

APPROVAL

Province of Nova Scotia
Environment Act, S.N.S. 1994-95, c.1, s.1

APPROVAL HOLDER: Sovereign Resources Inc.

SITE PID: 40255689 and 40645558

APPROVAL NO: 2006-051587-R01

EXPIRY DATE: October 08, 2026

Pursuant to Part V of the *Environment Act, S.N.S. 1994-95, c.1, s.1* as amended from time to time, approval is granted to the Approval Holder subject to the Terms and Conditions attached to and forming part of this Approval, for the following activity:

Construction and operation of a Quarry, and associated works, at or near 1791 Rocky Lake Dr, Waverley, Halifax Regional Municipality in the Province of Nova Scotia.

Administrator _____
Norma J Bennett

Effective Date _____

The Minister has delegated his powers and responsibilities under the Act with respect to this Approval to the Administrator named above. Therefore any information or notifications required to be provided to the Minister under this approval can be provided to the

Administrator unless otherwise advised in writing.

Nova Scotia Environment
Official Copy

TERMS AND CONDITIONS OF APPROVAL

Nova Scotia Department of Environment and Labour

Approval Holder: SOVEREIGN RESOURCES INC.

Project: Quarry

Site: 1791 Rocky Lake Dr,
Waverley, Halifax Regional Municipality
PID # 40255689, 40645558

Approval No: 2006-051587-R01
(Renewal)
Formerly Approval # 84-073

File No: 92100-30/BED-55

Map Series: 11D/13

PID # : 40255689 and 40645558

Reference Documents:

- Application dated 2016/06/1 and attachments.
- Previous Approvals Applications and Attachments
- Environmental Assessment Approval, Approval Date: Original Dated Aug. 29, 2005, Sovereign Resources Quarry Expansion/Modification, Sovereign Resources Inc., Proponent, Rocky Lake Drive, Bedford, Nova Scotia
- Revised Application dated June 28, 2006 and attachments.
- Environmental Assessment Registration submitted August 2, 2005.
- Letters from Hugh Smith, Sovereign Resources to the Department dated May 19th and 25th, 2006.
- Correspondence from JWEL to the Department dated July 14, 2006 entitled "*Addendum to the Revised Application to Amend the Industrial Approval to the Proposed Quarry Expansion Project at Sovereign Resources*"

1. Definitions

- a) "Abandonment" means cessation of production of aggregate for a period of

twelve (12) months.

- b) "Act" means the *Environment Act* S.N.S. 1994-1995, c.1 and includes all regulations made pursuant to the Act.
- c) "Active Area" means the area required to operate a quarry and includes the working face and associated works.
- d) "Aggregate" means all consolidated and unconsolidated material, excluding gypsum, limestone, peat or minerals.
- e) "Associated works" means any building, structure, processing facility, pollution abatement system or stockpiles of aggregate.
- f) e) "Department" means the Central Region, Bedford Office, of Nova Scotia Environment located at the following address:
 - Nova Scotia Environment
Inspection, Compliance, and Enforcement Division
Central Region, Bedford Office,
Suite 115, 30 Damascus Road,
Bedford, Nova Scotia, B4A 0C1.
 - Phone: (902) 424-7773
Fax: (902) 424-0597
- g) "Disturbed Area" means any area on a quarry site that has been stripped of vegetation and is susceptible to erosion.
- h) "Facility" means the Quarry and associated works.
- i) "Minister" means the Minister of the Nova Scotia Environment.
- j) Community Liaison Committee means committee established in accordance with "Guide for the Formation and Operation of a Community Liaison Committee" published by Nova Scotia Environment.
- k) "Production" means the extraction of aggregate or transfer of aggregate from the Site.
- l) "Rehabilitation" means restorative work performed or to be performed in accordance with the rehabilitation plan.
- m) "Structure" includes but is not limited to a private home, a cottage, an apartment building, a school, a church, a commercial building or a treatment facility associated with the treatment of municipal sewage, industrial or landfill effluent, an industrial building, infrastructure or construction, a hospital, and a nursing home, etc.

