

# WHALE TAIL PROJECT

# Monitoring Program Summary Report March 2020

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## SECTION 1 • BACKGROUND

As required under Part I, Item 23 of Type A Water License 2AM-WTP1826, 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 plan discharge, Whale Tail North Basin dewatering, Quarry 1 discharge and Whale Tail South Basin water transfer.

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

#### **SECTION 2 • WATER MANAGEMENT**

#### 2.1 WATER USAGE

All water withdrawals related to Exploration activities is currently managed by Part C Item 1 of the Exploration Water License 2BB-MEA1828. All of the information regarding the use under this License 2BB-MEA1828 will be provided via the Annual Report required by Part B Item 6.

Agnico Eagle is authorized as per Part E Item 1 of the Water License 2AM-WTP1826 to intake water from Nemo Lake for a total year to date of 240,000 m³/year. A total volume of 3,601 m³ was withdrawn from Nemo Lake in March. Details are provided in Table 2.1.1 below.

Table 2.1.1: March 2020 – Freshwater Consumption

Water Location	Source Lake	Jan	Feb	March	Total
Camp	Nemo	2 062	2 184	2 317	6 563
Construction/Operation	Nemo	1 518	1 840	1 284	4 642
Dust Suppression	Nemo / WTHR Pond	0	0	0	0
Total Freshwater Usage (m³)		3 579	4 024	3 601	11 205

#### 2.2 LAKE WATER MONITORING

Lake around the Whale Tail Project were monitored on a monthly basis during the open water season. In March, no monthly samples were taken at Lake A47 (ST-WT-6), Lake A45 (ST-WT-13), Lake A16 (ST-WT-14) and Lake A15 (ST-WT-15) due to freezing conditions.

#### 2.3 WHALE TAIL DIKE SEEPAGE MONITORING

In March, the Whale Tail North dewatering continued and seepage water was still observed at the toe of the structure. Seepage was estimated in average at 230 m<sup>3</sup>/h based on pumping rate which is a significant decrease from previous month.

Work was suspended on the grouting at Whale Tail Dike as the risk has been reduced to an acceptable level based on the lower inferred seepage rate and the progress of piping installation of the seepage interception system. The possibility of continuing the injection work later in 2020 or 2021 will be evaluated as part of a broader tradeoff study later in the year.

Agnico continue to manage water from WTD seepage as part of the dewatering of the Whale Tail North Basin and is be monitored for Water License 2AM-WTP1826 Part D Item 7. Refer to Section 2.5 below for the water quality monitoring results.

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

#### 2.4 SEWAGE TREATMENT PLANT

Effluent from the sewage treatment plan is discharged in the future Whale Tail Attenuation Pond. As per Water License Schedule I Sampling Station ST-WT-11, effluent is to be sample four time per calendar year. Agnico is currently sampling the STP minimally on a monthly basis and thus sample was taken in March. A total of 2,699 m<sup>3</sup> was discharged during the month.

#### 2.5 WHALE TAIL NORTH BASIN DEWATERING

As describe in Section 2.3 above, Agnico has discharged the Whale Tail Dike (WTD) seepage as part of the Whale Tail North Dewatering to Whale Tail South Basin (ST-DD-7). Water discharge was from March 1 to 8, March 15 to 22 and March 30 - 31. A total volume of 173,565 m³ was discharged in March.

No dewatering of the Whale Tail North Basin to Mammoth Lake (ST-DD-9), via the temporary diffuser, in March.

As per Water License Part D Item 7, the effluent from Whale Tail North dewatering, either to Whale Tail South or Mammoth Lake shall not exceed the following quality limits:

Parameter	Maximum Monthly Mean	Short Term Maximum
Total Suspended Solids	15.0 mg/L	22.5 mg/L
Turbidity	15 NTU	30 NTU
pН	6.0 to 9.0	6.0 to 9.0
Total Aluminum	1.5 mg/L	3.0 mg/L

The pH and Aluminum concentrations were as follows for ST-DD-7:

