



**AGNICO EAGLE**

WHALE TAIL PROJECT

## **Monitoring Program Summary Report**

**June 2022**

Type A Water License 2AM-WTP1830

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## **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         | Total         |
|---|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Camp  | Nemo             | 2,022        | 2,819        | 3,084        | 3,162        | 3,265        | 3,144        | 17,496        |
| Construction/Operation                        | Nemo             | 739          | 1,978        | 2,101        | 3,191        | 4,532        | 3,574        | 16,116        |
| Dust Suppression                              | WTHR Pond        | 0            | 0            | 0            | 0            | 1,100        | 2,510        | 3,610         |
| Explosive                                     | Mammoth Lake     | 0            | 0            | 0            | 0            | 0            | 0            | 0             |
| Drilling                                      | Proximal Sources | 0            | 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> | <b>37,222</b> |

### 2.2 LAKE WATER MONITORING

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

### 2.3 WHALE TAIL SOUTH CHANNEL

The Whale Tail South Channel was operational in June. An estimated 1,344,377 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 June. A total of 2,842.5 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 June in Whale Tail South and Mammoth Lake. Discharge in Whale Tail South Permanent Diffusor was from June 1 to 16 and discharge in Mammoth Lake East Diffusor was from June 16 to 30. Water was treated by the Water Treatment Plan before discharge. A total of 410,152 m<sup>3</sup> was discharged to Whale Tail South and 164,317 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 and 2.6.2 below. No non-compliance observed during the month of June 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 Whale Tail South Permanent Diffuser (ST-WT-24)**

| Parameter                    | Maximum Authorized Concentration Grab Sample | Maximum Authorized Monthly Mean Concentration | Unit     | Sample Date |            | Monthly Average |
|------------------------------|--|---|----------|-------------|------------|-----------------|
|                              |  |   |          | 6/6/2022    | 6/13/2022  |                 |
| Field Measured               |  |   |          |             |            |                 |
| pH                           | 6.0 - 9.5                                    | 6.0 - 9.5                                     | pH units | 6.86        | 7.11       | 6.99            |
| Conventional Parameters      |  |   |          |             |            |                 |
| Total suspended solids       | 30   | 15  | mg/L     | 2           | 2          | 2               |
| Nutrients                    |  |   |          |             |            |                 |
| Total phosphorus             | 0.6  | 0.3   | mg P/L   | 0.0046      | < 0.0010   | 0.0026          |
| Ammonia Nitrogen (NH3-N)     | 32   | 16  | mg N/L   | 0.67        | 0.39       | 0.53            |
| General Organics             |  |   |          |             |            |                 |
| Total petroleum hydrocarbons | 6  | 3   | mg/L     | < 0.2       | < 0.2      | 0.1             |
| Total Metals                 |  |   |          |             |            |                 |
| Aluminum                     | 1  | 0.5   | mg/L     | 0.0298      | 0.0181     | 0.0240          |
| Arsenic                      | 0.2  | 0.1   | mg/L     | 0.00874     | 0.00493    | 0.00684         |
| Cadmium                      | 0.004  | 0.002   | mg/L     | < 0.000010  | < 0.000010 | 0.000005        |
| Chromium                     | 0.04   | 0.02  | mg/L     | < 0.0010    | < 0.0010   | 0.0005          |
| Copper                       | 0.2  | 0.1   | mg/L     | 0.00095     | 0.00088    | 0.00092         |
| Iron                         | 2  | 1   | mg/L     | 0.234       | 0.126      | 0.180           |
| Lead                         | 0.1  | 0.05  | mg/L     | < 0.00020   | <0.00020   | 0.00010         |
| Mercury                      | 0.008  | 0.004   | mg/L     | < 0.00001   | < 0.00001  | 0.000005        |
| Nickel                       | 0.5  | 0.25  | mg/L     | 0.0156      | 0.0128     | 0.0142          |
| Zinc                         | 0.2  | 0.1   | mg/L     | < 0.0050    | 0.0050     | 0.0038          |