2. **Scope of Approval**

- a) This Approval (the "Approval") relates to the Approval Holder and their application and supporting documentation, as listed in the reference documents above, to construct and operate the Facility, situated at or near 1791 Rocky Lake Dr, Waverley, Halifax Regional Municipality (the "Site").
- b) The Facility boundaries shall not exceed the area as outlined in the application and supporting documentation and the Survey Drawing SDMM Plan No. 70-536-0 produced by Servant, Dunbrack, MacKenzie and MacDonald Ltd. Nova Scotia Land Surveyors & Consulting Engineers.
- c) The Approval Holder shall retain as undeveloped buffers those properties bounding the Facility identified as PID # 00527119 and 00527283.
- d) The Approval Holder shall not conduct rock crushing or aggregate processing on the Site.
- e) The Approval Holder shall not transport aggregate from the Site directly onto Provincial roads at any time. All aggregate shall be transported onto Provincial roadways via the adjoining Municipal Enterprises Limited, Rocky Lake Quarry property and entrance.
- f) Should the work authorized by this Approval not be commenced within a year, this Approval shall automatically be null and void, unless extended in writing by an Administrator.

3. **General Terms and Conditions**

- a) The Approval Holder shall construct, operate and reclaim its Facility in accordance with provisions of the:
 - i) *Environment Act* S.N.S. 1994-1995, c.1, as amended from time to time;
 - ii) Regulations, as amended from time to time, pursuant to the above Act;
- b) The Approval holder is responsible for ensuring that they operate the facility on lands which they own or have a lease or written agreement with the landowner or occupier. The Approval holder shall be responsible for ensuring that the Department has, at all times, a copy of the most recent lease or written agreement with the landowner or occupier. Breach of this condition may result in cancellation or suspension of the Approval.
- c) If there is a discrepancy between the reference documents and the terms and conditions of this Approval, the terms and conditions of this Approval shall

apply.

- d) The Minister or Administrator may modify, amend or add conditions to this Approval at anytime pursuant to Section 58 of the Act.
- e) This Approval is not transferable without the consent of the Minister or Administrator.
- f)
 - (i) If the Minister or Administrator determines that there has been non-compliance with any or all of the terms and conditions contained in this Approval, the Minister or Administrator may cancel or suspend the Approval pursuant to subsections 58(A)(1) and 58(A)(2) of the Act, until such time as the Minister or Administrator is satisfied that all terms and conditions have been met.
 - (ii) Despite a cancellation or suspension of this Approval, the Approval Holder remains subject to the penalty provisions of the Act and regulations.
- g) The Approval Holder shall notify the Department prior to any proposed extensions or modifications of the Facility, including the active area, process changes or waste disposal practices which are not granted under this Approval. An amendment to this Approval will be required before implementing any change. Extensions or modifications to the Facility may be subject to the Environmental Assessment Regulations.
- h) Pursuant to Section 60 of the *Act*, the Approval Holder shall submit to the Administrator any new and relevant information respecting any adverse effect that actually results, or may potentially result, from any activity to which the Approval relates and that comes to the attention of the Approval Holder after the issuance of the Approval.
- i) The Approval Holder shall immediately notify the Department of any incidents of non-compliance with this Approval.
- j) The Approval Holder shall bear all expenses incurred in carrying out the environmental monitoring required under the terms and conditions of this Approval.
- k) Unless specified otherwise in this Approval, all samples required to be collected by this Approval shall be collected, preserved and analysed, by qualified personnel, in accordance with recognized industry standards and procedures.
- l) Unless written approval is received otherwise from the Administrator, all samples required by this Approval shall be analysed by a laboratory that meets the requirements of the Department's "Policy on Acceptable Certification of Laboratories" as amended from time to time.

