



APPROVAL TO OPERATE

I-10936

Pursuant to paragraph 5 (3) (a) of the *Air Quality Regulation - Clean Air Act*, and paragraph 8(1) of the *Water Quality Regulation - Clean Environment Act*, this Approval to Operate is hereby issued to:

Hammond River Holdings Limited
for the operation of the
Upham East Gypsum Quarry

Description of Source: **Operation of a gypsum quarry located in Upham, New Brunswick.**

Source Classification: **Air Quality Regulation Class 4**
Fees for Industrial Approvals Class 4
Regulation - Clean Water Act

Parcel Identifier: **00149013**

Mailing Address: **Unit 210, 65 Regent Street**
Fredericton, NB

Conditions of Approval: **See attached Schedules "A", "B", and "C" of this Approval**

Supersedes Approval: **New**

Valid From: **June 23, 2020**

Valid To: **June 22, 2025**

Recommended by: 

Issued by: 
for the Minister of Environment and Local Government

June 22, 2020
Date

SCHEDULE "A"

APPLICABILITY

This Approval, issued pursuant to the *Air Quality Regulation - Clean Air Act*, applies to the Upham East Gypsum Quarry operated by Hammond River Holdings Ltd. For the use of explosives to extract consolidated rock. It does not apply to construction blasting, wayside quarries and sand and gravel pits. The Approval is also issued pursuant to the *Water Quality Regulation - Clean Environment Act* as the physical processing of gypsum has a direct discharge to a watercourse.

A. DEFINITIONS

"Approval Holder" means the person or entity to whom this Approval is issued, as named on the first page (certificate) of the Approval.

"Department" means the New Brunswick Department of the Environment and Local Government.

"Facility" means the property, buildings, and equipment located on the property identified by the Parcel Identifier(s) on the first page (certificate) of this Approval, and all contiguous property in the title and/or in the control of the Approval Holder at that location.

"Holiday" means New Year's Day, Family Day, Good Friday, Easter Monday, Victoria Day, Canada Day, New Brunswick Day, Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day and Boxing Day. If the Holiday falls on a Sunday, the following day shall be considered as the Holiday.

"After Hours" means the hours when the Department's offices are closed. These include Holidays, weekends, and the hours before 8:15 a.m. and after 4:30 p.m. from Monday to Friday.

"Normal Business Hours" means the hours when the Department's offices are open. These include the period between 8:15 a.m. and 4:30 p.m. from Monday to Friday excluding Holidays.

"Petroleum Product" means a mixture of hydrocarbons, or their by-products, of any kind and in any form, including airplane fuel, asphalt, bunker "C" oil, crude oil, diesel fuel, engine oil, fuel oil, gasoline, kerosene, lubricants, mineral spirits, naphtha, petroleum based solvents regardless of specific gravity, transformer oil and waste petroleum products and excluding propane and paint.

"Environmental Emergency" means a situation where there has been or will be a release, discharge, or deposit of a contaminant or contaminants to the atmosphere, soil, surface water, and/or groundwater environments of such a magnitude or duration that it could cause significant harm to the environment or put the health of the public at risk.

“Final Operational Perimeter” means the final footprint of the Facility as approved by the Department. This includes but is not limited to, all areas from which rock has been or will be removed, as well as stockpiles and equipment.

“Blast Control and Monitoring Plan” means a plan, approved by the Department, describing actions to be taken prior to each blast at the Facility, including but not necessarily limited to monitoring for vibrations and air blast, public notification procedures, and audible blast warning procedures.

“Air Blast” means a temporary pressure pulse above the normal atmospheric pressure level produced by the unconfined detonation of explosives.

“Peak Particle Velocity” means the maximum speed that ground particles move in each of the three axes as a result of energy released from explosive detonations.

“Mine and Reclamation Plan” means the process, approved by the Department, to be used to rehabilitate areas where quarry activity has ceased. The rehabilitation of the quarry shall be progressive and the plan for final reclamation shall be such that there will be no requirement for ongoing site maintenance once rehabilitation is complete.

“Wayside Quarry” means a temporary quarry located immediately adjacent to the right-of-way of a provincial road or highway that removes consolidated rock with the use of explosives solely for use in the construction of the road or highway.

“Physical Processing of Gypsum” means the crushing of consolidated rock.

B. TERMS AND CONDITIONS

The Approval Holder shall operate the Facility in accordance with the following:

EMERGENCY REPORTING

1. Immediately following the discovery of an environmental emergency, the Approval Holder shall notify the Department in the following manner:

During normal business hours, telephone the Department’s applicable Regional Office **until personal contact is made** (i.e. no voice mail messages will be accepted) and provide all information known about the environmental emergency. The telephone number for the Department’s nearest Regional Office is provided in the table below:

After hours, telephone the Canadian Coast Guard **until personal contact is made** and provide all information known about the environmental emergency. The telephone number for the **Canadian Coast Guard** is **1-800-565-1633**.

