contaminated soil picked up and adequately disposed of