

Subject to the following terms and conditions:

Definitions

“the Act” means the *Quarry Materials Act, 1998*.

“angle of repose” means the steepest angle of descent or dip relative to the horizontal plane to which a material can be excavated or stockpiled without slumping. The angle of repose can range from 0° to 90° or be described as a ratio of horizontal and vertical distances (e.g. 2:1 means 2 horizontal units of measure for 1 vertical unit of measure).

“blaster” means a person who holds a valid blaster's certificate granted by the Department of Advanced Education, Skills and Labour.

“Crown” means any department of the Province of Newfoundland and Labrador.

“Department” means the Department of Natural Resources.

“designated blast area” includes the danger area, which is the zone in which there exists a possibility of hazard to a person or property from fly rock, fume, air blast or ground vibrations, and is the area where the blaster has made arrangements to evacuate all persons whose safety might be threatened by the blasting operation.

“final rehabilitation” means rehabilitation carried out upon exhaustion/depletion of a part or all of the Quarry Permit area in accordance with the Act, the Regulations, and terms and conditions of the Quarry Permit and is supplemental to any progressive rehabilitation that has been completed.

“flyrock” means rock that becomes airborne as a direct result of a blast.

“grubbing” means the stumps, organic material and topsoil that are stripped to access quarry materials.

“inert” means material that is deemed acceptable for disposal at a location other than at an approved waste disposal facility in accordance with the Department of Environment and Climate Change’s legislation and regulations.

“Minister” means the Minister of Natural Resources.

“overburden” means any unconsolidated materials located between the grubbing and bedrock.

“peak particle velocity (PPV)” means the maximum component velocity in millimetres per second that ground particles move as a result of energy released from explosive detonations.

“permittee” means the person or company to which a Quarry Permit has been issued. Where applicable, permittee means the person or company to which a Subordinate Quarry Permit has been issued.

“pre-blast survey” means a detailed record, accompanied by film or video, as necessary, of the condition of private or public property prior to the commencement of blasting operations.

“progressive rehabilitation” means rehabilitation done sequentially during the term of the Quarry Permit, within a reasonable time following individual quarry operations, in accordance with the Act, the Regulations, and terms and conditions of the Quarry Permit.

“quarry material” is defined under Section 2(1)(j) of the Act.

“the Regulations” means the *Quarry Materials Regulations, 1996*.

“rehabilitate” means to treat land from which quarry materials have been excavated so that the use or condition of the land is:

- a) restored to its former use or condition; or
- b) changed to another use or condition that is or will be compatible with the use of adjacent land.

“sensitive receptor” means a place of residence or commercial place of business, where people normally occupy at any given time.

A - General

- 1) This Quarry Permit does not relieve the permittee from:
 - a) adhering to other Provincial and Federal legislation or regulations; and
 - b) obtaining all other permits and authorizations that may be required for the quarry operation (e.g. municipal development permits, development control permits, crown land access and highway access permits, forestry cutting and operating permits, environmental permits for asphalt plants, stream crossing, etc.).
- 2) A rental fee of \$120.00 per hectare and an annual quarry permit application fee of \$100 are payable in advance.
- 3) A royalty of \$0.75 per cubic metre for quarry material removed is payable within two months from the expiration of this Quarry Permit.
- 4) The permittee shall retain any existing tree screens between quarrying and adjacent roads, highways, waterbodies (including wetlands), or other land uses.
- 5) Where no tree screens exist, earth berms and/or other measures approved by the Department shall be implemented to screen the operation from the general public on adjacent roads, highways, or other land uses.
- 6) The Crown reserves the right to quarry and remove from the Quarry Permit, at any time, any required quarry materials free of charge without obligation to compensate the permittee in any way.
- 7) A copy of this Quarry Permit shall be at the quarry site and available for inspection at all times during operations.
- 8) Any person authorized by the Minister may at any time enter upon the Quarry Permit for Departmental purposes in order to inspect, map or examine the quarry operation.
- 9) This Quarry Permit may be cancelled by the Minister without notice if operations fail to comply with any of the terms and conditions of this Quarry Permit, the Act, or Regulations.
- 10) Any Subordinate Quarry Permit issued for this site is subject to all applicable terms and conditions of the Quarry Permit.