- pH 24 hour minimum/maximum: 6.73 / 7.57 (Limit is 6-9 units)
- pH 30 days minimum/maximum: 6.98 / 7.05 (Limit is 6-9 units)
- Al 24 hour maximum concentration: 0.027 mg/L (Limit is 3.0 mg/L)
- Al 30 days maximum concentration: 0.023 mg/L (Limit is 1.5 mg/L)

The turbidity and Total Suspended Solids (TSS) concentrations were as follows:

- NTU 24 hour maximum concentration: 5.82 NTU (Maximum Limit is 30 NTU)
- NTU 30 days mean maximum concentration: 1.67 NTU (Maximum Limit is 15 NTU).
- TSS 24 hour maximum concentration: 11 mg/L (Maximum Limit is 22.5 mg/L)
- TSS 30 days mean maximum concentration: 6.64 mg/L (Maximum Limit is 15 mg/L)

Table 2.5.1 summarizes the dewatering monitoring results for pH, aluminum, turbidity and TSS for the month. No non-compliance was observed in March.

Table 2.5.1: Whale Tail North Basin Dewatering Monitoring ST-DD-7

		ST-DD-7			License Requirement				
Date	Turbidity <sup>1</sup>	TSS <sup>2</sup>	pH <sup>1</sup>	Total Al <sup>2</sup>	NTU 30- day Mean	TSS 30- day Mean	pH 30- day Mean	Al 30- day Mean	
	NTU	mg/L		mg/L	15	15	6.0 - 9.0	3	
01-03-2020	2.24	3	7.18		1.31	6.64	7.02		
02-03-2020	0.75	10	6.94	0.027	1.37	6.33	7.03		
03-03-2020	1.95	3	7.50		1.33	6.62	7.03	0.023	
04-03-2020	2.36	3	6.75		1.37	6.36	7.05		
05-03-2020	5.82	3	6.73	0.017	1.42	6.13	7.04		
06-03-2020	1.03	2	6.80		1.65	5.94	7.02	0.017	
07-03-2020	1.78	8	7.12		1.62	5.71	7.01		
08-03-2020	0.67	6	6.82		1.63	5.83	7.02		
09-03-2020		No dischar	ge	•	1.59	5.84	7.01		
10-03-2020		No dischar	ge		1.59	5.84	7.01		
11-03-2020		No dischar	ge		1.59	5.84	7.01		
12-03-2020		No dischar	ge		1.59	5.67	7.01		
13-03-2020		No dischar	ge		1.61	5.67	7.00		
14-03-2020		No dischar	ge		1.61	5.67	6.99		
15-03-2020	Resta	arted during the nig	ht – no samp	ole	1.63	5.59	7.00		
16-03-2020	0.99	5	7.00	0.008	1.63	5.41	7.00	0.016	
17-03-2020	1.01	5	6.94		1.64	5.29	6.99		
18-03-2020	1.15	11	6.94		1.66	5.65	6.98		
19-03-2020	0.93	5	6.85		1.66	5.61	6.99		
20-03-2020	0.85	<1	6.88	<0.006	1.67	5.25	7.00	0.013	
21-03-2020	0.84	1	6.97		1.67	4.92	6.99		
22-03-2020	0.64	<1	7.05	<0.006	1.64	4.50	7.00	0.012	
23-03-2020		No dischar	ge	•	1.67	4.29	7.00		
24-03-2020		No dischar	ge		1.61	4.38	7.00		
25-03-2020		No dischar	ge		1.61	4.38	7.00		
26-03-2020		No dischar	ge		1.61	4.38	7.00		
27-03-2020		No dischar	ge	1.61	4.38	7.00			
28-03-2020		No dischar	ge		1.61	4.38	7.00		
29-03-2020		No dischar	ge		1.61	4.38	7.00		
30-03-2020	2.02	5	7.54		1.56	4.44	7.00		
31-03-2020	2.23	3	7.57		1.56	4.44	7.03		

Half-detection limit use in the mean calculation

<sup>2-</sup> Results from the certified laboratory

### 2.6 QUARRY 1 DISCHARGE

No discharge from Quarry to Mammoth Lake in March.

## 2.7 WHALE TAIL SOUTH WATER TRANSFER

No water transfer between Whale Tail South to Mammoth Lake in March.

#### **SECTION 3** • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2020 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for March.

