



**AGNICO EAGLE**

WHALE TAIL PROJECT

# **Monitoring Program Summary Report**

**August 2022**

Type A Water License 2AM-WTP1830

## Table of Contents

<b>SECTION 1 • BACKGROUND .....</b>	<b>3</b>
<b>SECTION 2 • WATER MANAGEMENT .....</b>	<b>4</b>
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
2.6 WHALE TAIL/IVR ATTENUATION PONDS .....	5
<b>SECTION 3 • SPILL MANAGEMENT .....</b>	<b>7</b>

## **SECTION 1 • BACKGROUND**

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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 (m<sup>3</sup>)**

Water Location	Source Lake	Jan	Feb	March	April	May	June
Camp	Nemo	2,022	2,819	3,084	3,162	3,265	3,144
Construction/Operation	Nemo	739	1,978	2,101	3,191	4,532	3,574
Dust Suppression	WTHR Pond	0	0	0	0	1,100	2,510
Explosive	Mammoth Lake	0	0	0	0	0	0
Drilling	Proximal Sources	0	0	0	0	0	0
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>2,761</b>	<b>4,797</b>	<b>5,185</b>	<b>6,353</b>	<b>8,897</b>	<b>9,228</b>

Water Location	Source Lake	July	Aug	Total
Camp	Nemo	3,274	3,231	<b>24,001</b>
Construction/Operation	Nemo	3,873	3,424	<b>23,412</b>
Dust Suppression	Nemo / WTHR Pond	4,350	775	<b>8,735</b>
Explosive	Mammoth Lake	0	0	<b>0</b>
Drilling	Proximal Sources	0	0	<b>0</b>
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>11,497</b>	<b>7,430</b>	<b>56,148</b>

### 2.2 LAKE WATER MONITORING

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

### 2.3 WHALE TAIL SOUTH CHANNEL

The Whale Tail South Channel was operational in August. An estimated 371,020 m<sup>3</sup> 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 (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 August. A total of 2,992 m<sup>3</sup> was discharged during the month.

## **2.6 WHALE TAIL/IVR ATTENUATION PONDS**

Water from the IVR Attenuation Pond was discharged during the month of August in Mammoth Lake. Discharge in Mammoth Lake East Diffusor was from August 1 to 31. Water was treated by the Water Treatment Plan before discharge. A total of 364,244 m<sup>3</sup> 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 below. No non-compliance observed during the month of August 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 East Diffuser (ST-WT-2a)**