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

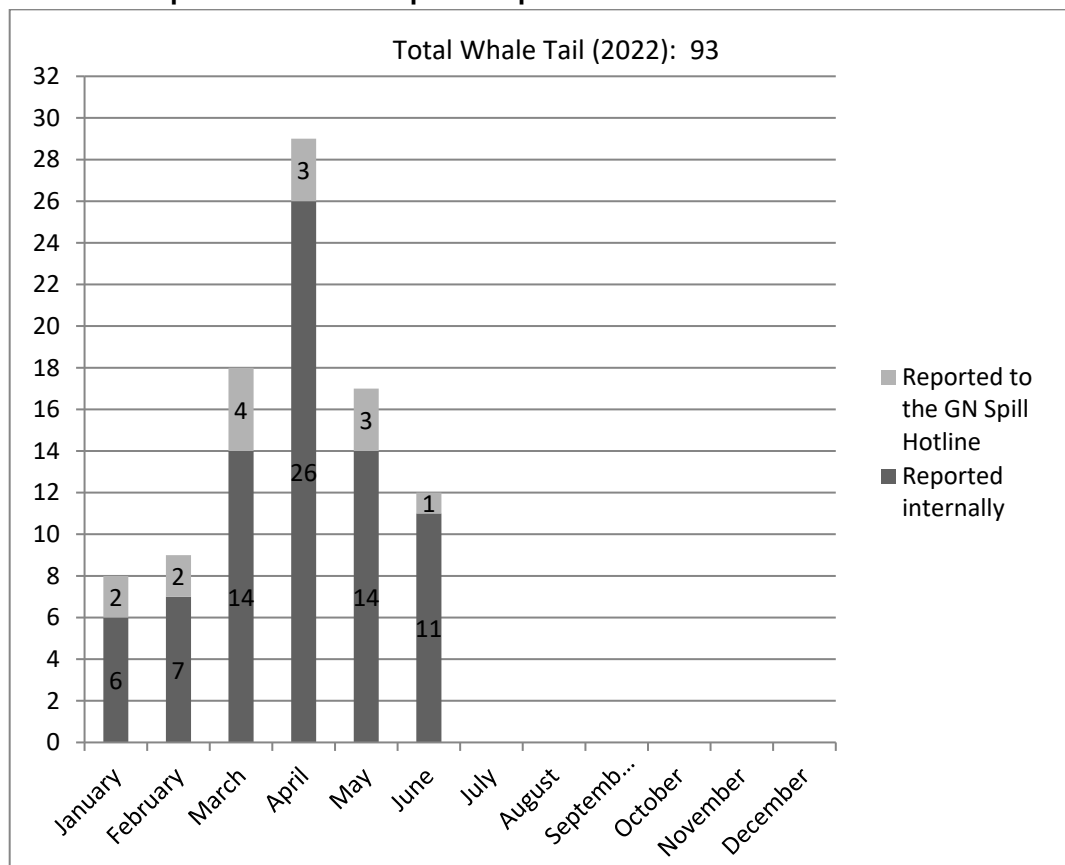
| Parameter                    | Maximum Authorized Concentration Grab Sample | Maximum Authorized Monthly Mean Concentration | Unit     | Sample Date |            |            | Monthly Average |
|------------------------------|--|---|----------|-------------|------------|------------|-----------------|
|                              |  |   |          | 6/18/2022   | 6/20/2022  | 6/27/2022  |                 |
| Field Measured               |  |   |          |             |            |            |                 |
| pH                           | 6.0 - 9.5                                    | 6.0 - 9.5                                     | pH units | 6.91        | 6.89       | 7.11       | 6.97            |
| Conventional Parameters      |  |   |          |             |            |            |                 |
| Total suspended solids       | 30   | 15  | mg/L     | < 1         | < 1        | 1          | 0.7             |
| Nutrients                    |  |   |          |             |            |            |                 |
| Total phosphorus             | 0.6  | 0.3   | mg P/L   | 0.0014      | 0.0024     | 0.0020     | 0.0019          |
| Ammonia Nitrogen (NH3-N)     | 32   | 16  | mg N/L   | 0.31        | 0.25       | 0.28       | 0.28            |
| General Organics             |  |   |          |             |            |            |                 |
| Total petroleum hydrocarbons | 6  | 3   | mg/L     | < 0.2       | < 0.2      | < 0.2      | 0.1             |
| Total Metals                 |  |   |          |             |            |            |                 |
| Aluminum                     | 1  | 0.5   | mg/L     | 0.0084      | 0.0074     | 0.0066     | 0.0075          |
| Arsenic                      | 0.2  | 0.1   | mg/L     | 0.00504     | 0.00227    | 0.00125    | 0.00285         |
| Cadmium                      | 0.004  | 0.002   | mg/L     | < 0.000010  | < 0.000010 | < 0.000010 | 0.000005        |
| Chromium                     | 0.04   | 0.02  | mg/L     | < 0.0010    | < 0.0010   | < 0.0010   | 0.0005          |
| Copper                       | 0.2  | 0.1   | mg/L     | 0.00096     | 0.00079    | 0.00077    | 0.00084         |
| Iron                         | 2  | 1   | mg/L     | 0.053       | 0.053      | 0.054      | 0.053           |
| 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     | 0.0162      | 0.0125     | 0.0118     | 0.0135          |
| Zinc                         | 0.2  | 0.1   | mg/L     | < 0.0050    | < 0.0050   | < 0.0050   | 0.0025          |

## 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 June.

Twelve (12) 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, June 2022**

| Date of Spill | Hazardous Material | Qty | Units (L / Kg) | Location         | Cause of spill        | Clean-up action taken  |
|---------------|--------------------|-----|----------------|------------------|-----------------------|--|
| 6/5/2022      | Diesel Fuel        | 80  | L              | Orbit Garage pad | Improper Storage      | Absorbent matting was put on the spill. The contaminated soil was removed by small excavator (3 buckets) Soil was loaded into a yellow bin and hauled to MBK landfarm  |
| 6/6/2022      | Hydraulic Oil      | 55  | L              | IVR Pit          | Equipment Failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/13/2022     | Coolant            | 10  | L              | WTHR KM 122      | Equipment failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/15/2022     | Hydraulic Oil      | 90  | L              | Whale Tail Pit   | Equipment failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/16/2022     | Engine Oil         | 800 | L              | Warehouse        | Damaged Tote          | The equipment was immediately removed from the area by the operator and absorbent pads/booms were placed around the seacan to contain the leak. Additionally, granular absorbent and a small pump were used to collect as much oil as possible. The seacan was then removed by the container handler to allow the decontamination of the area, approximately 12m <sup>3</sup> of contaminated soil was collected and brought to the Meadowbank landfarm. |
| 6/23/2022     | Transmission Fluid | 25  | L              | Whale Tail Pit   | Damaged Oil Pan       | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/23/2022     | Hydraulic Oil      | 10  | L              | Warehouse        | Equipment failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/23/2022     | Diesel Fuel        | 20  | L              | Near Peanut Lake | Equipment Malfunction | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/23/2022     | Diesel Fuel        | 10  | L              | IVR Pit          | Equipment failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/24/2022     | Coolant            | 25  | L              | IVR Pit          | Equipment failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/24/2022     | Hydraulic Oil      | 10  | L              | Whale Tail WRSF  | Equipment failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |
| 6/25/2022     | Hydraulic Oil      | 10  | L              | Washroom Parking | Equipment failure     | Contaminated soil was collected and brought to a yellow bin for disposal.  |