

12 ABBREVIATIONS, ACRONYMS AND GLOSSARY

12.1 Abbreviations and Acronyms

AAQC	Ambient Air Quality Criteria
ACCDC	Atlantic Canada Conservation Data Centre
AEMP	Aquatic Effects Monitoring Program
AGS	Atlantic Growth Strategy
ALDs	Anoxic limestone drains
AMNS	Atlantic Mining NS Inc.
AMO	Abandoned Mine Openings
ANFO	Ammonium Nitrate, Fuel Oil
ANSMC	Assembly of Nova Scotia Mi'kmaq Chiefs
APEC	Atlantic Provinces Economic Council
AQI	Air Quality Index
ARD	Acid Rock Drainage
ARM	Acid Rain Mitigation Project of the West River (Sheet Harbour)
As	arsenic
ATV	All terrain vehicles
ATVANS	All-Terrain Vehicle Association of Nova Scotia
BAP	Best Available Practices
BCM	bank cubic metres
BFI	baseflow Index
BMP	best management practices
CAAQS	Canadian Ambient Air Quality Standards
CaCO₃	Calcium Carbonate
CCME	Canadian Council of Ministers of the Environment
CCME FWAL	Canadian Council of Ministers of the Environment Water quality Guidelines for the Protection of Freshwater Aquatic Life
CDA	Canadian Dam Association
CEAA	Canadian Environmental Assessment Agency
CEPA	Canadian Environmental Protection Act
CERB	Canada Emergency Response Benefit
CFM	Cubic feet per minute
CH₄	Methane
CIL	Carbon in Leach
CLC	Citizen Liaison Committee
CMA	Census Metropolitan Area
CMM	Confederacy of Mainland Mi'kmaq
CO	Carbon Monoxide

CO₂	Carbon Dioxide
CO_{2e}	Carbon Dioxide Equivalent Units
COC	contaminant of concern
COO	Chief Operating Officer
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CRA	Conestoga-Rovers & Associates
CSM	Conceptual Site Model
CSP	corrugated steel pipe
CWS	Canadian Wildlife Service
DFO	Fisheries and Oceans Canada
DO	Dissolved Oxygen
DO	Dissolved Oxygen
DOC	Dissolved Organic Carbon
DSM	Digital Surface Model
DTH	down the hole
DU	designatable units
EA	Environmental Assessment
EARD	Environmental Assessment Registration Document
ECCC	Environment and Climate Change Canada
eDNA	Environmental DNA
EEM	Environmental Effects Monitoring
EGSPA	Environmental Goals and Sustainable Prosperity Act
EIS	Environmental Impact Statement
EMM	Preliminary Environmental Effects Monitoring Plan
EMS	Environmental Management System
EOM	End of Mine
EP	Engagement Plans
EPP	Environmental Protection Plan
EQS	Nova Scotia Environment Quality Standards
ESFWA	Eastern Shore Forest Watch Association
ESIA	Environmental Study Impact Assessment
ESMH	Eastern Shore Memorial Hospital
FEC	Forest Ecosystem Classification
FHAA	Fish Habitat Assessment Area
FOS	Fine ore stockpile
FTE	Full-time equivalents
FWAL	Freshwater Aquatic Life
GCL	Geosynthetic Clay Liner
GDP	Gross Domestic Product