- m) At the request of the Department, Approval Holder shall collect and analyse representative samples of aggregate quarried at the Site for the parameters and at frequency stipulated by the Department.
- n) The Approval Holder shall submit any monitoring results or reports required by this Approval to the Department. Unless specified otherwise in this Approval, All monitoring results shall be submitted within 30 days following the month of monitoring.
- o) The Approval Holder shall ensure that this Approval, or a copy, is kept on Site at all times and that personnel directly involved in the Facility operation are made fully aware of the terms and conditions which pertain to this Approval.
- p) The Approval Holder shall implement all proposed monitoring and mitigation strategies proposed in the application unless otherwise specified by terms and conditions of the Approval.
- q) The Department reserves the right to require modifications including, but not limited to, monitoring locations, monitoring frequency, monitoring parameters, for any sampling or monitoring program required by this Approval. The Approval Holder shall comply with any direction provided in writing with 30 days notice by the Department to modify the sampling and/or monitoring program, without requiring an amendment to this Approval.
- r) The Approval Holder shall comply with terms and conditions of Environmental Assessment Approval, dated Aug. 29, 2005
- q) The Approval Holder will be required to register their project under Part IV of the *Environment Act* should the Facility and associated works including access roads exceed an area approved under Environmental Assessment Approval, dated Aug. 29, 2005

4. **Construction of Facility**

- a) Erosion and sedimentation controls are to be in place prior to construction at this Facility in areas potentially affected by surface runoff. Additional controls shall be implemented if Site runoff exceeds the discharge limits contained herein.
- b) Erosion and sedimentation controls are to be maintained and remain in place until the disturbed areas are stabilized.
- c) The Approval Holder shall ensure that the following discharge limits are met for any water which is discharged from the Site to a watercourse or wetland:
 - i) **Total Suspended Solids**

Clear Flows (Normal Background Conditions):

- i) Maximum increase of 25 mg/L from background levels for any short term exposure (24 hour or less)
- ii) Maximum average increase of 5 mg/L from background levels for longer term exposure (inputs lasting between 24 hours and 30 days)

High Flow (Spring Freshets and Storm Events)

- i) Maximum increase of 25 mg/L from background levels at any time when background levels are between 25 mg/L and 250 mg/L.
- ii) Shall not increase more than 10% over background levels when background is > 250 mg/L.

ii) **pH**

- i) Maximum 5 to 9 in grab sample
- ii) Maximum 6 to 9 as a Monthly Arithmetic Mean

iii) **Monitoring Locations and Sampling Frequency**

Monitoring locations and sampling frequencies for the purpose of effluent compliance shall be determined by the Department in consultation with the Approval Holder and the Community Liaison Committee.

- d) The location of background monitoring stations and sampling frequencies shall be determined by the Department in consultation with the Community Liaison Committee.
- e) Signage including emergency telephone numbers and contacts is to be posted at the entrance to the Facility.

5. Particulate Emissions (Dust)

- a) The Approval Holder shall be required to implement an ambient air monitoring program in consultation with the Department and the Community Liaison Committee. This program is identified in Appendix I.
- b) Results of the monitoring program shall be submitted to the Department on a annual basis and include a professional interpretation of the data with recommendations, if warranted.
- c) The Approval Holder shall be required to conduct background particulate monitoring following the commencement of operation at the direction of the Department. This may include a requirement to temporarily suspend quarry operations to conduct background monitoring if there is non compliance with limits established in 5(f) and if so directed by the Department.

- d) Revisions to monitoring program (Appendix I) shall receive prior written approval from the Department in consultation with the Community Liaison Committee.
- e) Particulate emissions shall not exceed the following limits at or beyond the Site property boundaries:

Annual Geometric Mean	70 $\mu\text{g}/\text{m}^3$
Daily Average (24 hr.)	120 $\mu\text{g}/\text{m}^3$
- f) Where it is the opinion of the Department that the Approval Holder exceeds limits established in Condition 5 (e) the Approval Holder will be required to implement a corrective action plan which may include additional ambient air monitoring, or reducing or ceasing operation until the Approval Holder meets Approval requirements.
- g) Additional monitoring of particulate emissions shall be conducted at the request of the Department. The location of the monitoring station(s) for particulate will be established by the Department in consultation with the Community Liaison Committee and may include point(s) beyond the property boundary of the quarry.
- h) The use of used oil as a dust suppressant is strictly prohibited. The generation of dust from the Site shall be suppressed as required.
- i) Suspended ambient particulate matter shall be measured by the EPA standard; EPA/625/R-96/010a; Sampling of Ambient Air for Total Suspended Particulate Matter (SPM) and PM_{10} Using High Volume (HV) Sampler.