B - Restrictions

- 1) There shall be no quarrying within:
 - a) 300 metres of a sensitive receptor without permission in writing from the Minister;
 - b) 15 metres of private property without the written permission of the private property owner(s) Land title documentation shall be provided to the Department for verification;
 - c) 90 metres of the road centerline of a protected roadway as designated under the Protected Road Zoning Regulations;

- d) the building control line of a protected roadway without a development permit issued under the Protected Road Zoning Regulations. As set out in the Protected Road Zoning Regulations, building control lines are located at the following distances measured perpendicular from the road centreline:
 - i. 100 metres within a municipal boundary;
 - ii. 150 metres within a municipal planning area but outside of a municipal boundary;
 - iii. 400 metres within an unincorporated community or outside of a settled area;
 - e) 50 metres of a road not specified in subsections (a), (b), (c), and (d); and
 - f) 50 metres of any waterbody or 30 metres of wetlands and ephemeral watercourses.
- 2) Removal of grubbing (e.g. topsoil) is prohibited, unless otherwise stated.
 - 3) The permittee shall prevent unauthorized access to the Quarry Permit area.
 - 4) The permittee shall neither pollute nor permit the pollution of any pond, brook, river or other waters, including wetlands.
 - 5) The Fisheries Act requires that projects avoid causing serious harm to fish unless authorized by the Minister of Fisheries and Oceans Canada. This applies to work being conducted in or near waterbodies that support fish that are part of or that support a commercial, recreational or Aboriginal fishery. If quarrying related activities (e.g. access road construction) are to take place in or near a waterbody, please complete the Department of Fisheries and Oceans (DFO) Self-Assessment at: <http://www.dfo-mpo.gc.ca/pnw-pppe/index-eng.html>.
 - a) As per Section 38(5) of the Fisheries Act, every person has a duty to notify DFO of an occurrence that results in serious harm to fish, or the deposit of a deleterious substance in water frequented by fish. Should such an occurrence take place, the Proponent shall contact DFO at 709-772-4140 or FPP-NL@dfo-mpo.gc.ca.
 - 6) Except with the consent in writing by the Minister of Environment and Conservation, the permittee shall not interfere with any pond, brook, river or other waters, including wetlands.
 - 7) All access roads to the Quarry Permit that traverse watercourses (e.g. streams, creeks, rivers) shall be constructed in accordance with the Department of Environment and Climate Change's regulations and policies.
 - 8) Except with the written permission from the Minister, quarrying is not permitted to result in excavation below the water table and cause the accumulation or ponding of water. Creation of settling ponds for quarry production purposes requires both the written permission of the Minister and the Department of Environment and Climate Change.
 - 9) Buildings or structures shall only be erected in the Quarry Permit area with written permission from the Minister. Any erected buildings, structures and equipment approved for this permit shall be temporary in nature and kept in good repair and working order.
 - 10) The Quarry Permit area shall be kept free of scrap materials including, but not limited to refuse and abandoned or derelict vehicles, equipment, and buildings.

C - Site Preparation

- 1) The permittee, prior to commencing operations, shall establish suitable corner posts or rock cairns at least one-metre high and carry out suitable blazing of trees, placement of flagging, erection of fencing, or other appropriate methods to outline the area under Quarry Permit.
- 2) All boundary markings shall be maintained during the term of the Quarry Permit.
- 3) The area to be excavated shall be cleared of all vegetation prior to the removal of any quarry materials. Unless otherwise approved by the Minister, only an area necessary for the term of the Quarry Permit shall be cleared. The nearest Forestry Management office must be contacted to obtain any necessary wood cutting permits and instructions regarding the salvage of wood.

