



NUNAVUT WATER BOARD

WATER LICENCE NO: 2AM-WTP1826



TABLE OF CONTENTS

PART A:	SCOPE, DEFINITIONS AND ENFORCEMENT	2
1.	SCOPE	2
2.	DEFINITIONS	3
3.	ENFORCEMENT	3
PART B:	GENERAL CONDITIONS	4
PART C:	CONDITIONS APPLYING TO SECURITY	7
PART D:	CONDITIONS APPLYING TO CONSTRUCTION AND OPERATION	8
PART E:	CONDITIONS APPLYING TO WATER USE AND MANAGEMENT	11
PART F:	CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT	13
PART G:	CONDITIONS APPLYING TO MODIFICATIONS	16
PART H:	CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING	17
PART I:	CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING	18
PART J:	CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE	22
SCHEDULES	24
Schedule A:	Scope, Definitions, and Enforcement	25
Schedule B:	General Conditions	36
Schedule D:	Conditions Applying to Construction	39
Schedule I:	Conditions Applying to General and Aquatic Effects Monitoring	40



Licence No. 2AM-WTP1826

Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

AGNICO EAGLE MINES LIMITED

(Licensee)

145, KING STREET EAST, SUITE 400, TORONTO, ONTARIO M5C 2Y7

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or deposit waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type:	2AM-WTP1826 / Type "A"
Water Management Area:	THELON, QUOICH & BACK WATERSHEDS (5, 9 & 31)
Location:	WHALE TAIL PIT MINE AND HAUL ROAD KIVALLIQ REGION, NUNAVUT
Purpose:	WATER USE AND DEPOSIT OF WASTE
Description:	MINING UNDERTAKING
Quantity of Water not to be Exceeded:	240,000 CUBIC METRES ANNUALLY DURING CONSTRUCTION AND OPERATION AND 10,655,000 CUBIC METRES ANNUALLY DURING CLOSURE AS PER PART E
Date of Issuance:	MAY 29, 2018
Expiry of Licence:	MAY 28, 2026

This Licence issued (**Motion Number 2018-06-P17-06**) and recorded at Gjoa Haven, Nunavut includes and is subject to the annexed conditions.

Lootie Toomasie
Nunavut Water Board
Chair

APPROVED
BY:

Carolyn Bennett
Minister of Crown-Indigenous
Relations and Northern Affairs

DATE LICENCE
APPROVED:



PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. SCOPE

- a. This Licence authorizes the Licensee to the use of Waters and deposit of Wastes in support of a Mining Undertaking classified as per Schedule 1 of the *Regulations*, at the Whale Tail Pit Project as outlined in the Type “A” Water Licence Application (Application) submitted to the Nunavut Water Board (NWB) on July 8, 2016 and as reviewed throughout the regulatory process.

The Licensee may conduct mining and associated activities at the Whale Tail Pit Project in the Kivalliq Region of Nunavut at the following project extents:

Project Extents	Latitude	Longitude
Haul Road	65° 04' 53.3'' N	96° 01' 00.8'' W
	65° 23' 49.7'' N	96° 40' 35.8'' W
Whale Tail Pit Project Area	65° 25' 22.241'' N	96° 46' 06.042'' W
	65° 25' 12.707'' N	96° 35' 44.100'' W
	65° 21' 35.740'' N	96° 36' 03.944'' W
	65° 21' 45.248'' N	96° 46' 24.463'' W
Whale Tail Pit Camp Site	65° 24' 36'' N	96° 41' 41'' W

In general, the scope of the activities, works and Undertakings authorized in accordance with the terms and conditions of the Licence are as follows:

- Withdrawal and use of water from Nemo Lake for camp, mining, associated activities and domestic purposes;
- Withdrawal and use of water from unnamed lake approximately 250 metres from the Emulsion Plant for use in explosives mixing;
- Withdrawal and use of water from Whale Tail Lake (South Basin) for camp operation and re-flooding of open pit following pit development during Closure;
- Dewatering of Whale Tail Lake North Basin;
- Quarrying of materials from specified locations;
- Operation of a camp at the Whale Tail Pit Project site;
- Construction and operation of the Whale Tail Haul Road, site roads, including associated water crossings and bridges;
- Construction and operation of the Whale Tail Waste Rock Storage Facility, and Ore Stockpiles;
- Operation of satellite mine site facilities including bulk fuel storage, shops, offices warehouse and camp;
- Operation of a Sewage Treatment Plant, Wastewater Treatment Plant and controlled discharge of treated Effluent during operations;



- Set-up and operation of diesel fired equipment including the Waste Incinerator or approved equipment;
 - Construction and operation of an emulsion facility;
 - Construction and operation of the Whale Tail Landfill;
 - Use of an approved landfarm facility;
 - Operation of the Whale Tail Attenuation Pond;
 - Management and disposal of Wastes associated with the Whale Tail satellite deposit including: waste rock storage facility, landfill, ore stockpiles, water treatment plant, attenuation pond and other wastes as described in the Application;
 - Handling and storage of petroleum products and hazardous materials including explosives and other reagents;
 - Construction and operation of Contact and Non-Contact Water management systems;
 - Construction of Whale Tail site water management infrastructure including: Whale Tail Dike, Mammoth Dike, Waste Rock Storage Facility Dike, Northwest Dike, Mammoth Channel Culvert, Whale Tail Attenuation Pond, Saddle/Coffer Dam, and Whale Tail Diversion Channel;
 - Controlled and regulated Discharge of Effluent to Mammoth Lake from Whale Tail Attenuation Pond via Mammoth Lake Diffuser;
 - Re-flooding of Whale Tail open pit following pit development; and
 - Planning for, and carrying out progressive Reclamation, Closure and Abandonment of on-site facilities and infrastructure.
- b. This Licence is issued subject to conditions contained herein with respect to the use of Waters and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or the existing *Regulations* are amended by the Governor in Council under the *Act*, or other statutes imposing more stringent conditions relating to the quantity, type or manner under which any such Waste may be so deposited, this Licence shall be deemed to be subject to such requirements.
- c. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation, guidelines and directives.

2. DEFINITIONS

- a. The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

3. ENFORCEMENT



Nunavut Water Board | Water Licence No: 2AM-WTP1826

- a. Failure to comply with this Licence may be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*.
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*.
- c. For the purpose of enforcing this Licence and with respect to the use of Waters and deposit of Waste by the Licensee, Inspectors appointed under the *Act* hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable laws.

PART B: GENERAL CONDITIONS

1. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the *Regulations*.
2. The Licensee shall file an Annual Report with the Board no later than March 31th in the year following the calendar year being reported. The Annual Report shall be developed in accordance with [Schedule B](#).
3. The Licensee shall retain and have a copy of this Licence available at the site of operations at all times.
4. Any communication with respect to this Licence shall be made in writing to the attention of:

Manager of Licensing, Nunavut Water Board
P. O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca

5. Any notice made to an Inspector shall be made in writing to the attention of:

Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

6. The Licensee shall submit one (1) electronic copy of all reports, studies, and plans to the Board unless otherwise requested by the Board. Unless otherwise directed by the Board, reports or studies submitted to the Board by the Licensee shall include an executive summary



in English, Inuktitut, and French.

7. This Licence is assignable as provided in Section 44 of the *Act*.
8. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
9. The Licensee shall notify the Board of any changes in operating plans or conditions associated with this Project at least sixty (60) days prior to any such change.
10. The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facilities and the Waste Disposal Facilities. All signs must be in English, Inuktitut and French and shall be located and maintained to the satisfaction of an Inspector.
11. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
12. Unless otherwise directed by the Board in writing, if a Plan is not acceptable to the Board, the Licensee shall provide a revised version to the Board for review within thirty (30) days of notification by the Board.
13. The Licensee shall implement the following Plans also required under the Type “A” Water Licence 2AM-MEA1526 as approved (or accepted) by the Board. Any future updates to these Plans approved (or accepted) under the Type “A” Water Licence 2AM-MEA1526 or this Licence shall be applicable to both 2AM-MEA1526 and 2AM-WTP1826 Licences. Any changes to the plans deemed significant shall be considered as an amendment to the Plan(s) or as a modification and must be approved by the Board.
 - a. Aquatic Effects Management Program (AEMP), Version 3 (November 2015)*¹;
 - b. Ammonia Management Plan - Whale Tail Pit Addendum, Version WT (June 2016)*;
 - c. Core Receiving Environment Monitoring Program (CREMP), Version WT (June 2016)^;
 - d. Dewatering Dikes: Operation, Maintenance and Surveillance Manual, Version 6 (February 2017)*;
 - e. Emergency Response Plan, Version WT (June 2016)^;
 - f. Groundwater Monitoring Plan, Version WT (June 2016);
 - g. Hazardous Materials Management Plan: Meadowbank Mine Site, Whale Tail Pit Site, Baker Lake Facilities, Version WT (June 2016)*;
 - h. Quality Assurance/Quality Control (QA/QC) Plan, Version 3 (October 2015)* accepted by the Board;
 - i. Operational ARD/ML Testing and Sampling Plan, Version WT (June 2016)^;