2. Within 24-hours of the time of initial notification, a **Preliminary Emergency Report** shall be emailed by the Approval Holder to the Department’s applicable Regional Office using the email address provided below. The Preliminary Emergency Report shall clearly communicate all information available at the time about the environmental emergency.

Within five (5) days of the time of initial notification, a **Detailed Emergency Report** shall be emailed by the Approval Holder to the Department’s applicable Regional Office using the email address provided below. The Detailed Emergency Report shall include, as a minimum, the following: i) a description of the problem that occurred; ii) a description of the impact that occurred; iii) a description of what was done to minimize the impact; and iv) a description of what was done to prevent recurrence of the problem.

Office location	Phone	Email
Saint John Regional Office	(506) 658-2558	elg.egl-region4@gnb.ca

LIMITS

3. The Approval Holder shall ensure that emissions resulting from the operation of the Facility are controlled to prevent the exceedance of the maximum permissible ground level concentrations listed in Schedule B of the *Air Quality Regulation - Clean Air Act*
4. The Approval Holder shall ensure that odour, dust, site runoff and noise being released or discharged from the Facility does not cause adverse impacts to any off-site receptor. In the event emissions are suspected by the Department to be adversely impacting any off-site receptor, the Approval Holder may be required to investigate the degree of impact and/or develop, submit and implement a Prevention and Control Plan in accordance with a timetable established by the Department. The plan shall be submitted in writing to the Department for review and approval prior to implementation.
5. The Approval Holder shall conduct blasting such that ground vibration at each building, residence, and/or structure subject to blast effects, does not exceed a peak particle velocity of 1.25 cm/sec and that the air blast does not exceed 128 decibels on the linear scale.
6. The Approval Holder shall not conduct blasting operations between the hours of 17:00 and 10:00 during the week or at any time on Saturday, Sunday or any Holiday. If there are unforeseen delays in a scheduled blast that result in the blast having to be conducted beyond 17:00 for safety reasons, the Approval Holder shall notify the Department and provide an explanation in writing the following working day. The written explanation shall include the circumstances making the blast necessary and how this is to be prevented from recurring.
7. The Approval Holder shall ensure that no work is conducted outside of the Final Operational Perimeter of the Facility.

FACILITY MANAGEMENT

8. The Approval Holder shall ensure that no Petroleum Products are used as a dust control agent.
9. The Approval Holder shall control fly rock generated by blasting operations, such that it does not leave the Facility.
10. The Approval Holder shall ensure that spray bars are maintained and in use at all times while the crusher is operating.
11. The Approval Holder shall ensure that all chemicals stored at the Facility are located in a dedicated Chemical Storage System. The system shall be set-up to ensure that all chemicals are:
 - a) secured in sealed and chemically resistant containers;
 - b) protected from vehicle impacts;
 - c) in a containment area that has secondary containment adequate to contain 110 % of the nominal volume of the largest container in the containment area;
 - d) in a containment area that is designed to prevent contact between incompatible chemicals; and
 - e) in a containment area designed to prevent the release or discharge of chemicals to the environment as a result of a spill.
12. The Approval Holder shall ensure that all aspects of the most recent Blast Control and Monitoring Plan are followed for each blast at the Facility. In the event any contents of the Blast Control and Monitoring Plan are to be changed, the Approval Holder shall notify the Department of the intended change and receive written approval on the intended change prior to implementation.
13. The Approval Holder shall rehabilitate the Facility in accordance with the most recent Mine and Reclamation Plan. If a Mine and Reclamation Plan has not yet been submitted to the Department for review and acceptance, it shall be submitted **within six months of the issue date of this Approval**.

TESTING AND MONITORING

14. The Approval Holder shall monitor all blasts for ground vibration and air blast in accordance with the most recent Blast Control and Monitoring Plan
15. The Approval Holder shall conduct any testing and monitoring at such times and in such manner as the Department may in writing require.

RECORD KEEPING

16. The Approval Holder shall maintain records of the blast design used for each blast at the Facility, for a period of not less than **two (2) years**. These records shall be made available to the Department on request.

REPORTING

17. In the event the Approval Holder receives a complaint from the public regarding unfavourable environmental impacts associated with the Facility, the Approval Holder is to report this complaint by email to the Department's applicable Regional Office within one business day of receiving the complaint.
18. In the event the Approval Holder violates any Term and Condition of this Approval or the *Air Quality Regulation*, the Approval Holder is to immediately report this violation by email to the Department's applicable Regional Office. In the event the violation may cause the health or safety of the general public to be at risk and/or significant harm to the environment could or has resulted, the Approval Holder shall follow the Emergency Reporting procedures contained in this Approval.
19. In the event of a small spill or leak of liquid materials, the Approval Holder shall act first to contain, and then to clean up the spilled or leaked material and mitigate any resulting impacts as soon as the spill or leak is detected. If the spill or leak results in an "environmental emergency" as defined in this Approval, the Approval Holder shall report the event in accordance with the Emergency Reporting section of this Approval. If the spill or leak is not an "environmental emergency", the Approval Holder shall report this event to the Department's applicable Regional Office by fax, within one business day, identifying the material spilled, the approximate amount of liquid spilled, the location of the spill and the method(s) used to clean up the liquid.
20. The Approval Holder shall notify the Department, in writing, of the date that the Facility begins crushing and/or blasting activities for each operating season. This notification shall be made before such operation begins. The Approval Holder shall also notify the Department, in writing, of the date that the Facility ceases crushing and/or blasting activities for each operating season. This notification shall be made no later than one week after the Facility has ceased operation for the season. If the Facility is operating year-round, the Approval Holder shall notify the Department of this, in writing, by **October 1** of the year that this operating schedule begins, and no further notification will be required, provided that the operating schedule does not change.
21. **By the end of the business day following each blast**, the Approval Holder shall submit a blasting report to the Department.