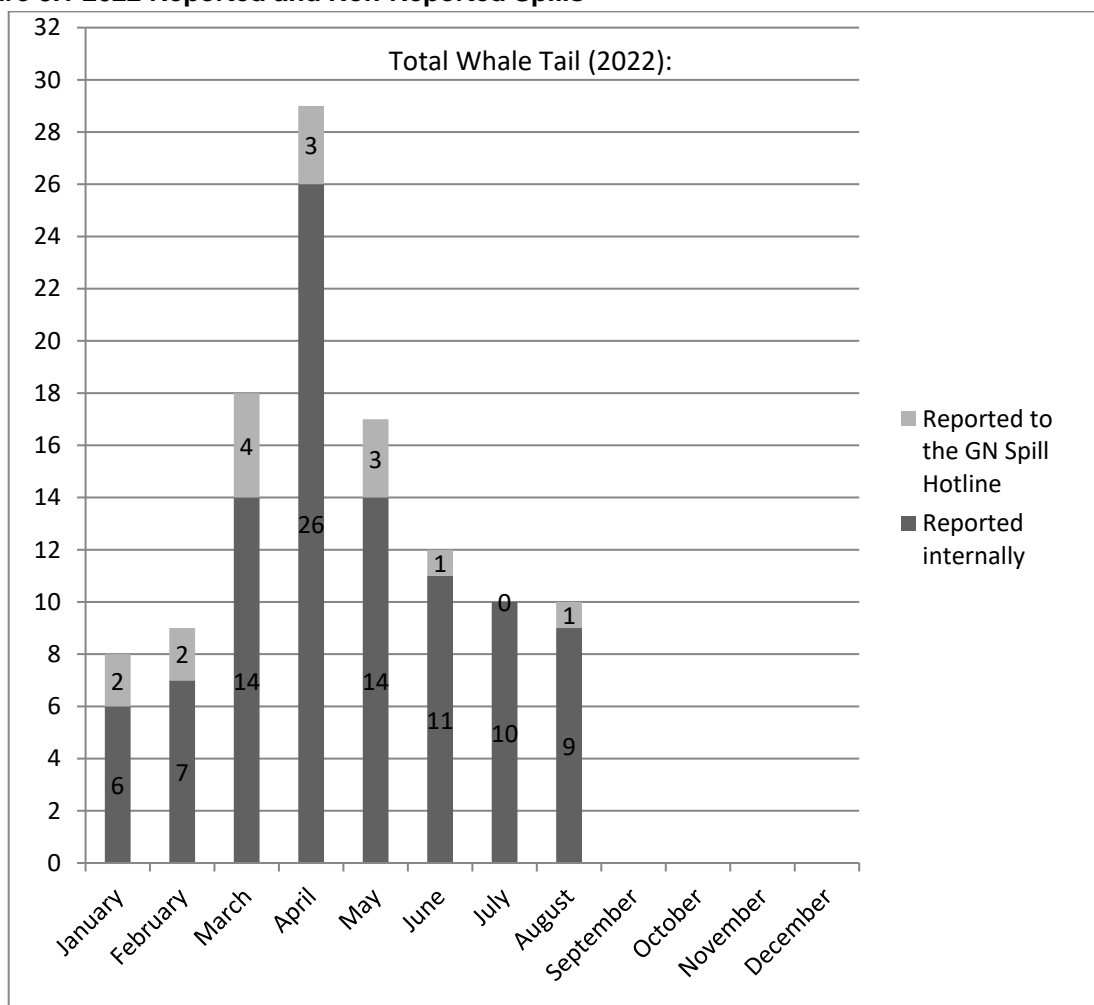
Parameter	Maximum Authorized Concentration Grab Sample	Maximum Authorized Monthly Mean Concentration	Unit	Sample Date					Monthly Average
				8/1/2022	8/8/2022	8/15/2022	8/22/2022	8/29/2022	
<b>Field Measured</b>									
pH	6.0 - 9.5	6.0 - 9.5	pH units	6.83	7.39	6.89	7.18	6.60	<b>6.98</b>
<b>Conventional Parameters</b>									
Total suspended solids	30	15	mg/L	2	4	3	2	1	<b>2.4</b>
<b>Nutrients</b>									
Total phosphorus	0.6	0.3	mg P/L	0.01	< 0.0010	< 0.0010	< 0.0010	0.0014	<b>0.0026</b>
Ammonia Nitrogen (NH3-N)	32	16	mg N/L	< 0.05	0.32	0.67	0.24	0.21	<b>0.29</b>
<b>General Organics</b>									
Total petroleum hydrocarbons	6	3	mg/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	<b>0.1</b>
<b>Total Metals</b>									
Aluminum	1	0.5	mg/L	0.0113	0.0158	0.013	0.0099	0.0055	<b>0.0111</b>
Arsenic	0.2	0.1	mg/L	0.00715	0.012	0.00654	0.00521	0.0042	<b>0.00702</b>
Cadmium	0.004	0.002	mg/L	0.000011	0.000014	<0.000010	<0.000010	< 0.000010	<b>0.000008</b>
Chromium	0.04	0.02	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	<b>0.0005</b>
Copper	0.2	0.1	mg/L	0.00091	0.00096	0.00136	0.00101	0.00091	<b>0.00103</b>
Iron	2	1	mg/L	0.354	0.749	0.481	0.307	0.221	<b>0.422</b>
Lead	0.1	0.05	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<b>0.00010</b>
Mercury	0.008	0.004	mg/L	<0.00001	<0.00001	< 0.00001	<0.00001	<0.00001	<b>0.000005</b>
Nickel	0.5	0.25	mg/L	0.0157	0.0244	0.0176	0.0144	0.0138	<b>0.0172</b>
Zinc	0.2	0.1	mg/L	< 0.0050	0.0059	0.0076	< 0.0050	< 0.0050	<b>0.0042</b>

### 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 August.

Ten (10) spills occurred on site during the month with one (1) 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 2022 Reported and Non-Reported Spills**



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

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
8/2/2022	Hydraulic Oil	20	L	Whale Tail Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
8/3/2022	Sewage Sludge	50	L	Sewage Treatment Plant	Sewage overflow due to malfunction after power outage	The vacuum truck was used to collect any sewage sludge that had pooled on the surface. A small excavator and hand shovels were used to scrape the ground. Approximately 2m3 of contaminated material was collected and adequately disposed of. Sewage Treatment Plant Operators will complete a walk through and check of working areas after electrical shutdowns or power failures.
8/4/2022	Engine Coolant	2	L	WTHR KM 141	Equipment failure	Absorbent pads were used and contaminated soil was collected and brought to a Quatrex bag for disposal.
8/5/2022	Engine Coolant	6	L	WTHR KM 138	Equipment failure	Absorbent pads were used and contaminated soil was collected and brought to a yellow bin for disposal.
8/5/2022	Windshield Washer Fluid	80	L	Washer Fluid Station	Valve left open	The valve was closed and the nozzle set into the secondary containment container. Absorbent pads were used and contaminated soil was collected and brought to a yellow bin for disposal.
8/11/2022	Transmission Fluid	4	L	Underground Shop Yard	Spilled fluid while towing to shop	Contaminated soil was collected and brought to a yellow bin for disposal.
8/17/2022	Greywater	90	L	Kitchen	Unknown	Vacuum truck removed greywater and it was adequately disposed of. Leak will be fixed once floor is replaced in the dish pit.
8/26/2022	Hydraulic Oil	10	L	IVR Pit	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
8/30/2022	Coolant	5	L	WTHR KM 175	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
8/30/2022	Hydraulic Oil	40	L	IVR WRSF	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.