

**FOR PUBLIC COMMENT**

Background Document supporting Public Participation Opportunity #1

In accordance with the

*Canadian Environmental Assessment Act*

**Proposed Project:**

BURNCO Aggregate Mine Project

Howe Sound, British Columbia

**Proposed by:**

BURNCO Rock Products Ltd.

**Prepared by:**

Canadian Environmental Assessment Agency

**Canadian Environmental Assessment Registry Reference Number:**

11-03-54754

**January 3, 2012 – February 3, 2012**

## 1. OVERVIEW OF THE ENVIRONMENTAL ASSESSMENT

In general, environmental assessment is a process to predict, avoid or minimize the effects of a proposed project on the environment before the proposed project is carried out. The environmental assessment will identify potential effects of the proposed project on the environment, propose measures to avoid or mitigate adverse effects of the proposed project on the environment and predict whether there will be significant adverse effects on the environment after mitigation is implemented.

BURNCO Rock Products Limited's proposal to construct and operate the BURNCO Aggregate Mine Project (the proposed project), requires an environmental assessment to be carried out in accordance with the *Canadian Environmental Assessment Act*. It has also been determined that a comprehensive study type environmental assessment process is required because the daily production capacity of the proposed project exceeds 1,000,000 tonnes per year; this threshold is described in the *Comprehensive Study List Regulations*.

The Canadian Environmental Assessment Agency has resources to guide the public through the environmental assessment process. For information about the environmental assessment process, please visit the Canadian Environmental Assessment Agency website at [www.ceaa-acee.gc.ca](http://www.ceaa-acee.gc.ca).

### Federal Agencies involved in the Environmental Assessment

Several Federal Agencies are involved in the environmental assessment of the proposed project including:

FEDERAL AGENCY	INVOLVEMENT
<ul style="list-style-type: none"><li>Canadian Environmental Assessment Agency</li></ul>	Ensures that an environmental assessment is conducted in accordance with the <i>Canadian Environmental Assessment Act</i> . Acts as the 'one window' into the Government of Canada for the environmental assessment process.
<ul style="list-style-type: none"><li>Fisheries and Oceans Canada</li></ul>	May have a decision making responsibility in relation to the issuance of federal approvals and/or authorizations for the proposed project. Required to ensure that an environmental assessment of the proposed project is conducted prior to taking any decisions that would enable the proposed project to proceed. Provides expert advice to support the completion of the environmental assessment.
<ul style="list-style-type: none"><li>Environment Canada</li><li>Health Canada</li><li>Natural Resources Canada</li><li>Transport Canada</li></ul>	Provides expert advice as requested to support the completion of the environmental assessment

## **Other Legislative Requirements or Policy Initiatives**

In accordance with the *Cabinet Directive on Improving the Performance of the Regulatory System for Major Resource Projects*, the proposed project has also been identified as a Major Resource Project by the Major Projects Management Office (MPMO) due to its complexity and multi-jurisdictional nature. The proposed project is therefore also subject to review in accordance with the federal major projects review initiative. Additional information on this initiative is available from the MPMO at [www.mpmo-bggp.gc.ca](http://www.mpmo-bggp.gc.ca).