GHG	Greenhouse Gas
GLC	ground level concentrations
Golder	Golder Associates Ltd
GPS	Global Positioning System
HDPE	High-density Polyethylene
HIS	Habitat Suitability Indexing
HMANA	Hawk Monitoring Association of North America
HRM	Halifax Regional Municipality
HU	habitat units
IA	Industrial Approval
IAAC	Impact Assessment Agency of Canada
ICMC	International Cyanide Management Code
IDF	Intensity, Duration and Frequency
ILE	Institute of Light Engineers
ILR	Intensive Leach Reactor
IR	Indian Reserve
IR2	Round 2, Information Requests
ISQG	Interim Sediment Quality Guidelines
KBCM	kilo bank cubic metre
kLCM	kilo loose cubic metre
KMKNO	Kwilmu'kw Maw-klusuaqn Negotiation Office
KPIs	Key Performance Indicators
LAA	Local Assessment Area
LGO	low-grade ore
LOEC	Lowest observed effect concentration
LSA	Lichen Study Area
MACA	Mooseland and Area Community Association
MAD	mean annual discharge
MBBA	Maritime Breeding Bird Atlas
MBCA	Migratory Birds Convention Act
MBR	Migratory Birds Regulations
MCBA	Migratory Birds Convention Act, 1994
MCG	Mi'kmaw Conservation Group
MDMER	Metal and Diamond Mining Effluent Regulations
MEKS	Mi'kmaq Ecological Knowledge Study
MEL	McCallum Environmental Limited
MIA	Mining Infrastructure Area
MLCM	Million loose cubic metres
MMMP	Mainland Moose Management Plan

MMTS	Moose Mountain Technical Services
MOU	Memorandum of Understanding
MPS	Municipal Planning Strategy
MRC	Moose River Consolidated
MTRI	Mersey Tobeatic Research Institute
MVMH	Musquodoboit Valley Memorial Hospital
Mine Water Management Plan	Mine Water Management Plan
N₂O	Nitrous Oxide
NaCN	Sodium Cyanide
NAG	non-acid generating
NaOH	sodium hydroxide
NAPS	National Air Pollution Surveillance Network
NCNS	Native Council of Nova Scotia
NGO	Non-Governmental Organization
NO_x	Oxides of Nitrogen
NPA	Navigation Protection Act, 1985
NPRI	National Pollutant Release Inventory
NRCAN	Natural Resources Canada
NSAQs	Nova Scotia Air Quality Standards
NSCCH	Nova Scotia Department of Communities, Culture, and Heritage
NSDEM	Nova Scotia Department of Energy and Mines
NSDMA	Nova Scotia Department of Municipal Affairs
NSDNR	Nova Scotia Department of Natural Resources
NSE	Nova Scotia Environment
NSECC	Nova Scotia Environment and Climate Change
NSESA	Nova Scotia Endangered Species Act
NSL&F	Nova Scotia Department of Lands and Forestry
NSSA	Nova Scotia Salmon Association
NSSA AMP	Nova Scotia Salmon Association Acid Mitigation Project
NSTAT	Department of Transportation and Active Transit
NSTIR	Nova Scotia Department of Transportation and Infrastructure Renewal
NWPA	Navigable Waters Protection Act, 1985 (repealed)
O₃	Ozone
OAA	Office of Aboriginal Affairs
OMS	organic material stockpile
PA	Project Area
PAG	potential acid generative
PAPR	powdered air purifying respirators
PC	Post Closure

PEL	Probable Effect Level
PLS	Plain Language Summary
PM	Particulate Matter
PM₁₀	Coarse Particulate Matter; 10 micrometers in aerodynamic diameter
PM_{2.5}	Fine Particulate Matter; 2.5 micrometers in aerodynamic diameter
PPE	personal protective equipment
ppm	parts per million
qPCR	quantitative polymerase chain reaction
RAA	Regional Assessment Area
RCMP	Royal Canadian Mounted Police
ROM	Run Of Mine
SAR	Species at Risk
SARA	Species at Risk Act, 2002
SEP	Stakeholder Engagement Plan
SMP	Special Management Practices
SO₂	Sulphur Dioxide
SO₄	Sulfate
SOCI	Species of Conservation Interest
SOP	Standard Operating Procedure
SSD	species sensitivity distribution
SSWQO	site-specific water quality objectives
SU	Southern Uplands
TC	Transport Canada
TDS	Total Dissolved Solids
TIR	Department of Transportation and Infrastructure Renewal
TLRUS	Traditional Land and Resource Use Study
TLS	till stockpiles
TMF	Tailings Management Facility
TOR	Terms of Reference
TPM	Total Particulate Matter
TSP	total suspended particulates
TSS	Total Suspended Solids
USEPA	United States Environmental Protection Agency
VC	Valued Component
VECs	Valued Environmental Components
VOC	Volatile Organic Compounds
VT	Vegetation types
WBM	water balance model
WQG	Water quality guidelines

