



WHALE TAIL PROJECT

## **Monitoring Program Summary Report**

**December 2018**

Type A Water License 2AM-WTP1826

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## **SECTION 1 • BACKGROUND**

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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 monitoring around site, sewage treatment plan discharge and Whale Tail Dike construction monitoring.

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

## **SECTION 2 • WATER MANAGEMENT**

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### **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.

Starting on October 28, the Exploration Camp freshwater source become Nemo Lake, which is the approved freshwater source as per Water License 2AM-WTP1826. 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 during construction of 220,750 m<sup>3</sup>/year. A total volume of 1,426 m<sup>3</sup> was withdrawn from Nemo Lake in December. Total year to date is 3,136 m<sup>3</sup>.

Following approval of the NWB, Agnico has been allowed under Part E item 3 of the Water License 2AM-WTP1826 and as per the NWB reason for decision letter to '*obtain water for domestic camp use during construction in 2018 from Whale Tail Lake with a total volume not exceeding 63,150 cubic metres per year from the date on which the Minister approves the issuance of the Licence through to the end 2018*'. In December, 677 m<sup>3</sup> was taken in Whale Tail Lake under this license for a total year to date of 9,285 m<sup>3</sup>.

### **2.2 LAKE A47 WATER MONITORING**

No monitoring sample at Lake A47 (ST-WT-6) was collected in December due to frozen condition.

### **2.3 LAKE A15 WATER MONITORING**

No monitoring sample at Lake A15 (ST-WT-15) was collected in December due to frozen condition.

### **2.4 LAKE A16 OUTLET WATER MONITORING**

No monitoring sample at Lake A16 (ST-WT-14) was collected in December due to frozen condition.

### **2.5 SEEPAGE MONITORING**

No seepage has been observed in December around the site.

### **2.6 SEWAGE TREATMENT PLANT**

Effluent from the Sewage Treatment Plan (STP) is discharged to the Whale Tail Lake North Basin and is monitored as per the Water License 2BB-MEA1828 Part D Item 10. Agnico still considers the camp and all the facilities associated to be Amaruq Exploration Camp. All of the

information regarding this discharge will be provided via the Annual Report required by 2BB-MEA1828 Part B Item 6.

Agnico plans to have a Sewage Treatment Plan associated with the Water License 2AM-WTP1826 in 2019.

## **2.7 WHALE TAIL DIKE CONSTRUCTION**

The construction of Whale Tail Dike started on July 27, 2018 and the rockfill placement was completed in August. Since the rockfill placement was completed, the turbidity curtains (3) installed downstream of the dike has been removed in September. The two (3) turbidity curtain north side of the dike are still in place. Secant wall installation completed early December. Grout curtain of the Whale Tail Dike was ongoing in December.

The fishout of the Whale Tail North Basin was stopped on September 29 because conditions did not permit safe continuation of work. Discussions are ongoing with ECCC. The complete report will be provided with the Whale Tail Annual Report.

In accordance with the Water License 2AM-WTP1826 Part D Item 6 and the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, the monitoring of the TSS level at four (4) locations downstream of the dike is based on the strong relation TSS-Turbidity which permit real time results. As detailed in this plan, daily depth profile turbidity readings have been taken at these locations and compared to the maximum monthly mean and short term maximum limit detailed in 2AM-WTP1826 Part D Item 6. No TSS exceedance has been observed in December as shown in Table 2-1 below.

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Table 2-1: Whale Tail Dike TSS Downstream monitoring station based on TSS-Turbidity relation

Date	Station	1	2	3	4	5	6	7	8	Max TSS 24H (mg/L)	Mean TSS 24H (mg/L)	TSS 7 Day Mean (mg/L)	TSS 30 Day Mean (mg/L)
<b>Limit (mg/L)</b>										<b>50</b>	<b>50</b>	<b>15</b>	<b>15</b>
2018-12-12	ST-WT-DC1	0.050	0.063							0.063	0.057	0.281	0.202
	ST-WT-DC2	0.000	0.000	0.000	0.000	0.000				0.000	0.000	0.237	0.190
	ST-WT-DC3	1.111	1.345	0.884						1.345	1.113	0.393	0.230
	ST-WT-DC4	0.000	0.000	0.000						0.000	0.000	0.260	0.310
2018-12-18	ST-WT-DC1	0.196	0.179	0.140						0.196	0.172	0.297	0.192
	ST-WT-DC2	0.020	0.012	0.000	0.000	0.000	0.000	0.000		0.020	0.005	0.232	0.173
	ST-WT-DC3	3.404	3.062	2.125	0.876					3.404	2.367	0.727	0.293
	ST-WT-DC4	0.000	0.000	0.000						0.000	0.000	0.256	0.293

## **2.8 MAMMOTH DIKE CONSTRUCTION**

The construction of Mammoth Dike is planned to start at the end on January 2019. In December 2018, only snow removal to expose foundation have been done.