22. **Within 30 days of the end of each month**, the Approval Holder shall submit to the Department a Monthly Environmental Report containing the following information:
 - a) a summary of the blasting reports for all blasts that occurred during the previous month, including, as a minimum, the date and time of the blast, the trigger settings of the monitors, and the monitoring results;
 - b) a summary report of all small spill and/or leak events at the Facility during the previous month, including the date, location, approximate volume, and method of clean-up for each spill and/or leak.
23. If no blasting has taken place during any month, and/or if no small spills have occurred, the monthly environmental report for that month shall contain a statement explaining that there is no information to report pertaining to this condition.
24. If the Facility will be shut down for more than one month, the Approval Holder shall notify the Department, in writing, of this at the commencement of the shutdown period. Such notification will fulfil the requirements of the monthly report, while the Facility remains shut down.

SCHEDULE "B"

APPLICABILITY:

This standard applies to all quarries with a requirement for ambient air monitoring in addition to the Terms and Conditions specified in Schedule "A".

A. DEFINITIONS

"**Ambient Air Quality Monitoring Plan**" means a plan, approved by the Department, describing the number and location of particulate samplers to be used to monitor ambient concentrations of particulate matter. The sampler(s) shall be sited and operated in accordance with the *National Air Pollution Surveillance Network Quality Assurance and Quality Control Guidelines*.

B. TERMS AND CONDITIONS

The Approval Holder shall operate the Facility in accordance with the following:

TESTING AND MONITORING

1. The Approval Holder shall monitor ambient air in accordance with the most recent Ambient Air Quality Monitoring Plan. Furthermore, the Approval Holder shall ensure that all equipment associated with the Ambient Air Quality Monitoring Plan is maintained and calibrated as per the manufacturer's recommendation.

RECORD KEEPING

2. The Approval Holder shall maintain records of all maintenance and calibration activities associated with the Ambient Air Quality Monitoring Plan for a minimum of two (2) years. These records shall be made available to the Department within fifteen (15) days of the Approval Holder receiving a request for this information.

REPORTING

3. The Approval Holder shall include the following information in the Monthly Environmental Report specified in Schedule "A":
 - a) the results of the Ambient Air Monitoring Program during the previous month.

SCHEDULE “C”

APPLICABILITY:

This schedule applies to the surface water and groundwater sampling requirements outlined in the Surface Water Monitoring Plan and the Groundwater Monitoring Plan in addition to the Terms and Conditions specified in Schedule “A”.

A. DEFINITIONS

“**Total Suspended Solids**” means any solid matter that is present in effluent when tested in accordance with the test method set out in the most recent version of the *Standard Methods for the Examination of Water and Wastewater* jointly published by the American Public Health Association, the American Water Works Association and the Water Environment Federation.

“**Surface Water Monitoring Plan**” means the most recent approved Surface Water Monitoring Plan submitted to the Department on behalf of the Approval Holder.

“**Groundwater Monitoring Plan**” means the most recent approved Groundwater Monitoring Plan submitted to the Department on behalf of the Approval Holder.

B. TERMS AND CONDITIONS

The Approval Holder shall operate the Facility in accordance with the following:

LIMITS

1. The Approval Holder shall ensure that the facility does not create runoff that causes the total suspended solids concentration in the water of any watercourse impacted by the runoff to exceed 25 mg/L above the background level (as a monthly average of grab samples).


TESTING AND MONITORING

2. The Approval Holder shall monitor for all parameters at the locations and frequencies specified in the Surface Water Monitoring Plan.
3. The Approval Holder shall monitor for all parameters at the locations and frequencies specified in the Groundwater Monitoring Plan.


REPORTING

4. In addition to the information outlined in Schedule A, the Approval Holder shall submit the results of all sampling parameters outlined in the Surface Water Monitoring Plan with the monthly environmental report.

5. **Within thirty (30) days of each sampling event**, the Approval Holder shall submit to the Department a summary of all groundwater monitoring results in accordance with the most recent approved Groundwater Monitoring Plan.

Prepared by: 

Mitchell Clark
Approvals Coordinator

Reviewed by: 

Mark Glynn, P.Eng.
Manager, Permitting South
Authorizations Branch