All spills reported internally (32) were managed appropriately on site according to Agnico's spill contingency plan. One (1) spill was reported to regulators in March. 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.

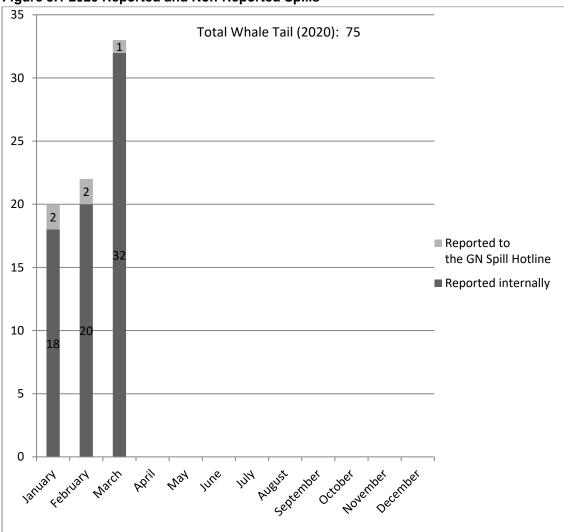


Figure 3.1 2020 Reported and Non-Reported Spills

Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, March 2020

Table 3.1. Cultillary of Agrico Lagic Internal and No					TPO-104 Opin Nopolito, mai on 2020			
Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken		
March 2, 2020	Diesel	0.25	L	RIG 5 on the side of road 7	When refueling the fuel canon, it was not leveled so the gage was not reading the right level and got overfilled	Stop refueling and add absorbent pads to clean the spill. Contaminated soil picked up and disposed of on quatrex for oily solid		
March 3, 2020	Hydraulic Oil	30	L	Whale Tail Pit Pat# 5130MSW68	Hydraulic hose failure	Absorbent pads were placed over the spill. The mechanic was called to replace the hose. Spill was contained and contaminated soil picked up and disposed of appropriately		
March 3, 2020	Coolant	15	L	Mine Washroom Parking	Coolant hose failure	Contaminated soil picked up and brought to UG shop in yellow bin		
March 3, 2020	Hydraulic Oil	15	L	Mine Washroom Parking	Hydraulic hose failure	Contaminated soil picked up and brought to UG shop in yellow bin		
March 4, 2020	Hydraulic Oil	60	L	E&I parking	Hydraulic hose failure	Operator shut down the loader and contain oil inside the affected zone. Spill was cleaned up and disposed into a yellow roll off bin		
March 8, 2020	Compressor Oil	30	L	Whale Tail Pit 5130MSW01	Seal between the compressor and engine was leaking	Absorbent pad was disposed over the spill and the rest of the material scrap with a shovel in a Quatrex bad		
March 9, 2020	Hydraulic Oil	5	L	Road 25	The operator had some problem with the blade. He stopped to check and he saw a leak under the dozer.	Called the dispatch for repair. Spill was contained and contaminated soil picked up and disposed of appropriately in the yellow roll of bin		
March 9, 2020	Hydraulic Oil	25	L	Whale Tail Pit	Quick attach on hydraulic hose failure	The operator stopped the engine right away and called the dispatch for the mechanic. Spill was		

March 10, 2020	Coolant	30	L	Mine Ops Parking at new camp	Coolant hose failure	contained and contaminated soil picked up and disposed of appropriately in the yellow roll of bin Mechanic as been called to fix the hose. Absorbent pad was put over the spill. Contaminated soil brought to the yellow bin.
March 10, 2020	Hydraulic Oil	400	L	Whale Tail Pit	During operations at Whale Tail Pit, DOZ03 was parked and idling when it caught fire. The Emergency Response team was called to put out the fire and sprayed water on the unit until the fire was out. The area was blocked off, absorbents and material was put down across the road to block stop the oil and water from the dozer from spreading	The spill will be collected and brought to the Meadowbank land farm once the scene is unfrozen and the equipment is removed.
March 10, 2020	Hydraulic Oil	35	L	Whale Tail Pit	Equipment failure	Called the mechanic to check where the leak comes from and also to fix it and clean the spill. Spill was contained and contaminated soil picked up and disposed of appropriately in the yellow roll of bin
March 10, 2020	Coolant	74	L	Ring road	Coolant hose failure	Stopped the engine right away and called the dispatch to advise the mechanics. Spill was contained and contaminated soil picked up and disposed of appropriately in the yellow roll of bin
March 10, 2020	Hydraulic Oil	50	L	Whale Tail Pit	Equipment failure	Stopped the engine right away and called the dispatch for the mechanic. Spill was contained and contaminated soil picked