¹ The Plans identified as “Version WT” are addendums^ to existing Meadowbank Mine Project’s plans; otherwise the most up-to-date Meadowbank plan is applicable*



- j. Spill Contingency Plan, Version WT (June 2016)^.
14. The Licensee shall, for all Plans submitted under this Licence, implement the Plans as approved by the Board in writing. The Board has approved (or accepted) the following Plans for implementation under the relevant sections in the Licence. Any changes to the plans deemed significant shall be considered as an amendment to the plan(s) or as a modification and must be approved by the Board.
- a. Amaruq Gold Wastewater Treatment System Operation and Maintenance Plan (December 2015)*;
 - b. Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan, Version WT, (June 2016)^;
 - c. Whale Tail Pit Interim Closure and Reclamation Plan, Version WT (June 2016)^;
 - d. Whale Tail Pit Landfill and Waste Management Plan, Version 1 (January 2017);
 - e. Whale Tail Pit Haul Road Management Plan, Version 1 (June 2016)
 - f. Whale Tail Pit Waste Rock Management Plan, Version 1 (January 2017);
 - g. Whale Tail Pit Water Management Plan, Version 1 (January 2017);
 - h. Whale Tail Pit Water Quality and Flow Monitoring Plan, Version 2 (May 2017); and
 - i. Whale Tail Pit Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, Version 1 (January 2017).
15. Within sixty (60) days of approval of this Licence by the Minister, the Licensee shall submit to the Board, for approval in writing, the following updated management plans. The updates are to take into account commitments made with respect to submissions received during the technical review of the Application, as well as final submissions and issues raised during the 2017-2018 Public Hearing process, where applicable.
- a. Whale Tail Pit Haul Road Management Plan, Version 1 (June 2016);
 - b. Whale Tail Pit Waste Rock Management Plan, Version 1 (January 2017);
 - c. Whale Tail Pit Water Management Plan, Version 1 (January 2017); and
 - d. Mercury Monitoring Studies Program.
16. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
17. The Licensee shall review the Plans or Manuals referred to in this Licence as required by changes in operation and/or technology and modify the Plans or Manuals accordingly. Revisions to the Plans or Manuals are to be submitted in the form of an Addendum to be included with the Annual Report required by Part B, Item 2, complete with a revisions list detailing where significant content changes are made.
18. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.



19. The Schedules attached to this Licence provide details regarding the requirements associated with specific items in the main body of the Licence and are included in the Schedule to provide greater clarity and as an aid to interpretation for the Licensee. If the Board subsequently determines that an item in any of the Schedules requires revision in order to better reflect the intent and objectives of the Licence, the Board may at its discretion, and upon consulting and providing written notice to the Licensee and interested parties, revise the Schedule accordingly. Unless the Board directs otherwise, such revision may not necessarily be considered as an “Amendment” to the Licence.
20. Unless otherwise stated, references in the Licence to any specific legislation, policy, guideline or other regulatory requirement are deemed to refer to the regulatory requirement as may be amended or as may be expressly replaced by successor legislation, policy, guidelines or other regulatory requirements after the Licence is approved by the Minister.

PART C: CONDITIONS APPLYING TO SECURITY

1. The Licensee shall, within thirty (30) days following the approval of this Licence by the Minister, furnish and maintain security with the Minister in the amount for a total of \$13,143,000. As set out in the *Whale Tail Security Management Agreement*, September 5, 2017 Version, the amount secured under this Part constitutes 50% of the total global security amount of \$26,286,000 that is required to reclaim the Undertaking and reflects that the other 50% of the global security amount will be held outside the Licence by the Kivalliq Inuit Organization, in accordance with the terms and conditions of the *Whale Tail Security Management Agreement*.
2. The security held under Part C, Item 1 shall be in a form that is satisfactory to the Minister and consistent with the *Act* and *Regulations*.
3. The Licensee shall, within ten (10) days after furnishing security with the Minister, provide evidence to the NWB and the Kivalliq Inuit Association, that the security has been received by the Minister, indicating the amount, form, nature and conditions of the security.
4. The Licensee shall, within ten (10) days after furnishing security with the Kivalliq Inuit Association, provide evidence to the NWB and to the Minister, that the security has been received by the Kivalliq Inuit Association, indicating the amount, form, nature and conditions of the security.
5. The Licensee shall provide the Board with at least ninety (90) days written notice prior to any parties’ termination of the *Whale Tail Security Management Agreement*, or any material change to the *Whale Tail Security Management Agreement* that may affect the amount of security held under Part C, Item 1.
6. The Licensee shall provide the Board with at least ninety (90) days written notice prior to any material changes to the Undertaking or the risk of environmental damage associated with the Undertaking that could result in a material change to the reclamation liability associated



with the Undertaking (including, but not limited to, updates to the reclamation cost estimate arising from unexpected changes or modifications of the works and activities associated with the Undertaking).

7. The Licensee shall, within twelve (12) months following the commencement of Operations and when the Licensee files a Final Reclamation and Closure Plan as required under the Licence, submit to the Board for review an updated reclamation cost estimate, using the INAC RECLAIM Reclamation Cost Estimating Model (Version 7.0 or the most current version in use at the time the updated reclamation cost estimate is submitted to the Board).
8. Upon the Board receiving notice under Part C, Items 5 or 6, or upon receiving an updated reclamation cost estimate as required under Part C, Item 7, the Board may, on its own initiative, or upon application by the Licensee, the Minister and/or the Kivalliq Inuit Association, conduct a periodic review of the outstanding reclamation liability associated with the Undertaking and may, as the Board considers appropriate, amend the amount of security held under Part C, Item 1. Any submission requesting an amendment to the security provisions of the Licence shall include supporting evidence to justify the amendment and will be processed by the Board as an amendment to the terms and conditions of the Licence.
9. If the Board determines it to be necessary, or upon the request of Licensee, the Minister and/or the Kivalliq Inuit Association, the Board may issue further directions under this Part with respect to the process for amending the amount of security to be furnished and maintained under the Licence.
10. The security referred to in Part C, Item 1 shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Final Reclamation and Closure Plan and as it is fully or in part refunded by the Minister pursuant to Section 76(5) of the Act. This clause shall survive the expiry of the Licence or renewals thereof and until full and final reclamation has been completed to the satisfaction of the Minister.

PART D: CONDITIONS APPLYING TO CONSTRUCTION AND OPERATION

1. The Licensee shall submit to the Board for review, at least sixty (60) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the following:
 - a. Water works, including: Water Intake and causeway, Water control structures (dikes, berms, jetties, channels) and Water crossings (culverts, bridges);
 - b. Waste disposal facilities including: Wastewater Treatment Plant, Sewage Treatment Plant, Discharge Diffuser, Waste Rock Storage Facility, Overburden stockpiles, and Landfill; and
 - c. Whale Tail Bulk Fuel Storage Facility.
2. The detailed report(s) referred to in Part D, Item 1 shall include:



- a. Design rational, requirements, criteria, parameters, standards analysis, methods, assumptions and limitations;
 - b. Site specific data and analysis to support the design and management decisions;
 - c. Geochemical analysis of Waste Rock and fill, demonstrating the Acid Rock Drainage and Metal Leaching characteristics of these materials;
 - d. Construction methods and procedures outlining how infrastructure will be put in place, including quality assurance and quality control measures and equipment to be used;
 - e. Technical specifications for sedimentation, erosion control and bank stabilization measures, including proposed materials, location and extent, place methods and quantities required;
 - f. Timetable for submission, including date of Construction and proposed date of commissioning of infrastructure; and
 - g. Be signed and sealed by the appropriately qualified Engineer.
3. The Licensee shall submit to the Board for review, at least thirty (30) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the Whale Tail Dike. The detailed report shall include items referred to in Part D Item 2.
4. The Licensee shall use Waste rock and fill material for Construction only from approved sources that have been demonstrated, by appropriate geochemical analyses, to not produce Acid Rock Drainage and to be Non-Metal Leaching, and free of contaminants.
5. During dike construction, the Licensee shall implement the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering and associated action plans outlined if:
 - a. Total Suspended Solids (TSS) levels in a single sample exceed the Short Term Maximum TSS concentration defined in Part D Item 6;
 - b. The 7-day moving average TSS concentration exceeds the Maximum Monthly Mean TSS concentration defined in Part D Item 6.
6. The Licensee shall compare TSS levels as required in Part D Item 5 to the following Maximum Monthly Mean and Short Term Maximum concentrations:

Parameter	Maximum Monthly Mean (mg/L)	Short Term Maximum (mg/L)
TSS in areas where there is spawning habitat and at times when eggs or larvae are expected to be present	6	25
TSS in all other areas and at times when eggs/larvae are not present	15	50
TSS in impounded areas at all times in all areas.	15	50



7. Effluent from dewatering activities shall be monitored at Monitoring Program Stations ST-DD-1 to ST-DD-TBD and not exceed the following Effluent quality limits:

Parameter	Maximum Monthly Mean	Short Term Maximum
Total Suspended Solids (TSS)	15.0 mg/L	22.5 mg/L
Turbidity	15 NTU	30 NTU
pH	6.0 to 9.0	6.0 to 9.0
Total Aluminium	1.5 mg/L	3.0 mg/L

8. Effluent from dewatering of Whale Tail Lake (North Basin) will be discharged to Whale Tail Lake (South Basin), if discharge water quality criteria are met.
9. All Effluent from Sewage Treatment Plant shall be directed to the Whale Tail Attenuation Pond.
10. The Licensee shall monitor the Whale Tail Attenuation Pond water quality in accordance with the Licence criteria. Effluent from Whale Tail Attenuation Pond may be discharged to Mammoth Lake via the Mammoth Lake diffuser, if Effluent discharge criteria are met.
11. The Licensee shall implement sediment and erosion control measures prior to and during Construction, and Operations where necessary, to prevent entry of sediment into Water.
12. The Licensee shall inspect daily, all construction activities for signs of erosion that may affect surface water flowing to Nemo Lake, Mammoth Lake and Whale Tail Lake.
13. All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids (TSS)	50.0	100.0

14. The Licensee shall, during the construction of all engineered structures, provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the project specification can be enforced and, where required, the quality control measures can be followed. The Licensee shall maintain all construction records of all engineered structures to be made available at the request of the Board and/or an Inspector.
15. The Licensee shall submit to the Board for review, within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain Waters or Wastes during the construction phase, a Construction Summary Report prepared by a qualified Engineer(s) in accordance with [Schedule D, Item 1](#).



- PART E: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT**

- Page 11



associated use or as otherwise approved by the Board in writing. The use of Waters from Nemo Lake, for all purposes, shall not exceed a total of one hundred seventy five thousand (175,000) cubic metres *per* year from the Licence approval date for construction, forty five thousand seven hundred and fifty (45,750) cubic metres *per* year for dust suppression on the road, one hundred and ninety one thousand seven hundred and fifty (191,750) cubic metres *per* year for operation, notification of closure.

2. The Licensee shall obtain fresh Water from Whale Tail Lake for domestic camp use during Closure, not to exceed a maximum of seventy thousand and six hundred (17,600) cubic metres *per* year, or as otherwise approved by the Board in writing.
3. The Licensee shall obtain fresh Water from Whale Tail Lake North Basin for mining and associated use, including dewatering of Whale Tail Lake North Basin to South Basin, or as otherwise approved by the Board in writing.
4. The Licensee shall obtain fresh Water from the unnamed lake for the purposes of explosives mixing and associated use, not to exceed a maximum of two thousand five hundred (2,500) cubic metres *per* year from approval of the Licence by the Minister through to Closure, or as otherwise approved by the Board in writing.
5. The Licensee shall obtain fresh Water from Whale Tail Lake South Basin at Monitoring Station ST-WT-8 for re-flooding of Whale Tail Pit and associated use, or as otherwise approved by the Board in writing. The use of Waters from Whale Tail Lake shall not exceed a total of ten million six hundred fifty five thousand (10,655,000) cubic metres *per* year commencing when notification of Closure is received by the Board through to the Expiry of the Licence.
6. The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
7. The Licensee shall submit an updated *Water Management Plan* on an annual basis to the Board for review following the commencement of Operations. The Plan must include an updated Water Balance. The Water Management Plan shall include an action plan to be implemented if predicted re-flooded pit water quality indicates that treatment is necessary.
8. The Licensee shall submit a Water Quality Model for pit re-flooding and for WRSF contact water mixing into Mammoth Lake post-Closure as part of the Water Management Plan which shall be re-calibrated as necessary and updated annually following commencement of Operations. The results and implications of the predictive model shall be reported to the Board.
9. The Licensee shall, on an annual basis during Closure, compare the predicted water quantity and quality within the pit and lake, to the measured water quantity and quality. Should the difference between the predicted base case values and measured values be 20% or greater,



then the cause(s) of the difference(s) shall be identified and the implications of the difference shall be assessed and reported to the Board.

10. The Licensee shall not breach dikes until the water quality in the re-flooded area meets *CCME Water Quality Guidelines for the Protection of Aquatic Life*, baseline concentrations, or appropriate site-specific water quality objectives. Subject to the Board approval, if water quality parameters are above *CCME Guidelines*, a site-specific risk assessment must be conducted to identify specific water quality objectives for the site that are protective of the aquatic environment.
11. The Licensee shall carry out weekly inspections of all water management structures during periods of flow and the records of inspections shall be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector. This information is to be included in the annual updated Water Management Plan.
12. The Licensee shall implement measures to minimize the generation and deposition of dust and/or sediment into Water arising from road use.
13. The Licensee shall provide at least thirty (30) days' notice to the NWB and Inspector prior to the commencement of re-flooding of pit.

PART F: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Licensee shall direct all Contact Water from the water collection ponds to Whale Tail Attenuation Pond, or as otherwise approved by the Board in writing.
2. The Licensee shall direct all Sewage to the Sewage Treatment Plant for treatment prior to its discharge to Whale Tail Attenuation Pond, or as otherwise approved by the Board in writing.
3. The Licensee shall dispose of all sludge removed from the Sewage Treatment Plant and Wastewater Treatment Plant in the Waste Rock Storage Facility or the Tailings Storage Facility or in a landfarm as a nutrient amendment in accordance with Wastewater Treatment System Operation and Maintenance Plan, dated December 2015, as approved by the Board.
4. The Discharge of Effluent from the Whale Tail Attenuation Pond at Monitoring Program Station ST-WT-2 shall be directed to Mammoth Lake through the Mammoth Lake Diffuser and shall not exceed the following Effluent quality limits:



Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab Sample
Conventional Constituents			
pH		6.0 to 9.5	6.0 to 9.5
Total Suspended Solids TSS	mg/L	15	30
Total Dissolved Solids TDS	mg/L	1400	1400
Nutrients			
Total Ammonia (NH ₃ -N)	mg-N/L	16	32
Total Phosphorous (P)	mg-P/L	0.3	0.6
Total Metals			
Aluminum (Al)	mg/L	0.5	1.0
Arsenic (As)	mg/L	0.1	0.2
Cadmium (Cd)	mg/L	0.002	0.004
Chromium (Cr)	mg/L	0.02	0.04
Copper (Cu)	mg/L	0.1	0.2
Iron (Fe)	mg/L	1.0	2.0
Lead (Pb)	mg/L	0.05	0.1
Mercury (Hg)	mg/L	0.004	0.008
Nickel (Ni)	mg/L	0.25	0.5
Zinc (Zn)	mg/L	0.1	0.2
Other			
Total Petroleum Hydrocarbons (TPH)	mg/L	3.0	6.0

5. The Discharge of Effluent from a Final Discharge Point at Monitoring Program Stations ST-WT-2, shall be demonstrated to be Acutely non-Lethal under the following test and as stipulated in Schedule I of the Licence:
 - a. Acute Lethality of Effluents to Rainbow Trout (as per Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13 Second Edition December 2000 (with May 2007 amendments).
6. All water collected prior to discharge from the Non-Contact Water diversions at Monitoring Program Stations ST-WT-7 and ST-WT-13, and Whale Tail Seepage at Monitoring Program Stations ST-S-1 to –TBD, during Operations shall not exceed the following Effluent quality limits:

Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab Sample
TSS	mg/L	15	30



7. The Discharge of Effluent to land from the Whale Tail Bulk Fuel Storage Facility at Monitoring Station ST-WT-12, shall not exceed the following Effluent quality limits:

Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab sample
pH		6.0 to 9.5	6.0 to 9.5
Total Arsenic (As)	mg/L	*0.5	1.0
Total Copper (Cu)	mg/L	*0.3	0.6
Total Nickel (Ni)	mg/L	*0.5	1.0
Total Zinc (Zn)	mg/L	*0.5	1.0
Total Suspended Solids (TSS)	mg/L	*15	30
Ammonia	mg/L	6.0	6.0
Benzene	µg/L	370	370
Toluene	µg/L	2	2
Ethylbenzene	µg/L	90	90
Lead	mg/L	0.1	0.1
Oil and Grease	mg/L	5 and no visible sheen	5 and no visible sheen

* Metal Mines Effluent Regulations (MMER)

8. The Licensee shall, under Part F, Item 7, discharge Effluent to a location at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any Water body, in such a manner as to minimize surface erosion to where direct flow into a Water body is not possible and no additional impacts are created, or as otherwise approved by the Board in writing.
9. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any Water body such that the quality, quantity or flow of Water is not impaired, or as otherwise approved by the Board in writing.
10. All Effluent at Monitoring Station ST-WT-12, that exceeds the Effluent quality limits under Part F, Item 7, shall be transferred to WTP for treatment.
11. The Licensee shall confirm compliance with Effluent quality limits in Part F, Items 4, 5, 6, and 7 prior to Discharge.
12. The Licensee shall submit to the Board for approval in writing a site-specific Operation and Maintenance Manual(s) for the Wastewater Treatment Plant(s), including the Sewage Treatment Plant, at least ninety (90) days prior to the Construction/installation of facilities, prepared in accordance with the *“Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest*



Territories; 1996". The Manual(s) shall include sludge management and disposal information and contingency measures in the event of plant malfunction.