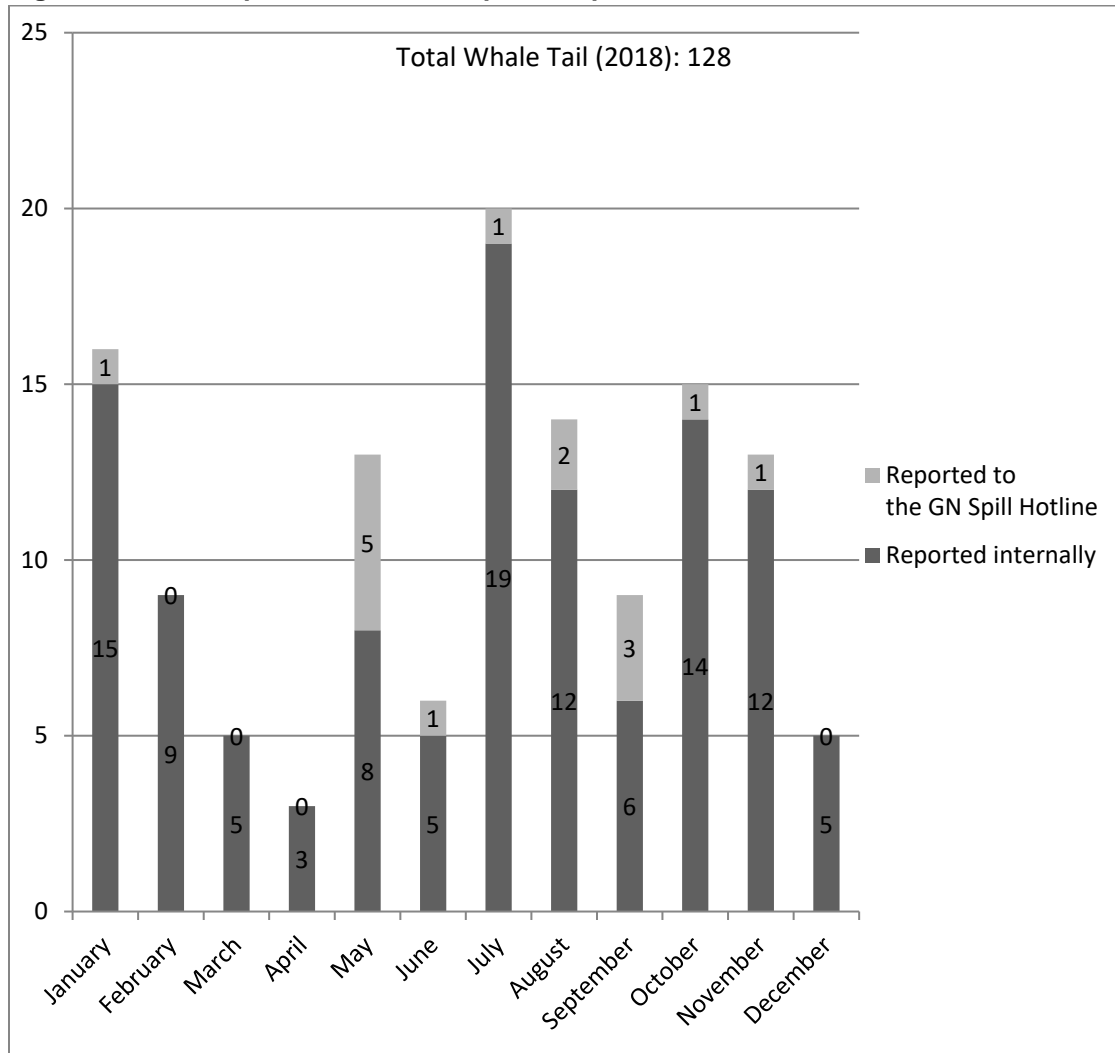
In accordance with the Water License 2AM-WTP1826 Part D Item 6 and the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, the monitoring of TSS level in Mammoth Lake will start as soon as the dike construction starts.

## SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2018 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for December. All spills related to the Whale Tail Project or the Whale Tail Road are included in this report.

All spills reported internally (5) were managed appropriately on site according to Agnico's spill contingency plan. No spills were reported to regulators in December. 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 2018 Reported and Non-Reported Spills**





**Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, December 2018**

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
December 7, 2018	Hydraulic Oil	20	L	Whale Tail Quarry 2	Hydraulic hose failure	Spill was contained and contaminated soil picked up and disposed of appropriately
December 19, 2018	Coolant	15	L	Whale Tail PAD H	Coolant hose failure	Spill was contained and contaminated soil picked up and disposed of appropriately
December 21, 2018	Hydraulic Oil	60	L	Whale Tail Sana crusher	When draining a hydraulic oil tank, wrong size of funnel and buckets were used to collect the used hydraulic oil	Spill was contained and contaminated soil picked up and disposed of appropriately
December 21, 2018	Transmission Fluid	10	L	Whale Tail Rock Storage Facility	Equipment failure	Spill was contained and contaminated soil picked up and disposed of appropriately
December 30, 2018	Sewage	25	L	Whale Tail Sanitary block	We had to Employee had to unfledged the pipe to pass the steamer - the pipe vertical section emptied on the snow	Spill was contained and contaminated soil picked up and disposed of appropriately