WRSA	Waste Rock Settlement Area
WRSH	West River Sheet Harbour
WSS	Wetlands of special significance
WTS	water treatment system
YOY	Young of the year
ZVI	Zone of Visual Influence

12.2 Units of Measure

%	percent
<	less than
>	greater than
°C	degrees Celsius
µg/m³	micrograms per cubic metre
µm	micro metres
cm	centimetre
cm/year	centimetres per year
dBA	decibels
E	East
EI.	Elevation
g/s	grams per second
g/t	grams per tonne
ha	hectare
Hz	hertz
kg	kilogram
kg/hr	kilogram per hour
kg/t	kilogram per tonne
km	kilometre
km²	square kilometre
kt	kilotonne
kt	kilo tonnes
kV	kilovolt
kW	kilowatt
L	litre
L/a	litres per annum
L/d	liters per day
m	metre
m²	square metre
m³	cubic metre
m³/d	cubic metre per day
m³/h	cubic metres per hour
m³/sec	cubic metre per second
m³/y	cubic metre per year
masl	metres above sea level

mg/L	milligram per litre
mg/m³	milligram per cubic metre
ML	million litres
mm	millimetre
Mm³	million cubic metres
Mm³/y	million cubic metres per year
Mt	million tonnes
Mt/yr	million tonnes per year
MW	megawatt
N	North
NTU	nephelometric turbidity unit
oz	ounces
pH	concentration of hydrogen ions
ppb	parts per billion
pphm	parts per hundred million
ppm	parts per million
S	South
t	tonne
t/d	tonne per day
t/hr	tonne per hour
t/m	tonne per cubic metre
t/m³	tonnes per cubic metres
t/y	tonnes per year
TCU	true colour unit
V	volt
W	West
wt%	percent by weight
µg/g	microgram per gram
µg/L	microgram per litre
µS/cm	microSiemens per centimetre

12.3 Glossary

Abiotic	Non-living factors that influence an ecosystem, such as climate, geology and soil characteristics.
Acid rock drainage	Acidic pH rock drainage due to the oxidation of sulphide minerals that includes natural acidic drainage from rock not related to mining activity; an acidic pH is defined as a value less than 6.0.
Active layer	The layer of ground above the permafrost that thaws seasonally during the summer and refreezes in the fall.
Ammonium nitrate fuel oil	A widely used explosive mixture.
Anthropogenic	Relating to, or resulting from the influence of human beings on nature.
Armouring	Protecting a channel from erosion by covering with protective material.
Backfilling	Using material to refill an excavated area.