13. The Licensee shall provide at least ten (10) days notice to the Inspector prior to any planned Discharges from any facilities. The notice shall include the estimated volume proposed for Discharge and the receiving location.
14. Unless otherwise approved by the Board in writing, the Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters.
15. The Licensee is authorized to dispose of and contain all non-hazardous, solid Wastes at the Whale Tail Landfill in accordance with the approved *Whale Tail Pit Landfill and Waste Management Plan*, dated January 2017, or as otherwise approved by the Board in writing.
16. The Licensee shall remove from the Project site, all solid and liquid Hazardous Wastes generated through the course of Project activities, for disposal at an approved hazardous waste disposal facility in accordance with the approved *Hazardous Materials Management Plan, Version WT*, dated June 2016;
17. The Licensee shall maintain records of all Waste backhauled and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut, Department of Environment.
18. The Licensee shall dispose of all petroleum hydrocarbon contaminated soils in an approved landfarm facility.
19. The Licensee shall dispose of waste rock in accordance with the approved *Whale Tail Pit Waste Rock Management Plan*, dated January 2017, or as otherwise approved by the Board in writing.
20. The Licensee shall incorporate Seepage management at Quarries using best management practices including ditches, diversions, sumps and berms where necessary.
21. The Licensee shall provide to the Board, at least thirty (30) days prior to any planned disposal of Waste in a facility operated by the Hamlet of Baker Lake, documented authorization from the Hamlet for the use of any waste disposal facility operated by the Hamlet.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:



- a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. Such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. Such Modifications are consistent with the applicable terms and conditions of the NIRB Project Certificate No. 008;
 - d. The Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. The Board has not rejected the proposed Modifications.
2. Modifications for which any of the conditions referred to in Part G, Item 1 have not been met can be carried out only with approval from the Board in writing.
 3. Applications for modifications shall contain:
 - a. A description of the facilities and/or works to be constructed;
 - b. The proposed location of the structure(s);
 - c. Identification of any potential impacts to the receiving environment;
 - d. A description of any monitoring required, including sampling locations, parameters measured, and frequencies of sampling;
 - e. A proposed schedule for construction;
 - f. Drawings of Engineered Structures stamped by a Professional Engineer; and
 - g. Proposed sediment and erosion control measures.
 4. The Licensee shall provide to the Board, within ninety (90) days of completion of the Modification, as-built plans and drawings of the Modifications referred to in this Part. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING

1. The Licensee shall implement the *Emergency Response Plan, Version WT*, dated June 2016, and the *Spill Contingency Plan, Version WT*, dated June 2016, as approved by the Board. The Licensee shall comply with the Plan(s) and any changes deemed significant shall require the submission and subsequent approval of the Board in writing.
2. The Licensee shall prevent any chemicals, petroleum products or unauthorized Wastes associated with the Project from entering Water.
3. The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.
4. The Licensee shall perform weekly inspections of petroleum products storage and containment facilities, fuel tanks and connectors, for leaks and settlement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent



inspections may be requested by an Inspector.

5. If the Licensee provides notification under Part J, Item 4, the Licensee shall submit to the Board an Addendum to the Emergency Response Plan and the Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.
6. The Licensee shall keep a copy of the Emergency Response Plan and the Spill Contingency Plan at each site of operation.
7. The Licensee shall conduct emergency maintenance and servicing on equipment, in designated areas, and shall implement measures to collect motor fluids and other Waste to prevent and contain spills.
8. The Licensee shall, subject to Section 16 of the *Regulations*, report any unauthorized deposits or foreseeable unauthorized deposits of waste and/or discharges of Effluent, and:
 - a. Employ the Spill Contingency Plan;
 - b. Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130 and to the Inspector at (867) 975-4295; and
 - c. For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
9. The Licensee shall, in addition to Part H, Item 8, regardless of the quantity of release of a harmful substance, report to the NWT/NU Spill Line if the release is near or into a Water body.

PART I: CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING

1. The Licensee shall comply with the *Aquatic Effects Management Program* (AEMP), dated November 2015, as approved by the Board. The AEMP shall include:
 - a. Comprehensive receiving environment monitoring to identify changes to the aquatic environment associated with mine activities;
 - b. Linkage between monitoring results and adaptive management response;
 - c. Monitoring of lake productivity;
 - d. Sampling and analysis plans; and
 - e. Monitoring under Fisheries Authorizations, NWB Licence Compliance Monitoring, *Metal Mining Effluent Regulations* (MMER) Environmental Effects Monitoring, and Groundwater Monitoring.



2. The Licensee shall implement the Core Receiving Environmental Monitoring Program (CREMP) (November 2015) and combined with Whale Tail Pit CREMP Addendum (January 2016), as approved by the Board.
3. The Licensee shall submit for Board approval, at least ninety (90) days prior to Operations an updated CREMP. The Program shall include all comments provided during the technical review of Application and shall include a comparison of monitoring results for receiving waters to model predictions (including base case predictions) and to thresholds identified for management actions, should trends indicate water quality objectives may be exceeded.
4. The Licensee shall implement the *Whale Tail Pit Water Quality and Flow Monitoring Plan, Version 2*, dated May 2017, as approved by the Board.
5. The Licensee shall submit to the Board for approval and implementation, within sixty (60) days of the approval of the Licence by the Minister, a *Mercury Monitoring Studies Program*. The Program shall include all comments and recommendations provided during the technical review of Application.
6. The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of Water use and Effluent discharge volumes, to be operated and maintained to the satisfaction of an Inspector.
7. The Licensee shall undertake the Monitoring Program provided in the Tables 1 and 2 of [Schedule I](#). The Licensee shall establish the locations and GPS coordinates for all additional Monitoring Program Stations in consultation with an Inspector.
8. The Licensee shall establish the locations for the proposed compliance and internal monitoring locations as they relate to existing drainage courses beneath the Whale Tail Waste Rock Storage Facility's and other Dikes to ensure potential Seepage locations are adequately identified in accordance with the *Groundwater Monitoring Plan, Version WT*, dated June 2016, as approved by the Board.
9. The Licensee shall install and maintain signs that identify Monitoring Program Stations. The signs shall be posted in English, Inuktitut and French.
10. The Licensee shall measure and record the following on a Monthly basis in cubic metres or as otherwise stated:
 - a. The volume of fresh Water obtained from Nemo Lake;
 - b. The volume of fresh Water obtained from Whale Tail Lake;
 - c. The volume of fresh Water de-watered from Whale Tail Lake (North Basin);
 - d. The volume of fresh Water obtained for the purposes of explosives mixing;
 - e. The volume of Effluent and fresh Water transferred to the pit lakes;
 - f. The volume of fresh Water obtained for dust suppressant along the Whale Tail Pit Haul Road;



- g. The flow during periods of discharge from the Landfill, Waste Rock Storage Facilities, Wastewater Treatment Plant, Contact Water Collection System, and area Sumps collecting Contact Water;
 - h. The volume of water transferred from the Whale Tail Bulk Fuel Storage Facility;
 - i. The volume of sludge removed from the Sewage Treatment Plant and Wastewater Treatment Plant; and
 - j. Tonnes of mineralized and un-mineralized waste rock stored.
- 11. The Licensee shall undertake the Thermal Monitoring Program detailed in the *Whale Tail Waste Rock Management Plan* as approved by the Board.
- 12. The Licensee shall undertake a geotechnical inspection, to be carried out annually by a Geotechnical Engineer, between the months of July and September. The inspection shall be conducted in accordance with the *Canadian Dam Safety Guidelines* where applicable and take into account all major earthworks, including:
 - a. Dikes;
 - b. Cofferdams;
 - c. Pit walls;
 - d. Waste Rock Storage Facilities;
 - e. Landfill;
 - f. Shoreline protection at the location of the Mammoth Lake Diffuser;
 - g. Geotechnical instrumentation;
 - h. Haul Road and site roads, in particular water course crossings;
 - i. Quarries;
 - j. Bulk Fuel Storage Facilities;
 - k. Attenuation Pond; and
 - l. Collection Ponds and Sumps.
- 13. The Licensee shall submit to the Board as part of the Annual Report, the Geotechnical Engineer's Inspection Report. The Report shall include a cover letter from the Licensee outlining an implementation plan to address the recommendations of the Geotechnical Engineer.
- 14. The Licensee shall submit to the Board as part of the Annual Report required under Part B, Item 2, all reports and performance evaluations prepared by the Independent Geotechnical Expert Review Panel.
- 15. The Licensee shall monitor and record Seepage observations pursuant to Part I, Item 8 in accordance with the following:



Characterization of seepage including: precise location; discharge rates and volumes; respective hazard(s) and consequences and prescribed mitigative measures	Minimum Frequency of Observation
Seepage (of any kind) through any Dike(s)	Monthly
Seepage and Runoff from the Landfill(s)	Quarterly
Seepage and Runoff from Waste Rock Storage Facility	Quarterly
Seepage and Runoff from Ore piles	Quarterly
Seepage at Pit Wall and Pit Wall Freeze/Thaw and Permafrost Aggradation	Quarterly

16. The Licensee shall submit the results and interpretation of the Seepage monitoring required in Part I Item 15 in the Annual Report required under Part B, Item 2.
17. The Licensee shall implement the Inspection and Maintenance procedures for the Haul Road in accordance with the *Whale Tail Pit Haul Road Management Plan, Version WT*, dated June 2016, as approved by the Board.
18. The Licensee shall keep a digital photographic record of all the Project's watercourse crossings before, during, and after Construction has been completed.
19. The Licensee shall maintain and implement the Quality Assurance / Quality Control Plan dated June 2014, accepted by the Board under the Licence 2AM-MEA1525 that includes requirements for independent third party sampling and analysis. The QA/QC Plan shall be updated as needed in accordance with, and in consultation with, the accredited laboratory conducting the analyses. This Plan shall be developed and maintained in accordance with current Standard Methods and the *1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" Licensees in Meeting SNP Requirements* (INAC).
20. The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.
21. All analyses shall be conducted as described in the most recent edition of "*Standard Methods for the Examination of Water and Wastewater*" or by other such methods approved by an Analyst.
22. All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
23. The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:
 - a. All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule I; and



- b. An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Parts D and F.
24. As noted in Part B, Item 19, changes to the Schedules, including Schedule I, which provides details of the Monitoring Program, may, at the Board's discretion, be considered without requiring an Amendment to the Licence. However, the Board must approve any changes to the Monitoring Program, as outlined in Part I and Schedule I; any request for changes to the Monitoring Program should be submitted to the NWB in writing, and should include the justification for the change.
25. Additional monitoring may be imposed by the Inspector.

PART J: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE

1. The Licensee shall implement the *Whale Tail Pit Interim Whale Tail Pit Closure, Version WT*, dated June 2016.
2. The Licensee shall submit to the Board for approval within twelve (12) months of Operations, an updated Interim Whale Tail Pit Closure and Reclamation Plan prepared in accordance with the "*Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*", issued by the Mackenzie Valley Land and Water Board (MVLWB) and Aboriginal Affairs and Northern Development Canada (AANDC) in 2013 (MVLWB/AANDC 2013) and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002. The Plan shall include all mine related facilities and Whale Tail Pit Haul Road.
3. The Licensee shall submit to the Board for approval at least twelve (12) months prior to the expected end of planned mining, a Final Closure and Reclamation Plan. The Final Closure and Reclamation Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include:
 - a. Soil Quality Remediation Objectives reflecting the applicable *CCME Guidelines* and the *Government of Nunavut Environmental Guideline for Site Remediation*;
 - b. Environmental Site Assessment plans in accordance with the applicable Canadian Standards Association (CSA) criteria; and
 - c. An evaluation of the human health and ecological risks associated with the Closure options proposed.
4. The Licensee shall notify the Board in writing, at least sixty (60) days prior to, or as soon as practically possible, of the Licensee's intention to enter into a Care and Maintenance Phase.
5. The Licensee shall provide the Board, within thirty (30) days of the Licensee providing notice of intent to enter into Care and Maintenance under Part J, Item 4, a Care and Maintenance Plan that details the Licensee's plans for maintaining compliance with the Terms and Conditions of the Licence.



6. The Licensee shall review the Plans referred to in this Part as required by changes in operation and/or technology and modify the Plans accordingly. Revisions to the Plans should incorporate design changes and adaptive engineering required and implemented during Construction and reflect actual site conditions and monitoring results over the life of the Project.
7. The Licensee shall complete all reclamation work in accordance with the Plan(s) referred to in this Part, as and when approved by the Board in writing.
8. The Licensee shall implement Progressive Reclamation, including progressive covering of Waste Rock, and if practicable, re-vegetation.
9. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
10. All roads and airstrip, if any, shall be re-graded to match natural contours to reduce erosion.
11. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's *Environmental Guideline for Site Remediation*, (2010 version or current version in place at the time of Reclamation).
12. The Licensee shall notify the Board in writing, at least sixty (60) days prior to the Licensee intending to seek Recognized Closed Mine status for the Project.



SCHEDULES

Schedule A: Scope, Definition, and Enforcement

Schedule B: General Conditions

Schedule C: No Schedule for Security

Schedule D: Conditions Applying to Construction

Schedule E: No Schedule for Water Use and Management

Schedule F: No Schedule for Waste Disposal and Management

Schedule G: No Schedule for Modifications

Schedule H: No Schedule for Emergency Response and Contingency Planning

Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

Schedule J: No Schedule for Abandonment, Reclamation and Closure



Schedule A: Scope, Definitions, and Enforcement

In this Licence: **2AM-WTP1826**

“**Abandonment**” means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Acid Rock Drainage (ARD)**” means the production of acidic leachate, seepage or drainage from underground workings, open pits, ore piles, waste rock, construction rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after Closure;

“**Acutely Lethal Effluent**” means acutely lethal effluent as defined in the *Metal Mining Effluent Regulations* SOR/2002-222 dated June 6, 2002, last amended on December 8, 2017 and as may be further amended from time to time;

“**Adaptive Management**” means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework for mitigation measures to be implemented and actions to be taken when specified thresholds are exceeded;

“**Addendum**” means the supplemental text that is added to a full plan or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;

“**Amendment**” means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a modification;

“**Analyst**” means an Analyst designated by the Minister under section 85 (1) of the *Act*;

“**Annually**” means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;

“**Aquatic Effects Management Program (AEMP)**” means an overarching “umbrella” program that conceptually provides an opportunity to integrate results of individual, but related, monitoring programs in accordance with the Licence;

“**Biannual**” means, in the context of monitoring frequency, one sampling event occurring every six months with a minimum of one hundred eighty days between sampling events;

“**Board**” means the Nunavut Water Board established under Article 13 of the *Nunavut Agreement* and under section 14 of the *Act*;



“Borrow Pits” - means sites where materials, such as gravel or sand, are excavated for the purposes of constructing site infrastructure and facilities;

“Canadian Council of the Minister of Environment (CCME)” means the organization of the Canadian Ministers of Environment that sets guidelines for environmental protection across Canada such as the *Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life*;

“Care and Maintenance” in respect of a mine, means the status of the facility when the Licensee ceases production or commercial operation temporarily for an undefined period of time;

“Chief Administrative Officer” means the Executive Director of the Nunavut Water Board;

“Chief Executive Officer” means the Chair or Chairperson of the Nunavut Water Board;

“Closure” means when an Operator ceases operations at a facility without the intent to resume mining activities in the future;

“Commercial Operation” in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design capacity of the mine over a period of ninety consecutive days;

“Construction” means any activities undertaken to construct or build any component of, or associated with, the development of the Whale Tail Pit Project, as described in the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;

“Contact Water” means any water that may be physically or chemically affected by mining activities, including all runoff and seepage from WRSF, Ore Stockpiles and other mine facilities;

“Contact Water Collection System” means the system of trenches, sumps and attenuation pond designed to manage water that may be affected physically or chemically by any mine development activities, including but not limited to pre-development activities as described in the Water Licence Application document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017;

“Core Receiving Environmental Monitoring Program or CREMP” means a monitoring program designed to determine the short and long-term effects in the aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects;

“Dam Safety Guidelines” means the *Canadian Dam Association (CDA) Dam Safety Guidelines (DSG)*, (published in 2007, revised in 2013 or subsequent approved editions);

“Deleterious Substances” means a substance as defined in section 34(1) of the *Federal Fisheries Act*;



“Deposit” means the placement of waste rock, tailings or other solids materials on land or in water;

“Discharge” means the release of any water or waste to the receiving environment;

“Dissolved Metals” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule J of this Licence. Dissolved metals shall be analyzed on a filtered sample;