6. **Sound Levels**

- a) The Approval Holder shall be required to implement a noise monitoring program in consultation with the Department and the Community Liaison Committee. This program is identified in Appendix I.
- b) Results of the monitoring program shall be submitted to the Department with Annual report and include a professional interpretation of the data with recommendations, if warranted.
- c) Revisions to monitoring program (Appendix I) shall receive prior written approval from the Department in consultation with the Community Liaison Committee.
- d) Sound levels measured at the monitoring stations established beyond Site property boundaries shall not exceed the following equivalent sound levels (Leq):

Leq 65 dBA 0700-1900 hours (Days)
60 dBA 1900-2300 hours (Evenings)
55 dBA 2300-0700 hours (Nights)

- e) Where it is the opinion of the Department that the Approval Holder exceeds limits established in Condition 6 (d) the Approval Holder will be required to implement a corrective action plan which may include additional noise monitoring or reducing or ceasing operation. The Approval holder shall implement immediate corrective actions to mitigate noise if so directed by the Department.
- f) Noise monitoring shall be conducted in accordance with the Department's Guideline for Environmental Noise Measurement and Assessment or future revisions to this guideline. Noise measurements shall be integrated on the A weighted scale based on a minimum of two hours of continuous sampling during each day period identified in Condition 6(d).
- g) Additional noise monitoring shall be conducted at the request of the Department. The location of the noise monitoring station(s) as referenced in Appendix I will be established by the Department in consultation with the Community Liaison Committee and may include point(s) beyond the property boundary of the quarry.
- h) The Approval Holder shall be required to conduct background noise monitoring following the commencement of operation at the direction of the Department. This may include a requirement to temporarily suspend quarry operations to conduct background monitoring if there is non compliance with limits established in 6(d) and if so directed by the Department.
- i)
 - (i) The Approval Holder shall submit a nighttime noise reduction plan for implementation to the Department within 3 months of commencement of extractive operations unless otherwise approved by the Department.
 - (ii) The Department may request additional nighttime noise evaluation during the life of the operation.
 - (iii) Nighttime hours of operation, including trucking from the Site between 1900 and 0700 hours, may be limited based on the results of the noise reduction plan and/or monitoring.

7. **Surface Water**

- a) The Site shall be developed and maintained to prevent siltation of the surface

water which is discharged into the nearest watercourse, wetland or beyond the property boundary. The Nova Scotia Department of the Environment "Erosion and Sedimentation Control Handbook For Construction Sites" shall serve as the reference document for all erosion control measures. These measures are minimum requirements and additional controls shall be implemented in accordance with the best management practises for soil erosion and sedimentation submitted with the application or if Site runoff exceeds the discharge limits contained herein.

- b) No authority is granted by this Approval to enable the Approval Holder to discharge surface water beyond the property boundary and onto adjoining lands without the authorization of the affected landowner(s). It is the responsibility of the Approval Holder to ensure that the authorization of said landowner(s) is current and valid. Failure to maintain said authorization will result in this Approval being null and void. The Approval Holder shall provide, to the Department, proof of the continued authorization of the adjoining landowner(s) when the current agreement has expired.
- c) Erosion and sedimentation control devices shall be installed prior to any excavation of material in areas potentially affected by surface runoff. Controls shall be modified during operation to comply with discharge limits. Runoff from the disturbed and active areas of the Site shall be collected and directed to soil erosion and sedimentation control devices including a final settling pond for control of releases.
- d) The Approval Holder shall ensure the following liquid effluent levels are met and that the effluent is monitored at the frequency and locations indicated.

i) Total Suspended Solids

Clear Flows (Normal Background Conditions):

- i) Maximum increase of 25 mg/L from background levels for any short term exposure (24 hour or less)
- ii) Maximum average increase of 5 mg/L from background levels for longer term exposure (inputs lasting between 24 hours and 30 days)