D - Quarry Operations

- 1) The permittee shall conduct quarry operations in an efficient manner.
- 2) All trees must be removed and grubbing carried out within five metres of the active quarry and stockpile areas; these activities shall remain within the boundaries of the quarry permit. Prior to stockpiling the grubbing material, any topsoil shall be separated and stockpiled separately. The permittee shall ensure that the quality of the topsoil is not affected by dilution with other materials.
- 3) Quarrying shall be conducted in a systematic manner taking in to account the life expectancy of the operation, the eventual slopes upon completion, the potential after-use of the site, and the various potential end-product uses of quarry materials available at the site.
- 4) Where mobile crushing and/or screening equipment is used to process quarry materials, Section 414 of the Occupational Health and Safety Regulations require, as applicable, equipment to have dust controls, adequate mechanical exhaust system(s), and adequate water spray system(s).
- 5) Noise and dust shall be mitigated on site if a sensitive receptor is within 500 metres from the Quarry Permit operation and/or for environmental reasons and in accordance with applicable industrial and environmental standards, regulations, and guidelines.
- 6) If blasting is required, it shall be performed under the direct supervision of a blaster who is present at the project and who holds a valid blaster's certificate which authorizes the performance of the particular type of work that the blaster is to conduct or supervise.
- 7) If blasting is required, the permittee and/or blaster must notify, in writing, all sensitive receptors within 500 m of the blast site.
- 8) If blasting is required, a drill and blast design plan shall be prepared by a qualified individual and monitoring for ground vibration and overpressure shall be carried out by the blaster to ensure compliance with appropriate guidelines. The drill and blast design plan shall include, as a minimum, the following:
 - a) PPV and design peak sound pressure level at 300 m radius from the area of the blast or to nearest utility, residence, structure, or facility;
 - b) Number, pattern, orientation, spacing, size, and depth of drill holes;
 - c) Collar and toe load, number and time of delays, and mass and type of charge per delay;

- d) Setback distances to affected fish habitat;
- e) The explosive products to be used; and
- f) The designated blast area.

The drill and blast design plan shall be kept on site at all times.

- 9) If blasting is required, a pre-blast survey shall be prepared for all buildings, utilities, structures, water wells, sewage disposal systems, and other facilities likely to be affected by the blast. The standard inspection procedure shall include the provision of an explanatory letter to the owner or occupant with a formal request for permission to carry out an inspection and to obtain any necessary water samples for analysis and flow testing. The pre-blast survey shall include, as a minimum, the following information:
- a) Type of structure, including type of construction and if possible, the date when built;
 - b) Identification and description of existing differential settlements, including visible cracks in walls, floors, and ceilings, including a diagram, if applicable, room-by-room. All other apparent structural and cosmetic damage or defect shall also be noted. Defects shall be described, including dimensions, wherever possible; and
 - c) Digital photographs or digital video or both, as necessary, to record areas of significant concern.

Photographs and videos shall be clear and shall accurately represent the condition of the property. Each photograph or video shall be clearly labelled with the location and date taken.

A copy of the pre-blast survey, including copies of any photographs or videos that may form part of the report shall be provided to the owner of that residence or property, upon request.