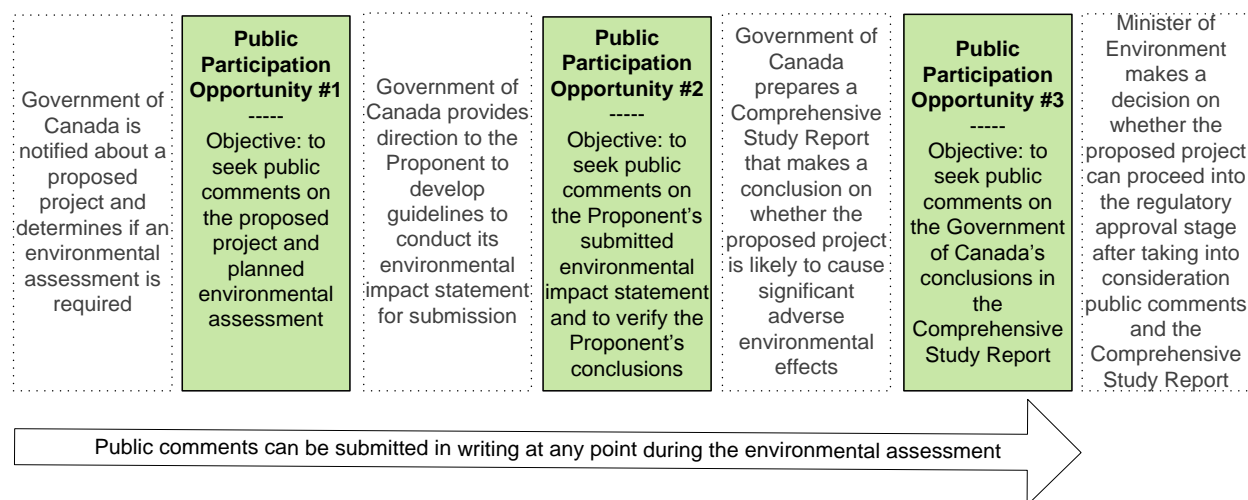
The proposed project is also subject to the British Columbia *Environmental Assessment Act* (BCEAA), and a cooperative federal and provincial assessment process will be conducted in accordance with the principles outlined in the *Canada-British Columbia Agreement for Environmental Assessment Cooperation*. Additional information on the provincial environmental assessment is available from the British Columbia Environmental Assessment Office (BCEAO) website at: [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca).

## **2. PURPOSE OF PUBLIC PARTICIPATION**

The primary objective of the environmental assessment is to minimize or avoid adverse environmental effects from the proposed project before they occur and to incorporate environmental factors into decision making by the Government of Canada. Public participation is an important element of the environmental assessment process. It strengthens the quality of the environmental assessment and the public is an important source of local and traditional knowledge about a proposed project's site and likely effects on the environment.

The Government of Canada plans to conduct three public participation opportunities within the environmental assessment of the proposed project as detailed in Figure 1 below. At this time, Public Participation Opportunity #1 will run from January 3, 2012 to February 3, 2012, providing the public the opportunity to comment on the proposed project and the planned environmental assessment.

**Figure 1: Public Participation Opportunities in the Environmental Assessment of the BURNCO Aggregate Mine Project**



### 3. OBJECTIVES OF PUBLIC PARTICIPATION OPPORTUNITY #1

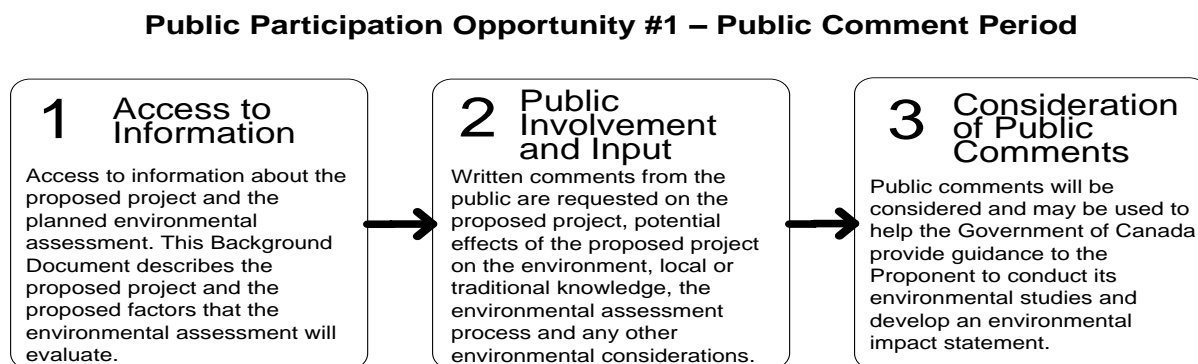
At this early stage in the environmental assessment, the Government of Canada is sharing information about the proposed Project and the planned environmental assessment.

The public is invited to share comments on:

- the proposed project;
- the proposed factors to be included in the environmental assessment including the valued ecosystem components, other aspects of the environment, other factors and relevant matters;
- potential effects of the proposed project on the environment;
- local or traditional knowledge;
- the planned environmental assessment process including the planned public participation opportunities; and,
- any other environmental considerations in relation to the proposed project.