High Flow (Spring Freshets and Storm Events)

- i) Maximum increase of 25 mg/L from background levels at any time when background levels are between 25 mg/L and 250 mg/L.
- ii) Shall not increase more than 10% over background levels when background is > 250 mg/L.

ii) pH

- i) Maximum 5 to 9 in grab sample
- ii) Maximum 6 to 9 as a Monthly Arithmetic Mean

iii) **Monitoring Locations and Sampling Frequency**

Monitoring locations and sampling frequencies for the purpose of effluent compliance shall be determined by the Department in consultation with the Approval Holder and the Community Liaison Committee.

- e) Treated effluent shall be directed onto and across adjacent lands as described in Fig. 6 entitled "Sovereign Quarry Modification Project, Proposed Options for Initial Quarry Development, JWEL, June 28, 2006" unless otherwise directed or approved by the Department.
- f) At least ninety days prior to the fifth (5) anniversary of the Approval, the Approval Holder shall submit Quarry Development Plans for the next five (5) years of development. These plans shall include, but not be limited to, any revised designs for effluent treatment.
- g)
 - (i) Streams (SW-A, SW-B, SW-C, SW-D, SW-E) associated with groundwater monitoring stations MW A through MW E, 1,2,3 and MW Final Effluent shall be monitored quarterly for R-Cap ms*, total dissolved solids, total suspended solids, temperature and pH.
 - (ii) Stations MW A through MW E shall also be monitored quarterly for water levels following the completion of baseline monitoring. Stream flows shall be measured at the direction of the Department.
- h) The Approval Holder shall implement immediate corrective or conduct monitoring for liquid effluent or surface water actions to mitigate surface runoff if site runoff exceeds the discharge limits established in Condition 7(d) or if so directed by the Department.
- i) A annual summary of results of monitoring shall be submitted to the Department.

8. Groundwater

- a) The Approval Holder shall establish six groundwater monitoring stations identified as MW A through MW E, Rocky Lake Quarry (RLQ) potable deep well in Figure 4.(Jacques Whitford, project 1007718, July 14, 2006)
- b) Monitoring station MW-E shall be installed and monitored for baseline groundwater quality for a period of two (2) years prior to quarry encroachment within 800 metres of the stations.

- c) All monitoring stations (MW-A through MW-E) shall be monitored on a quarterly basis for the following parameters, including R-CAP ms*, total dissolved solids, temperature, conductivity, pH and static water levels. Analysis of the RLQ potable well shall also include coliforms bacteria and turbidity.
- d) Each monitoring well shall be evaluated for hydraulic conductivity on an annual basis in the Spring of each year.
- e) Approval holder shall submit and implement an Adaptive Management Strategy to the Department which includes threshold actions limits and associated mitigative measures to address potential impacts on groundwater and surface water quality. Adaptive Management Strategy shall be submitted for review by January 1, 2018.
- f) The Approval Holder shall replace at their expense any water supply which has been lost or damaged as a result of activities associated with the Facility.
- g) The Approval holder shall complete any reinstatement or repair to a damaged/destroyed monitoring well within 90 days of identifying that damage has occurred.
- h) Should a monitoring well become damaged to the point of destruction, the Approval Holder shall have the well decommissioned in a manner that prevents the ingress of surface water into the subsurface and the vertical migration of any contamination within the well and is acceptable to the Department.

9. **Separation Distances**

- a) The Approval Holder shall not locate the Active Area of the quarry within:
 - i) 30 m of the boundary of a public or common highway.
 - ii) 30 m of the bank of any watercourse (including intermittent), ordinary high water mark or wetland unless wetland alteration have been approved by Department.
 - iii) 30 m of the boundary of the quarry property with the exception of the common quarry limits shared between the Facility and the Municipal Enterprises Ltd., Rocky Lake Quarry.
- b) The Approval Holder shall not blast within:
 - i) 30 m of the boundary of a public or common highway.

- ii) 30 m of the bank of any watercourse (including intermittent), ordinary high water mark or wetland unless wetland alteration have been approved by Department.
- iii) 800 m of the foundation or base of a structure located off site, unless consent of the property owner is obtained.