						up and disposed of appropriately in the yellow roll of bin
March 12, 2020	Hydraulic Oil	2	L	0-6' stockpile	Equipment failure	Spill was contained and contaminated soil picked up and disposed of in Sana quatrex bag
March 14, 2020	Diesel	50	L	Fountain tire shop	The nozzle popped out from the hose.	Close the valve right away and called the supervisor. Spill was contained and contaminated soil picked up and disposed of appropriately in the yellow roll of bin
March 17, 2020	Hydraulic Oil	20	L	FGL garage	While warming the haul- truck the rear axle start to leaked	Contaminated soil picked up and disposed of appropriately
March 18, 2020	Diesel	25	L	Underground Shop	The operator was going to fuel equipment and hit a toe on the floor and made a hole in the fuel truck tank on the left side	Contaminated soil was scraped up and sent to Hazmat storage.
March 18, 2020	Hydraulic Oil	57	L	Sana Crusher	Hydraulic hose failure	Stop the engine right away and called the supervisor and the dispatch for mechanic. Contaminated soil was scraped up and sent to Hazmat storage.
March 18, 2020	Coolant	60	L	Whale Tail Phase 1.5109MSW 05	Coolant hose failure	Spill was contained and contaminated soil picked up and disposed of to the contaminate bin.
March 19, 2020	Coolant	60	L	Whale Tail Phase 1	Equipment failure	Stopped the engine right away and called the dispatch for mechanic. Spill was contained and contaminated soil picked up and disposed of to the contaminate bin.
March 20, 2020	Hydraulic Oil	5	L	Pad E	Hydraulic hose failure	Stopped the engine and called the dispatch right away. Spill was contained and contaminated soil

						picked up and disposed of to the contaminate bin.
March 21, 2020	Coolant	50	L	Ore storage	Coolant hose failure	Contaminated soil was brought to the yellow bin located at the Hazmat area
March 22, 2020	Hydraulic Oil	5	L	Ore storage	Hydraulic hose failure	Contaminated soil was brought to the yellow bin located at the Hazmat area
March 22, 2020	Coolant	40	L	Haul truck parking	Radiator failure	Contaminated soil was brought to the yellow bin located at the Hazmat area
March 23, 2020	Compressor Oil	20	L	Whale Tail Pit 5109MSW15	Compressor oil / pressure valve defective	Contaminated soil was brought to the yellow bin
March 24, 2020	Hydraulic Oil	10	L	Haul truck Parking	The spill was from the cap of the hydraulic thank.	Contaminated soil was brought to the yellow bin
March 24, 2020	Diesel	10	L	Whale Tail Pit 5109MSW15	Diesel vent on top of fuel tank failed	Mechanic was called to repair vent. Contaminated soil was brought to the yellow bin
March 25, 2020	Hydraulic Oil	30	L	Whale Tail Pit 5123msw45	Equipment failure	Shovel was turned off and repaired. Contaminated soil was brought to the contaminated bin located at the Hazmat area
March 28, 2020	Hydraulic Oil	75	L	Whale Tail Pit	Hydraulic hose failure	Contaminated soil was brought to the yellow bin
March 28, 2020	Coolant	10	L	Whale Tail Pit	Blown brake cooler return hose	Contaminated material picked up and disposed of adequately
March 28, 2020	Hydraulic Oil	15	L	Whale Tail Pit, road 3	Equipment failure	Contaminated soil was brought to the yellow bin
March 29, 2020	Coolant	35	L	Haul Truck Parking	Equipment failure	Contaminated soil was brought to the yellow bin

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March 31, 2020	Hydraulic Oil	80	L	Whale Tail Pit pattern 07	Equipment failure	Operator put absorbent pad to contain the spill. Contaminated soil was brought to the yellow bin
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