“Domestic Waste” means all solid waste generated from the accommodations, kitchen facilities and all other site facilities, excluding those hazardous wastes associated with the Whale Tail Pit Project;

“Effluent” means treated or untreated liquid waste material that is discharged into the environment from all site water management facilities;

“Emulsion Plant (Explosives Mixing Facility)” means the facility designed for storage of Ammonium Nitrate, detonators, and explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as indicated in the Water Licence Application Document entitled: *“Ammonia Management Plan - Whale Tail Pit Addendum, Version WT”*, dated June 2016 and illustrated in Drawing No. 6108-446-210-001 Amaruq Emulsion Plant General Arrangement Building Layout, dated May 24, 2016;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“Engineering Geologist” means a professional geologist registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the investigation and interpretation of geological conditions for civil engineering purposes;

“Engineered Structure” means any facility, which was designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

“Environmental Assessment” means, in respect of the Project, all material filed with the Nunavut Impact Review Board (NIRB) on the NIRB’s Public Registry (established under the authority of Article 12 of the *Nunavut Agreement*) that is associated with the NIRB’s impact assessment (Review) of the Project and associated with the scope of the activities, works and Undertakings authorized in accordance with the terms and conditions of the Licence;

“Final Discharge Point” in respect of an effluent, means, as defined in the *Metal Mining Effluent Regulations*, SOR/2002-222 (as amended, December 2017 and as may be further amended from time to time) an identifiable discharge point of a mine beyond which the operator of the mine no longer exercises control over the quality of the effluent;



“Geotechnical Engineer” means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the engineering properties of earth materials in dealing with manmade structures and earthworks. Such structures and earthworks can include shallow and deep foundations, retaining walls, dams, and embankments;

“Grab Sample” means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

“Greywater” means the component of effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), but excluding sewage;

“Ground Water” means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;

“Hazardous Waste” means materials or contaminants which are categorized as dangerous goods under the *Transportation of Dangerous Goods Act* 1992 (1992, c. 34) and/or that are no longer used for their original purpose and are intended for recycling, treatment, disposal or storage;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for a sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);

“ICP Metals Scan” means elements detected using Inductively Coupled Plasma (ICP) mass spectrometer. Metal parameters chosen to be included in an ICP Metals Scan under the Licence should be consistent with baseline data previously collected and include any metals of concern or interest;

“Incinerator” means the dual chamber, high temperature facility designed with the capacity to service the Meadowbank Mine site camp as described in the Water Licence Application document entitled *“Incineration Waste Management Plan”* dated March 2016;

“Independent Geotechnical Expert Review Panel” means the panel of geotechnical specialists established by Agnico Eagle to review the designs and performance of the dikes and dams;

“Inspector” means an Inspector designated by the Minister under section 85 (1) of the *Act*;

“Interim Closure and Reclamation Plan” means a conceptual detailed plan addressing the Reclamation of mine components which will not be closed until the end of the mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life;



“Licence” means this Type “A” Water Licence 2AM-WTP1826, issued by the Nunavut Water Board in accordance with the *Act*, to Agnico Eagle Mines Limited (Agnico Eagle) for the Whale Tail Pit Project;

“Licensee” means the entity to whom the Licence is issued or to whom the Licence is subsequently assigned;

“Mammoth Channel Culvert” means the structure designed to divert non-contact water from the west shore of the open pit to Lake A16 (Mammoth Lake), if deemed necessary;

“Mammoth Dike” means the structure designed to protect the mine site area from potential backwatering from Lake A16 (Mammoth Lake) during the operational and Closure phases as indicated in the Water Licence Application Document entitled “*Whale Tail Pit Water Management Plan*” dated January 2017, and illustrated in Drawing No. 627215-1000-4G-DD-0005-00: Dewatering Dikes Plan View, Profiles and Typical Sections;

“Mammoth Lake Diffuser” means the effluent discharge pipeline within Lake A16 (Mammoth Lake), designed to discharge and enhance mixing of effluent after final treatment from the Whale Tail Attenuation Pond in the receiving environment as described in the Water Licence Application document entitled “*Whale Tail Pit Water Management Plan*” dated January 2017;

“Maximum Average Concentration” means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;

“Maximum Monthly Mean” means the average concentration of all samples collected over a thirty day period from the identical sampling location;

“Meadowbank Gold Mine Project” means the Meadowbank Gold Project (Meadowbank Gold Mine) as outlined in the Final Environmental Impact Statement and supplemental information submitted by Cumberland Resources Limited to the Nunavut Impact Review Board (NIRB) as well as the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico Eagle Mines Limited to the NWB throughout the regulatory process. It comprises an open pit mine, an all-weather private access road from Baker Lake to the mine site, and a marshalling facility in the Hamlet of Baker Lake;

“Metal Leaching” means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

“Mine Water” means any water, including groundwater, that is pumped or flows out of any underground workings or open pit;

“Minister” means the Minister of Crown-Indigenous Relations and Northern Affairs (CIRNA, formerly the Minister of Indigenous and Northern Affairs Canada);



“Modification” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work;

“Monitoring Program” means the program to collect data on surface water and Ground Water quality to assess impacts to the environment of an appurtenant Undertaking;

“Monthly” means, in the context of monitoring frequency, one sampling event occurring every thirty (30) days with a minimum of twenty one (21) days between sampling events;

“Nemo Lake Fresh Water Intake” means the facility consisting of vertical filtration wells fitted with vertical turbine pumps connected to the pump house with piping buried under a rockfill causeway for the purpose of supplying freshwater to the Whale Tail Pit Project as described in the Water Licence Application document entitled **“Whale Tail Pit Water Management Plan”** dated January 2017, and illustrated in Drawing No. 6108-692-210-001: Nemo Fresh Water Intake General Arrangement - Typical Cross-Section and Plan View of Freshwater Intake;

“Non-Contact Water” means the runoff originating from areas unaffected by mining activity that does not come into contact with developed areas;

“North Channel” means the structure designed to divert non-contact water from the north shore of the open pit to Lake A16 (Mammoth Lake), if deemed necessary;

“Northeast Dike” means the structure designed to raise Lake A47, Lake A48, Lake A113, Pond A-P38, and Pond A-P68, and to divert runoff to the Lake C38 (Nemo Lake) watershed as indicated in the Water Licence Application Document entitled **“Whale Tail Pit Water Management Plan”** dated January 2017, and illustrated in Drawing No. 627215-1000-4G-DD-0006-00: RSF and North East Dikes Plan View & Typical Sections;

“Northeast Pond” means the facility to divert non-contact water towards the C Watershed runoff that will be drawn-down into the open pit before the dike will be decommissioned as described in the Water Licence Application document entitled **“Whale Tail Pit Water Management Plan”** dated January 2017;

“Nunavut Agreement” means the *“Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada,”* including its preamble and schedules, and any amendments to that agreement made pursuant to it;

“Operations” means the set of activities associated with mining, ore processing and recovery of gold; excluding Construction, decommissioning and permanent Closure activities;

“Operator” means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;

“Progressive Reclamation” means actions that can be taken during mining operations before permanent Closure, to take advantage of cost and operating efficiencies by using the resources available from mine operations to reduce the overall reclamation costs incurred. It enhances



environmental protection and shortens the timeframe for achieving the final Reclamation objectives and goals;

“Project” means the Whale Tail Pit Project Proposal as outlined in the Final Environmental Impact Statement and supplemental information submitted by Agnico Eagle Mines Limited (Agnico Eagle) to the Nunavut Impact Review Board (NIRB) as well as the associated Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico Eagle to the NWB throughout the regulatory process. It comprises an open pit mine, and haul road from Meadowbank Gold Mine site to the Project site;

“Quarry or Quarries” means the areas of surface excavation for extracting rock material for use as construction materials in the development of infrastructure and facilities;

“Quality Assurance / Quality Control (QA/QC)” Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

“Quarterly” means, in the context of monitoring frequency, one sampling event occurring every three months with a minimum of ninety days between sampling events;

“Receiving Environment” means both the aquatic and terrestrial environments that receive any discharge resulting from the Project;

“Reclamation” means the process of returning a disturbed site to its natural state or one for other productive uses that prevents or minimizes any adverse effects on the environment or threats to human health and safety;

“Recognized Closed Mine” means a recognized closed mine as defined in the *Metal Mining Effluent Regulations*, SOR/2002-222 (as amended, December 2017 and as may be further amended from time to time);

“Regulations” means the *Nunavut Waters Regulations*, SOR/2013-69;

“Remediation” means the removal, reduction, or neutralization of substances, wastes or hazardous material from a site in order to prevent or minimize any adverse effects on the environment and public safety now or in the future;

“Saddle/Coffer Dam” means the water retention structures to provide a barrier between the facilities and surrounding lakes until the water quality (seepage and runoff collected from facilities, and from the back-flooded area) is considered acceptable for release to the environment without treatment, as described in the Water Licence Application document entitled “*Whale Tail Pit Water Management Plan*” dated January 2017;

“Seepage” means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged



through open pits, runoff from Waste Rock storage facilities, ore stockpile areas, quarries, landfill or landfarm areas;

“Sewage” means all toilet wastes and greywater;

“Sewage Treatment Plant” means the rotary biological contactor sewage treatment plant described in the Water Licence Application document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017;

“Short Term Maximum” means the maximum concentration of all samples collected over a 24 hour period, or less, taken from the identical sampling location;

“Soil Quality Remediation Objectives (SQROs)” means the numerical concentration established as target value for soil quality remediation for contaminated sites as determined with guidance provided by the *Canadian Council of Ministers of the Environment (CCME)*.