10. Blasting

- a) The Approval Holder shall have a technical blast design prepared by a qualified person which ensures the ground vibration and air concussion limits in this Approval can be achieved.
- b) The Approval Holder shall conduct a pre-blast survey including a water quality analysis of all structures within 800 metres of the Facility. The survey shall be conducted in accordance with the Department's 'Procedure For Conducting a Pre-Blast Survey' and the results of this survey sent to the Department prior to any blasting on the Site. Water quality parameters will be determined by Department staff.
- c) The Approval Holder shall call the nearest weather office, to assess the climatic conditions prior to conducting any blasting. No blasting will be permitted if a thermal inversion is anticipated at the time of the proposed blast.
- d) No blasting shall occur on Sunday or on a statutory holiday prescribed by the Province. Blasting shall be limited to the hours of 1100 to 1300 daily unless a delay is incurred for health and safety reasons or in the occurrence of unfavourable climatic conditions during this period.
- e) The Approval Holder shall ensure that all blasts are monitored for air concussion and ground vibration to ensure that the limits in Table 1 are not exceeded:

Table 1			
Blasting Limits			
Parameters	Maximum	Monitoring Frequency	Monitoring Station
Concussion (Air Blast)	128 dBL	Every Blast	Within 7 m of the nearest structure not located on the Site

Ground Vibration	0.5 in/sec (12.5 mm/s)	Every Blast	Below grade or less than 1 m above grade in any part of the structure not located on the Site
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- f) The monitoring stations for blasting shall be as indicated in Table 1 and Appendix II. Additional monitoring stations for blasting may be specified as required by the Department in consultation with the Community Liaison Committee. Any changes to the location of the stations shall be approved by the Department in consultation with the Community Liaison Committee.
- g) A annual summary of results of monitoring shall be submitted to the Department with Annual report. Blasts results shall also be made available to the Department within 48 hours of a specific request for blast results.

11. Rehabilitation

- a)
 - (i) The Approval Holder shall submit a financial security in the value of \$ 245,000. The Department may require additional security if the disturbed area exceeds 50 acres.
 - (ii) The Approval Holder shall submit for review an updated rehabilitation plan prior to the fifth anniversary date of the approval and every five years thereafter. The rehabilitation plan shall include the estimated total cost for labour, equipment, supplies and services of a third party contractor to undertake the following activities:
 - i) surface contouring
 - ii) establishing proper drainage
 - iii) revegetation work
 - (iii) The Approval Holder shall submit a reclamation plan to address portions of the Site which have been removed from quarry service and are to be abandoned. The plan shall be submitted for approval within three months of the date of the Approval and be implemented in a time frame acceptable to the Department.
- b) The Approval Holder shall post security which is acceptable to the Department. It shall be calculated using the rehabilitation plan and factors in item 11(a) above. The security shall be revised, if necessary, every five years in accordance with the updated rehabilitation plan which is acceptable to the Department.
- c) The Approval Holder shall rehabilitate the Site within twelve (12) months of abandonment and in accordance with the latest rehabilitation plan submitted by the Approval Holder as identified in Condition 11 (a) or upon other terms as

specified by the Department.

- d) The Nova Scotia Environment shall release the security to the Approval Holder after final rehabilitation of the Site has been completed to the satisfaction of the Minister or Administrator. The Approval Holder shall notify the Department when rehabilitation has been completed.
- e) The Approval Holder shall ensure that any security posted for rehabilitation be kept valid for the term of the Approval.

12. Complaint Resolution

- a) The Approval Holder shall have standard procedures to address complaints associated with the Facility which would include but not be limited to;
 - (i) Immediately investigate the cause of the complaint and undertake immediate and appropriate action, if necessary, to correct the problem.
 - (ii) The Approval holder shall record all complaints and document the date, time, name, address and telephone number of the individual lodging the complaint. The record shall also state any cause and the action taken to correct a problem.
 - (iii) Records referenced in condition 12(a)(ii) shall be maintained for a minimum two (2) years and made available to the Department upon request.