As described in Figure 2, the Government of Canada is proposing environmental factors that may be potentially affected by the proposed Project and should be examined by BURNCO Rock Products Ltd. in its Environmental Impact Statement. Comments are sought on which aspects of the proposed Project and its potential effects on the environment may be of concern to the public so that they can be considered for inclusion in the environmental assessment. The proposed factors to include in the environmental assessment are outlined in section 5 of this Background Document.

**Figure 2: Process for Public Participation Opportunity #1 – Public Comment Period**



### **Consultation with Aboriginal Groups**

In addition to providing opportunities for public participation, the Government of Canada is consulting with potentially affected Aboriginal groups. The Government of Canada has a duty to consult and, if appropriate, accommodate, when it contemplates conduct that might adversely impact potential or established Aboriginal and treaty rights. The Government of Canada is consulting with potentially affected Aboriginal groups during the environmental assessment process and will work closely with the Province of British Columbia, BURNCO Rock Products Ltd. and potentially affected Aboriginal groups to achieve a coordinated process.

## **4. SUMMARY OF THE PROPOSED BURNCO AGGREGATE MINE PROJECT**

BURNCO Rock Products Limited is proposing to construct and operate the BURNCO Aggregate Mine Project 35 kilometres northwest of Vancouver, British Columbia. The BURNCO Aggregate Mine Project is expected to produce 1.0 to 1.6 million tonnes of sand and gravel per year for export over a mine life of 20 years. Sand and gravel will be processed in a preparation plant on site and transported by barge to BURNCO Ready-Mix Concrete Plants in Burnaby and Port Kells, British Columbia. The project will include development of a marine barge loading facility at the mine site.

BURNCO Rock Products Limited is planning to use an extraction method, based upon an electrically powered floating clamshell dredge equipped with a primary crusher and a floating conveyor system. No pit dewatering will be required and no explosives will be used. As sand and gravel extraction proceeds through the proposed project's lifespan, the overburden will be removed and stockpile around the project area. This material can be used for future site reclamation. No material from the pit will be disposed-of at sea. The final site reclamation will include a ground- and surface water-fed pond, with the surrounding areas to be reclaimed by contouring the landscape, re-vegetation and planted forest.

## **Location of the Proposed Project**

The proposed project is located on the northwest shore of Howe Sound British Columbia approximately 22 kilometres west-southwest of Squamish and 35 kilometres northwest of Vancouver. The closest population centre is the village of Port Mellon, located approximately 8 kilometres west of the Project.

The project is centred at:

UTM Coordinates Zone 10N: N5490525 and E471880

Latitude: 49° 34' 00" N, Longitude: 123° 23' 20" W

Please refer to Figure 3 for a map of the proposed project location and components.

## **How to Obtain Additional Information**

To facilitate Public Participation Opportunity #1, BURSCO Rock Products Ltd. was requested to prepare a summary of the key components they are proposing to construct, operate and decommission as part of the BURSCO Aggregate Mine Project. This summary is provided in the following section titled "Key Components of the Proposed Project," and is intended to provide a brief description of the Project but not replace the full project description. The full project description for the BURSCO Aggregate Mine Project as submitted by BURSCO Rock Products Ltd. can be viewed on Canada's Major Projects Management Office website at: [www.mpmo-bggp.gc.ca](http://www.mpmo-bggp.gc.ca).