“Sump” means a structure or depression that collects, controls, and filters liquid waste before it is released to the environment. This structure should be designed to prevent erosion while allowing percolation of liquid waste;

“Traditional Knowledge” means the practical knowledge that has been gathered through the experience of living in close contact with nature and has been passed along or communicated orally, and handed down from generation to generation;

“Total Metals” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule I of this Licence. Total metals shall be analyzed on an un-filtered sample;

“Undertaking or Undertakings” means an undertaking or undertakings in respect of which Water is to be used or Waste is to be deposited, as classified in Schedule 1 of the *Regulations*;

“Use” means use as defined in section 4 of the *Act*;

“Waste” means waste as defined in section 4 of the *Act*;

“Waste Disposal Facilities” means all facilities designated for the disposal of waste including: the mine site Sewage Treatment Plant, Wastewater Treatment Plant, Landfill, and Waste Rock Storage Facility;

“Waste Rock” means all unprocessed rock materials that are or were produced as a result of mining operations and that have no current economic value;

“Waste Rock Storage Facility Collection Pond” means the structure designed to collect runoff and seepage from the WRSF which is to be pumped to the Whale Tail Attenuation Pond for treatment in the WTP as described in the Water Licence Application Document entitled *“Whale Tail Pit Water Management Plan”*, dated January 2017;



“Waste Rock Storage Facility Dike” means the structure designed to confine contact water in the Whale Tail WRSF Collection Pond before it is pumped to the Whale Tail Attenuation Pond as indicated in the Water Licence Application Document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017, and illustrated in Drawing No. 627215-1000-4G-DD-0006-00: RSF and North East Dikes Plan View & Typical Sections;

“Wastewater” means the water generated by site activities or that originates on-site and that requires treatment or any other water management activity;

“Wastewater Treatment Plant” means the facilities designated for the treatment of contact water from collection ponds (Whale Tail Attenuation and WRSF Collection Ponds) prior to discharge to the receiving environment during all phases of mine operations, including during Closure/post-Closure as described in the Water Licence Application documents entitled *“Whale Tail Pit Water Management Plan”* dated January 2017 and *“Whale Tail Pit Waste Rock Management Plan”* dated January 2017 and illustrated in the Drawing No. 6108-693-210-002: Construction Water Treatment Plant Plan & Elevation Conceptual Design WTP Actiflo - Actiflo Water Treatment Plant Schematic;

“Water” means water as defined in section 4 of the *Act*;

“Water Supply Facilities” means the facilities designated for the supply of water including the Nemo Lake Fresh Water Intake and associated infrastructure as described in the Water Licence Application document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017;

“Water Licence Application” for the purposes of this Licence includes the totality of relevant documents filed by Agnico Eagle on the NWB and NIRB Public Registries in support of Agnico Eagle’s Water Licence Application filed on July 8, 2016, and includes Supporting Documents, and Technical Meeting Information Supplement documents;

“Weekly” means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 5 days between sampling events;

“Whale Tail Attenuation Pond” means the facility located in a deep part of Whale Tail Lake (North Basin) where mine site Contact Water will be discharged, be treated by the WTP prior to discharge to the receiving environment in Lake A16 (Mammoth Lake) as described in the Water Licence Application document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017;

“Whale Tail Bulk Fuel Storage Facility” means the fuel storage and all associated infrastructure as described in the Water Licence Application document entitled *“Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan”* dated June 2016;

“Whale Tail Camp” means a permanent life of mine camp proposed at the mine site proposed to include a sewage treatment plant, water intake, accommodation buildings, power plant, bulk fuel storage area, warehouse, maintenance shop as described in the Water Licence Application dated June 2016;



“Whale Tail Dike” means the structure designed to raise Whale Tail Lake (South Basin) to an elevation of 156 metres above sea level (masl), and divert runoff downstream to the Lake A16 (Mammoth Lake) watershed through the Whale Tail Lake (South Basin) diversion channel, and to permit dewatering of Whale Tail Lake (North Basin) and mining of the Whale Tail Pit as described in the Water Licence Application Document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017, and illustrated in Drawing No. 627215-1000-4G-DD-0005-00: Dewatering Dikes Plan View, Profiles and Typical Sections: Cross-Section Whale Tail Dike;

“Whale Tail Diversion Channel” means the structure designed to divert runoff downstream to the Mammoth Lake watershed from Whale Tail Lake (South Basin) once the Whale Tail Dike is constructed and the Whale Tail Lake (South Basin) level is raised to 156 metres above sea level (masl) as described in the Water Licence Application document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017, and illustrated in Drawing No. 627215-1000-4G-DD-0007-00: Channels and Ponds Plan View, Profiles and Sections: Cross-Section Whale Tail Diversion Channel;

“Whale Tail Haul Road” means the 64.1 km. haul road and associated water crossings between the Whale Tail Pit and Project site and the Meadowbank Mine site as described in the Water Licence Application document entitled *“Whale Tail Pit Haul Road Management Plan”* dated June 2016.

“Whale Tail Lake (North Basin)” means the northern portion of Whale Tail Lake that will be dewatered to allow the mining of Whale Tail Pit once the Whale Tail Dike is constructed. The water will be pumped to either Whale Tail Lake (South Basin) or to Mammoth Lake through the discharge diffuser as described in the Water Licence Application document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017;

“Whale Tail Lake (South Basin)” means the southern portion of Whale Tail Lake that will receive water from Whale Tail Lake (North Basin) once the Whale Tail Dike is constructed, and from which water will be diverted for re-flooding of the mined out open pit and Whale Tail Lake (North Basin) at the Closure phase as described in the Water Licence Application document entitled *“Whale Tail Pit Water Management Plan”* dated January 2017;

“Whale Tail Landfill” means the facility to be constructed and operated until the end of the mine life designed to contain non-salvageable, non-organic, non-hazardous solid wastes from mining activities that cannot be incinerated, as described in the Water Licence Application document entitled *“Whale Tail Pit Landfill and Waste Management Plan”* dated January 2017, and illustrated in Drawing No. 6108-697-210-001: Whale Tail Landfill Plan View, Section & Detail Arrangement Stage Design;

“Whale Tail Pit” means the satellite deposit located on the Amaruq Exploration property approximately 150 km north of Hamlet of Baker Lake and 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut that the Licensee will mine as an open pit;



“Whale Tail Security Management Agreement” means the agreement between Kivalliq Inuit Association, (KIA or KivIA), Agnico Eagle Mines Limited (Agnico Eagle) and Her Majesty Queen in Right of Canada as represented by the Minister of Crown-Indigenous Relations and Northern Affairs Canada (the Minister), dated September 5, 2017 and signed by KIA, Agnico Eagle and Minister on September 26, 2017;

“Whale Tail Waste Rock Storage Facility (WRSF)” means the facility designed to store Waste Rock from the Whale Tail open pit as described in the Water Licence Application document entitled *“Whale Tail Pit Waste Rock Management Plan”* dated January 2017, and illustrated in the Drawing No. 627215-1000-4G-DD-0006-00: Typical cross-section of the Whale Tail Waste Rock Storage Facility and North East Dike;



Schedule B: General Conditions

The Annual Report referred to in Part B, Item 2, shall include:

CONSTRUCTION

1. For the dikes, dams and structures constructed to withhold water or waste:
 - a. An overview of methods and frequency used to monitor deformations, Seepage and geothermal responses;
 - b. A comparison of measured versus predicted performance;
 - c. A discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk;
 - d. As-built drawings of all mitigation works undertaken;
 - e. Any changes in the design and/or as-built condition and respective consequences of any changes to safety, water balance and water quality;
 - f. Data collected from instrumentation used to monitor earthworks and an interpretation of that data;
 - g. A summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams; and
 - h. The monthly and annual quantities of Seepage from dikes and dams in cubic metres.