- 10) If blasting is required, it shall only be carried out during daylight hours and at a time when atmospheric conditions provide clear observation of the blast from a minimum distance of 500 metres.
- 11) If blasting is required, it shall not be carried out on a holiday or between the hours of 6 PM on any day and 8 AM the following day. These time constraints do not apply if it can be demonstrated that a sensitive receptor does not exist within 1000 metres of the Quarry Permit.
- 12) If blasting is required, all fly rock shall be contained within the Quarry Permit via the use of blast mats, adjustment of drill and blast plan, or other appropriate operational measures.
- 13) Benching or other operational processes may be necessary to allow for the extraction of specific types of quarry materials or to prevent the contamination of relatively high quality materials by low quality materials. High quality materials shall not be used when lower quality would be adequate (e.g. materials suitable for hot-mix asphalt applications shall not be used for fill or road subgrade applications), unless contract requirements specify otherwise.
- 14) Without written permission of the Minister, quarry faces and bench heights shall be maintained in accordance with Section 409(2) of the Occupational Health and Safety Regulations. Specifically,
- a) the bench/face height quarries developed in unconsolidated material shall not exceed five metres and not be higher than can be reached safely with the equipment in use;
 - b) the bench/face height of quarries developed in consolidated (bedrock) shall not exceed ten metres and not be higher than can be reached safely with the equipment in use;
 - c) where there are two or more benches, berms shall be constructed on the second and higher benches to prevent material from falling to a lower bench;

- 15) Progressive rehabilitation is required for all operations throughout the term of the Quarry Permit.

E - Termination of Operations and Rehabilitation

- 1) Not less than thirty days prior to removing equipment from the Quarry Permit, the permittee shall notify the Department to arrange for an inspection of the site.
- 2) Prior to progressive or final rehabilitation of any part of the site, the site shall be inspected for waste materials (e.g. petroleum products, garbage, plastics, metal, and waste equipment). Any waste materials shall be removed from the site and taken to an approved waste disposal facility.
- 3) Upon completion of the operation or during extended periods of shutdown, where the quarry haul road accesses directly onto a provincial road/highway, municipal road, or publicly accessible road, the quarry haul road shall be barricaded (e.g. ditch/berm, gate) to the satisfaction of the Department.
- 4) The Department may require the permittee to perform maintenance on the portion of the quarry haul road that accesses directly onto a provincially maintained road/highway, municipal road, or publicly accessible road. Any maintenance to be performed on the quarry haul road or access from the road shall be at the expense of the permittee.
- 5) For final rehabilitation, quarries developed in unconsolidated material (sand and gravel) shall be sloped at 3:1; and quarries developed in consolidated (bedrock) sloped at 2:1. If approved by the Department, the slopes may conform to that which existed prior to quarrying and/or be left at a safe angle of repose. Surplus overburden may also be used to attain proper slopes; grubbing shall then be spread uniformly over the slopes.
- 6) If approved by the Department, if there is insufficient overburden available on site, clean inert fill may be imported for the purposes of carrying out final rehabilitation described in Paragraph E(5).
- 7) If approved by the Department, if there is insufficient grubbing to completely re-cover the site after sloping is complete, an additional organic substitute material shall be used to complete the process, provided that no invasive species are introduced. Acceptable substitute materials are straw, hay, trees having been cut in other parts of the quarry area, or ground vegetation produced by seeding.
- 8) If approved by the Department, final rehabilitation of the quarry site as outlined in Condition E(5) may not be required, where the Department confirms that the excavated portion(s) of the Quarry Permit contains sufficient reserves of quarry materials for future use. In this case, final rehabilitation may be required only for depleted areas of the site. Sloping and seeding of remaining topsoil and overburden stockpiles may be required.
- 9) Upon surrender, cancellation or expiration of the Quarry Permit, the permittee shall, within thirty days after the surrender, cancellation or expiration, remove from the permit area any buildings, machinery, chattels, personal property and quarry material which have been extracted. In default of doing so, the Minister may sell or otherwise dispose of the said buildings, machinery, chattels, personal property and quarry material under such terms and conditions as is considered appropriate. In the event that the cost of disposing of the said buildings, machinery, chattels, personal property and quarry material exceeds the amount recovered by the Minister, the permittee shall pay to the Minister any deficiency.
- 10) A complete report, on the form available from the Department, stating the actual quantity and type of material removed under this permit shall be filed with the royalty payment referred to in Condition A(3) of this Quarry Permit.