Biophysical	The biological (e.g., plants, animals) and physical (e.g., air, water, soil) components of the natural environment.
Bioremediation	Use of microorganisms or their enzymes to return soil altered by contaminants back to its original condition.
Biotic	Living components of an ecosystem.
Boulder	A large rounded mass of rock lying on the surface of the ground or embedded in the soil.
Breccia	A fragmental rock whose fragments are angular.
Catchment	An area of land where water from precipitation drains into a body of water.
Commitments	Actions that AMNS formally agrees to undertake
Degrit	A degrit module consists of cyclones that separate the fine kimberlite (less than 0.25 mm) from the grits (greater than 0.25 mm but less than 1.0 mm).
Diabase	A dark coloured, fine to medium-grained igneous intrusive rock.
Diversion channel	an artificial channel built to reduce excess water flow, particularly during flooding, by diverting some of this flow to a lake or the sea or to a purpose-built waterway.
Dyke	A tabular body of igneous rock that cuts across the bedding or foliation of the rock it intrudes.
Entrainment	The entrapment of one substance by another substance.
Fetch	An area of a waterbody where waves are generated by a wind having a constant direction and speed (also called Generating Area).
Fines	Silt and clay particles.
Flocculant	Chemicals that promote flocculation by causing colloids and other suspended particles in liquids to aggregate, forming a floc.
Freeboard	The distance between the water level and the top of a containing structure such as a dyke crest or channel top of bank.
Freshet	Seasonal surface runoff associated with spring melt.
Game Sanctuaries	Game Sanctuaries were established early in the 20th century to protect wildlife and a “nucleus of breeding stock”. Today, wildlife management tools reduce the risk of extinction, but the game sanctuary designation remains as a tool for government to regulate lands, “where unusual concentrations of wildlife are vulnerable to site specific threats.” Game Sanctuaries are enabled under the Nova Scotia Wildlife Act.
General fill	Rock not graded as to size or quality
Granular fill	Screened and sized rock material for earthworks/construction.
Grits	Processed kimberlite particles between 0.25 mm and 1.0 mm in size.
Grizzly	A grating, usually constructed of steel rails to separate coarse material from plant feed.
Groundwater	Water within interconnected pore spaces of the subsurface within the saturated zone below the water table.
Habitat	The place or environment where a plant or animal naturally or normally lives or occurs.
Heat-traced pipes	Piping with electric heating elements to prevent freezing.
Humidity cell	A type of kinetic test in which a small sample (about 1 kg) is placed in an enclosed chamber in a laboratory, alternating cycles of moist and dry air is constantly pumped through the chamber, and once a week the sample is rinsed with water; chemical analysis of rinse water yields concentrations of elements and other parameters used to calculate reaction rates.
Hydraulic gradient	The difference in piezometric level or hydraulic head between two points over a change in distance in the direction, which yields the greatest change in hydraulic head.
Hydrocarbons	Oil based products.
Infrastructure	Basic facilities, such as transportation, communications, power supplies and buildings, which enable an organization, project or community to function.
Landfarm	Facility that contains soil during bioremediation.
Littoral	The shallow, shoreline area of a lake.

Make-up water	The process water required to replace that lost by evaporation or leakage in a closed-circuit, recycle operation.
Mature climax	A forest stand of trees aged 80 to 125 years old
Mine rock	Excavated bed rock surrounding the kimberlite deposits. Mine rock consists primarily of granitic rock material.
Mineralization	To transform a metal into an ore; to impregnate or supply with minerals or an inorganic compound; to convert into mineral or inorganic form.
Mitigation	An approach, action or process to reduce or eliminate impacts of a project on the environment, community, stakeholder or society. To take action on a mitigation AMNS would issue a commitment to the mitigation.
Muskeg	Bog: especially a sphagnum bog of northern North America often with tussocks. A usually thick deposit of partially decayed vegetable matter of wet boreal regions.
Nature Reserves	Nature reserves are areas selected to preserve and protect, in perpetuity, representative and special nature ecosystems, plant and animal species, features and natural processes. Scientific research and education are the primary uses of nature reserves and recreation is generally restricted. Nature Reserves are protected under the Nova Scotia Special Places Protection Act.
Old Forest	A stand or collection of stands containing Old Growth and/or mature climax conditions.
Old Growth Forest	A stand with trees 125 years or older
Open-pit mine	A mine where rock or mineral extraction from the earth is done using a pit or borrow open to the surface, rather than using a tunnel into the earth.
Ore body	An accumulation of ore, which is a type of rock that contains minerals with important elements that are typically mined.
Overburden	Materials of any nature, consolidated or unconsolidated, that overlie a deposit of useful materials. In the present situation, overburden refers to the soil and rock strata that overlie kimberlite deposits.
Overwintering	To remain alive over winter.
Permafrost	Permanently frozen subsoil occurring throughout the polar regions.
pH	The degree of acidity (or alkalinity) of soil or solution. The pH scale is generally presented from 1 (most acidic) to 14 (most alkaline). A difference of one pH unit represents a ten-fold change in hydrogen ion concentration.
Plant phenology	The study of periodic plant life cycle events and how these are influenced by seasonal and interannual variations in climate.
Potable water	Water that is suitable for drinking.
Potentially acid generating rock	Rock that when oxidized by surface weathering may form acid which can then leach metals. Leached metal ions can be harmful to fish and other aquatic life.
Propagules	Root fragments, seeds, and other plant materials that can develop into a plant under the right conditions.
Reagent	A substance or compound that is added to a system to bring about a chemical reaction or is added to see if a reaction occurs.
Runoff	The portion of water from rain and snow that flows over land to streams, ponds or other surface waterbodies. It is the portion of water from precipitation that does not infiltrate into the ground, or evaporate.
Run-of-mine	The raw unprocessed or uncrushed material in its natural state obtained after blasting or digging, from the mineralized zone of a lease area.
Sediment	Solid material that is transported by, suspended in, or deposited from water. It originates mostly from disintegrated rocks; it also includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope soil characteristics, land usage and quantity and intensity of precipitation.
Seepage	Slow water movement in subsurface. Flow of water from man-made retaining structures. A spot or zone, where water oozes from the ground, often forming the source of a small spring.