WATER

2. Monthly and annual volume of fresh Water obtained from Nemo Lake.
3. Monthly and annual volume of fresh Water obtained from Whale Tail Lake.
4. Monthly and annual volume of fresh Water obtained from unnamed water bodies for Whale Tail Haul Road dust suppressant and for the Emulsion plant.
5. Results of lake level monitoring conducted under the protocol developed as per Part D Item 5 for Whale Tail Lake (South Basin).
6. Summary of reporting results for the Water Balance and Water Quality model and any calibrations as required in Part E Items 7-9.

WASTE

7. Geochemical monitoring results including:
 - a. Operational acid/base accounting and paste pH test work used for Waste Rock designation (PAG and NPAG rock);
 - b. As-built volumes of Waste Rock used in construction and sent to the Waste Rock Storage Facility with estimated balance of acid generation to acid neutralization capacity in a given sample as well as metal toxicity;
 - c. All monitoring data with respect to geochemical analyses on site and related to roads, quarries, and the Whale Tail Haul Road;
 - d. Leaching observations and tests on pit slope and dike exposure; and
 - e. Any geochemical outcomes or observations that could imply or lead to environmental impact.



8. Volumes of Waste Rock used in construction and placed in the Waste Rock Storage Facility.
9. Volumes of ore stockpiled and overburden stored at Whale Tail Pit site.
10. Summary of quantities and analysis of Seepage and runoff monitoring from the Landfill, Waste Rock Storage Facility and associated dikes/berms.
11. A summary report of all general waste disposal activities including monthly and annual quantities in cubic metres of waste generated and location of disposal.
12. Reporting of Incinerator test results including the materials burned and the efficiency of the Incinerator in relation to effects on Water and the potential Deposit of Waste into Water.

SPILLS

13. A list and description of all unauthorized discharges including volumes, spill report line identification number and summaries of follow-up action taken.

MODIFICATIONS

14. A summary of Modifications and/or major maintenance work carried out on all Water and Waste-related structures and facilities.

MONITORING

15. The results and interpretation of the Monitoring Program in accordance with Part I and Schedule I.
16. The results of monitoring related to the Aquatic Effects Monitoring Program (AEMP) including:
 - a. Core Receiving Environment Monitoring Program (CREMP);
 - b. Metal Mining Effluent Regulation (MMER) Monitoring;
 - c. Water Quality and Flow Monitoring;
 - d. Visual Whale Tail Haul Road water quality monitoring;
 - e. Blast Monitoring; and
 - f. Groundwater Monitoring.

CLOSURE

17. A summary of any progressive Closure and Reclamation work undertaken, including photographic records of site conditions before and after completion of operations, and an outline of any work anticipated for the next year, including any changes to implementation and scheduling.
18. A summary of on-going field trials to determine effective capping thickness for the Waste Rock Storage Facility for the purpose of long term environmental protection.
19. An updated estimate of the current restoration liability based on Project development monitoring, results of restoration research and any changes or modifications to the Appurtenant Undertaking.



PLANS/REPORTS/STUDIES

20. A summary of any studies requested by the Board that relate to Water use, Waste disposal or Reclamation, and a brief description of any future studies planned.
21. Where applicable, revisions as Addenda, with an indication of where changes have been made, for Plans, Reports, and Manuals.
22. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence.

GENERAL

23. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector.

OTHER

24. A summary of public consultation and participation with local organizations and the residents of the nearby communities, including a schedule of upcoming community events and information sessions.
25. Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.



Schedule D: Conditions Applying to Construction

1. The Construction Summary Report referred to in Part D Items 15-16 shall include:
 - a All final design and Construction drawings (must be stamped and signed by a Professional Engineer).
 - b A summary of Construction activities including photographic records before, during and after Construction;
 - c As-built drawings;
 - d Documentation and detailed explanation of field decisions reflecting any deviations from original Construction drawings and plans, and how such deviations may affect performance of engineered structures;
 - e Discussion of mitigation measures implemented during Construction and effectiveness of measures taken;
 - f Monitoring undertaken in compliance with Part D of the Licence;
 - g Blast vibration monitoring for quarrying activities carried out in close proximity to fish bearing waters;
 - h Monitoring for sediment release from Construction areas; and
 - i Monitoring and reporting on use of Water to manage dust emissions from crushing and Construction activity.



Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

TABLE 1 – MONITORING GROUP

Group	Parameters
1	pH, turbidity, hardness, alkalinity, ammonia nitrogen, total metals (aluminum, arsenic, barium, cadmium, chloride, chromium, copper, fluoride, iron, lead, manganese, mercury, molybdenum, nickel, nitrite, nitrate, selenium, silver, thallium, zinc) sulphate, TDS, TSS.
2	<p>Total and Dissolved metals: aluminum, antimony, arsenic, boron, barium, beryllium, cadmium, copper, chromium, iron, lithium, manganese, mercury, molybdenum, nickel, lead, selenium, tin, strontium, titanium, thallium, uranium, vanadium and zinc.</p> <p>Nutrients: Ammonia-nitrogen, total kjeldahl nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate, total phosphorous, total organic carbon, total dissolved organic carbon and reactive silica.</p> <p>Conventional Parameters: bicarbonate alkalinity, chloride, carbonate alkalinity, conductivity, hardness, calcium, potassium, magnesium, sodium, sulphate, pH, total alkalinity, TDS, and TSS, turbidity.</p>
3	MMER parameters (arsenic, copper, lead, nickel, zinc, total suspended solids, pH), sulphate, turbidity and total aluminum.
4	Total Arsenic, Total Copper, Total Lead, Total Nickel, TSS, Benzene, Toluene, Ethylbenzene, Xylene, TPH, pH.
MMER	Arsenic, copper, lead, nickel, zinc, total suspended solids, pH, effluent volumes and flow rate of discharge, acute lethality (Rainbow Trout and Daphnia magna) and environmental effects monitoring (EEM).



TABLE 2 – MONITORING PROGRAM

Station	Description	Phase	Monitoring Parameters	Frequency
<i>Mine Site</i>				
ST-DC-1 to TBD	Monitoring Program Stations during dike Construction as defined in the Whale Tail Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	Construction	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D, Item 5	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D Item 5
ST-DD-1 to TBD	Monitoring Program Stations during dike dewatering as defined in the Whale Tail Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	Construction	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D, tem 5	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in part D, Item 5
ST-S-1 to TBD	Seeps (to be determined)	Operations	Group 1	Monthly or as found
		Closure	Group 1	Monthly or as found
ST-GW-1 to TBD	Groundwater wells (to be determined) as required under Groundwater Monitoring Plan	Operations	Group 2	Annually
		Closure	Group 2	Annually
ST-WT-1	Attenuation Pond, pre-treatment	Operations	Group 1	Four times per calendar year
ST-WT-2	Attenuation Pond, posttreatment; last point of control before discharge	Operations	Volume (m ³)	Daily during periods of discharge
			Field Measurements	Weekly during periods of discharge
			Group 1	Weekly during periods of discharge



			Group1-MMER Effluent characterization	Four times per calendar year
			Group 3-MMER Acute Toxicity	Once prior to discharge and Monthly thereafter
			3-MMER sub-lethal toxicity	Two times per calendar year
ST-WT-3	Waste Rock Storage Facility (WRSF) Pond prior to pumping to Attenuation Pond	Operations	Group 1	Four times per calendar year, when water is present
		Closure	Group 1	Four times per calendar year, when water is present
	Waste Rock Storage Facility (WRSF) Pond prior to discharge to Mammoth Lake	Post-Closure	Group 1	Four times per calendar year, when water is present
ST-WT-4	Whale Tail Pit or pit sump	Operations	Group 1	Four times per calendar year
ST-WT-5	Water Intake from Nemo Lake	Construction	Volume (m ³)	Monthly
		Operation	Volume (m ³)	Monthly
ST-WT-6	Lake A47	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-7	East diversion channel	Operations	Group 3	Three times (freshet, summer, fall) per calendar year
ST-WT-8	Water Intake from Whale Tail Lake	Closure	Volume (m ³)	Monthly
ST-WT-9	North Whale Tail Lake (as the basin fills and when it is	Closure	Group 1	Four times per calendar year



	connected to the south basin and prior to or when connected to the downstream environment)	Post-Closure	Group 2	Four times per calendar year
ST-WT-10	Pit Lake (as the Pit fills)	Closure	Group 2	Four times per calendar year
		Post-Closure	Group 2	Four times per calendar year
ST-WT-11	Sewage Treatment Plant	Operations	Group 1	Four times per calendar year
		Closure	Group 1	Four times per calendar year
ST-WT-12	Secondary containment at Whale Tail Bulk Fuel Storage Facility	Operations	Group 4	Prior to discharge or transfer of effluent
		Closure	Group 4	Prior to discharge or transfer of effluent
ST-WT-13	Lake A45	Operations	Group 3	Flow, Monthly during open-water
		Closure	Group 3	Flow, Monthly during open-water until water level have returned to baseline level
ST-WT-14	Lake A16 outlet	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-15	Lake A15	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water