13. Contingency Plan

- a) The Approval Holder shall develop and maintain a contingency/emergency response plan for the Facility. This plan is to meet the requirements of the Nova Scotia Department of Environment and Labour Contingency Planning Guidelines, as amended from time to time. The plan is to include:
 - i) general procedures for routine (equipment break-down, upset conditions, maintenance, etc.) or major emergencies within the Facility, and
 - ii) a plan for dealing with emergency issues including but not limited to fires, explosions, spills and releases.
- b) The Approval Holder shall ensure that the contingency/emergency response plan for the Facility is reviewed and updated on a yearly basis.

- c) A copy the contingency/emergency response plan is to be maintained on Site at all times for inspection by staff of the Department. All employees shall be trained in the implementation of the contingency plan.

14. Site Specific Conditions

- a) The five year quarry extension plan development boundaries shall be identified via sub-meter GPS coordinates and clearly identified on scaled drawings that shall be submitted to the Department with Annual Report. The corner boundaries for the overall limits of the quarry footprint shall be clearly identified via sub-meter GPS coordinates and provided to the Department by June 1, 2017
- b) The Approval Holder shall immediately contact the Department should sulphide bearing material be encountered on the Site and shall include planned remedial measures in conformance with the Sulphide Bearing Material Disposal Regulations.
- c) Refueling and vehicle maintenance shall only be carried out in a designated refueling area, where conditions will allow the containment of any accidental spills.
- d) The surface of the refueling area shall be comprised of low permeability material and shall be sloped or bermed in such a way that spills will be captured prior to encountering a watercourse or water resource.
- e) The Approval Holder shall reinstate the Community Liaison Committee (CLC) (formerly Monitoring Board) as per the "Guide for the Formation and Operation of a Community Liaison Committee", 90 days prior to commencement of quarrying activities at the site.

15. Reporting

15.1 Annual Reporting

- a) An Annual Report shall be supplied to the Department providing a summary of any monitoring carried out under Sections 4,5,6,7, 8 and 10 of this approval. If no activities are carried out which would result in monitoring being required under any of the sections, then a note indicating this is to be included in the Annual Report.
- b) The annual report shall be submitted to the Department on or before March 1 each year and shall and contain the results and performance summary for the four quarters of the previous calendar year.

15.2 Emergency Reporting on Operation

- a) The Approval Holder shall notify the Department immediately when activities carried out at the Facility lead to results which do not meet the requirements of this approval.

Appendix I

Ambient Air Monitoring Program

Particulate and Noise Monitoring Program (unless amended by the Department)

Monitoring Stations

1908 Waverley Road, Waverley

212 Rocky Lake Drive, Bedford

48 Powder Mill Road (Fire Fighters School), Waverley

533 Rocky Lake Drive, Bedford

148 Ridge Ave., Waverley

189 Third Ave., Lakeview Subdivision

Frequency

Particulate Monitoring Stations shall be monitored on a monthly basis.

Noise monitoring stations shall be monitored on a quarterly basis

Appendix II

Blast Monitoring Program

Blast Monitoring Stations

Nearest Structure not located on the Site

1407 Waverley Road, Waverley

1908 Waverley Road, Waverley

222 Rolling Hills Drive, Waverley

187 Ridge Ave., Waverley

48 Powder Mill Drive, Waverley

Loonhaven Drive, Lakeview Subdivision

152 Rocky Lake Drive, Bedford

***Appendix III**

***RCAP- ms shall include the following parameters**

Total alkalinity	Copper
Dissolved chloride	Iron
Colour	Lead
Hardness	Manganese
Nitrate & nitrite	Molybdenum
Nitrite	Nickel
Ammonia (Ammonia nitrogen)	Selenium
Total organic carbon	Silver
Orthophosphate	Strontium
pH	Thallium
Reactive silica	Tin
Dissolved sulphate	Titanium
Turbidity	Uranium
Conductivity	Vanadium
Aluminum	Zinc
Antimony	
Arsenic	
Barium	
Beryllium	
Bismuth	
Boron	
Cadmium	
Chromium	
Cobalt	