settling pond	An earthen or concrete structure using sedimentation to remove settleable matter and turbidity from wastewater. The basins are used to control water pollution.
Sub-watershed	A smaller portion of a watershed containing a drainage area that is connected to the larger portion by a single channel.
Succession	The progressive replacement of one dominant type of species or community by another in an ecosystem until a stable climax community is established.
Sumps	A well or pit in which liquids collect below floor level.
tailings	Finely ground residuals that remain after the mill process has removed the valuable metals from the ore.
Talik	A layer of year-round unfrozen ground that lies in permafrost areas.
Tertiary watershed	Tertiary Watershed are subdivisions of secondary watershed.
Thermistors	An instrument used to measure temperature.
Till	Till is an unsorted glacial sediment. Glacial drift is a general term for the coarsely graded and extremely heterogeneous sediments of glacial origin. Glacial till is that part of glacial drift which was deposited directly by the glacier. It may vary from clays to mixtures of clay, sand, gravel, and boulders.
Total dissolved solids	The total concentration of all dissolved materials found in a water sample.
Total suspended solids	A measurement of the concentration of particulate matter found in water.
Turbidity	The cloudiness or haziness of a fluid caused by individual particles (suspended solids) in water that are generally invisible to the naked eye.
Utilidors	A utility corridor built underground or aboveground to carry utility lines such as electricity, water and sewer.
Valued Components	Components of the natural and human environment that are considered by the proponent, public, Aboriginal groups, scientists and other technical specialists, and government agencies involved in the assessment process to have scientific, ecological, economic, social, cultural, archaeological, historical, or other importance
Waste rock	Bedrock that has been mined and transported out of the pit but does not have metal concentrations of economic interest.
Waterbody	A body of water forming a physiographical feature, for example a sea or a reservoir
Watercourse	A natural or artificial channel through which water flows.
Watershed	Also know as a catchment basin, includes all land that is drained by a watercourse and its tributaries. Water sheds are split into four categories; Primary, Secondary, Tertiary, and Quaternary.
Wetlands	A wetland is a distinct ecosystem that is flooded by water, either permanently or seasonally, where oxygen-free processes prevail. The primary factor that distinguishes wetlands from other land forms or waterbodies is the characteristic vegetation of aquatic plants, adapted to the unique hydric soil.
Wilderness Areas	These are provincially significant protected areas which are designated under the Nova Scotia <i>Wilderness Areas Protection Act</i> . Forestry and road development are not permitted. Other activities such as mining, vehicle use, building structures or trails, and managing or removing plants are prohibited except in certain circumstances as outlined in the legislation. Hunting is permitted.