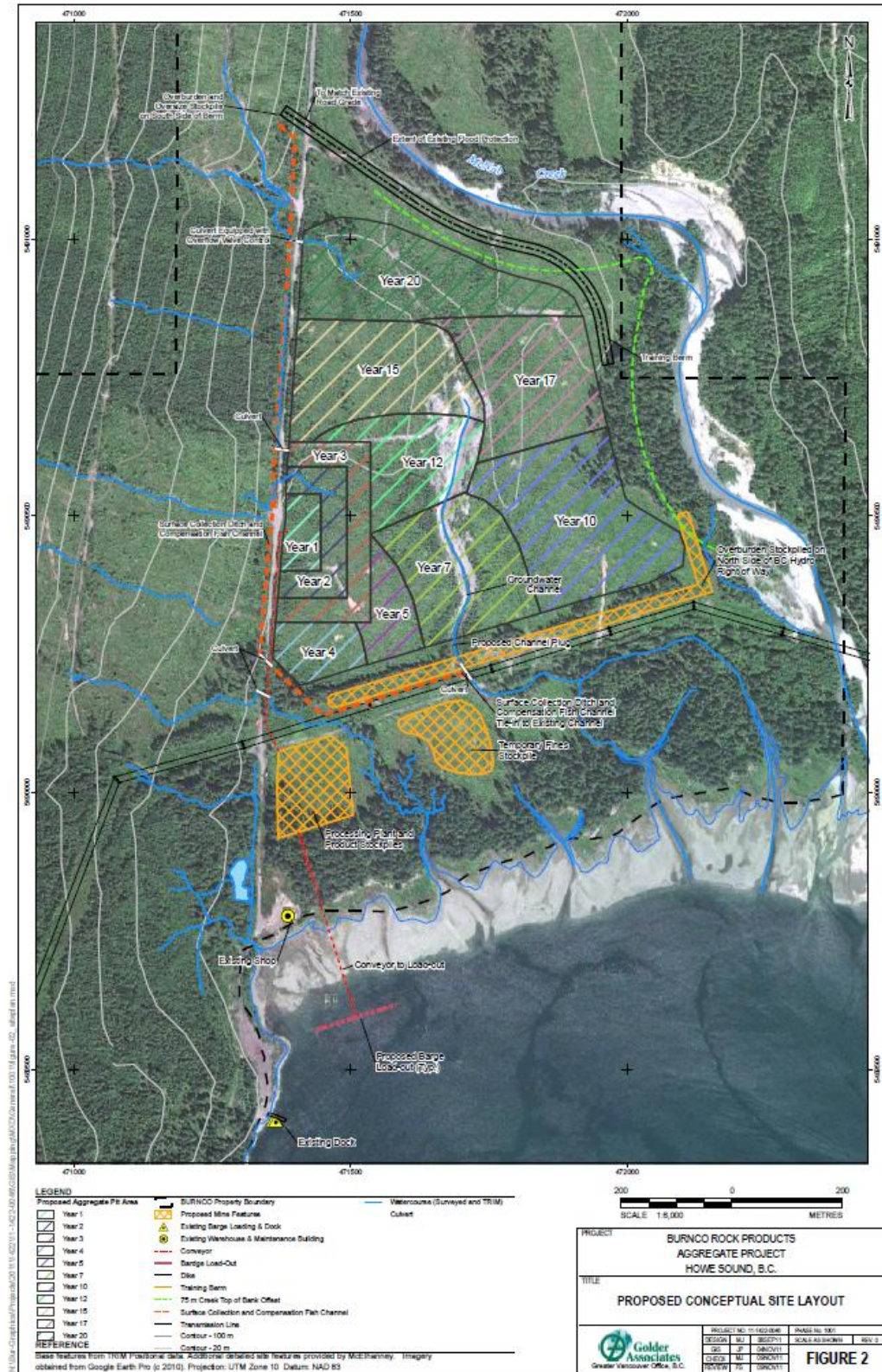
Additional information about BURSCO Rock Products Ltd. can be found on BURSCO Rock Products Ltd.'s website at: [www.BURSCO.com](http://www.BURSCO.com). Questions may be directed to BURSCO Rock Products Ltd. via email at: [Derek.holmes@burnco.com](mailto:Derek.holmes@burnco.com).

## Key Components of the Proposed Project

The construction, operation and decommissioning of the following key components are proposed by BURSCO Rock Products Limited and are represented in Figure 3:

Key Component	Description
Pit Development	Sand and gravel will be extracted from the pit using an electrically powered floating clamshell dredge equipped with a primary crusher and a floating conveyor system. This equipment will be initially placed at a western location on the deposit, and will dig downward to form a pit. The floating clamshell will work to extract material based on the aggregate deposit and mine plan, gradually enlarging the pond. No pit dewatering will be required and no explosives will be used.
Processing Plant	The processing plant will be located in the southwestern corner of the property in a preloaded area above the pit elevation, to enhance water recycling process and drainage. Processed sand and gravel will be stockpiled prior to loading onto barges. Water will be recycled from settling ponds at an estimated capacity of 15,100 Litres per hour. Initially the processing plant may be active 12 hours per day, 260 days per year.
Marine Loading Facility	The marine loading facility will be designed to accommodate up to 5,000 to 6,000 deadweight tonnage barges. It will consist of a limited series of pilings that support a fixed, above-ground electric conveyor with a capacity of 1,000 tonnes per hour. The location of the barge loading facility has been proposed within the exiting foreshore lease and log dump area. The barge loading facility is expected to be operational approximately 300 days per year.
Shipping	During operation, tug boats will deliver empty barges and pick up aggregate filled barges. A mooring buoy will be located in deeper water for barge storage within the lease and the log dump area. Filled barges will be towed through existing barging routes and navigational channels from the site through the Ramillies Channel, Howe Sound to the Fraser River through established shipping traffic lanes. Filled barges will use the North Arm of the Fraser River to deliver barges to existing BURSCO facilities in Burnaby, and will use the Main Arm of the Fraser River to deliver BURSCO facilities in Langley. BURSCO presently uses Seaspan tugs and barges to deliver aggregate to existing BURSCO facilities from Port McNeil. Seaspan and other tug barge, and log booming operators use the Ramillies Channel in Howe Sound and the exiting shipping routes in the Fraser River to move bulk materials.
Reclamation, Closure and Monitoring	The proposed project will use progressive reclamation of the site, consisting of ongoing reclamation activities taking place alongside of ongoing extraction throughout the proposed operations area. Site planning will include landscaping, further design and development of the existing training berm along the north edge logging road of the pit area, and creation of surface water features, fisheries habitats and re-vegetation throughout the site. Ongoing monitoring will be conducted for relevant noise and dust, water quality parameters, and fish and wildlife resources.

**Figure 3: Proposed Project Location and Components**





## 5. PROPOSED FACTORS FOR THE ENVIRONMENTAL ASSESSMENT

Taking into consideration BURNCO Rock Products Ltd.'s project description, the Government of Canada is determining the factors and the scope of the factors to be included in environmental assessment. BURNCO Rock Products Ltd. will be required to provide information on the proposed factors listed below, and any other factors identified by Federal Agencies involved in the environmental assessment. Written public comments received during this Public Participation Opportunity #1 and comments from potentially affected Aboriginal groups will be considered by the Government of Canada and used to inform the environmental assessment.

Proposed factors that will be examined in the environmental assessment:

<i>Any change that the proposed project may cause to the following <b>Valued Environmental Components</b></i>	<i>Any change that the proposed project may cause to the following <b>Other Factors and Relevant Matters</b></i>
<ul style="list-style-type: none"> <li>▪ Environmental conditions including climate</li> <li>▪ Surface water quality and quantity</li> <li>▪ Groundwater quality</li> <li>▪ Hydrogeology</li> <li>▪ Fish populations and fish habitat</li> <li>▪ Vegetation</li> <li>▪ Rare and sensitive ecological communities including wetlands</li> <li>▪ Terrestrial invertebrates</li> <li>▪ Amphibians</li> <li>▪ Migratory birds, raptors, bats and their habitats</li> <li>▪ Mammals and their habitat</li> <li>▪ Soils, including terrain and geology</li> <li>▪ Species at risk, its critical habitat or residences as defined in the <i>Species at Risk Act</i></li> <li>• Air quality (dustfall and particulate matter)</li> </ul> <p>The effect of any change to the environment on:</p> <ul style="list-style-type: none"> <li>▪ Human health (for example from changes to air quality, noise and vibration, water quality, light, country foods)</li> <li>▪ Local and regional socio-economic conditions</li> <li>▪ Physical and cultural heritage</li> <li>▪ Archaeological, historical, paleontological or architectural resources including structures and sites of significance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cumulative environmental effects that are likely to result from the residual impacts from the Project (that remain after the implementation of mitigation measures) in combination with other projects or activities that have been or will be carried out</li> <li>▪ Environmental effects from accidents and malfunctions</li> <li>▪ Capacity of renewable resources that are likely to be significantly affected by the proposed project to meet the needs of the present and those of the future</li> <li>▪ Current use of lands and resources for traditional purposes by Aboriginal persons</li> <li>▪ Change to the proposed project that may be caused by the environment (i.e. natural hazards, seismic events, extreme weather events)</li> <li>▪ The need for and purpose of the proposed project</li> <li>▪ Alternative means of carrying out the proposed project</li> <li>▪ The need for and the requirements of any follow-up program</li> </ul>

## 6. HOW TO SUBMIT WRITTEN COMMENTS

The Government of Canada is accepting written comments from **January 3, 2012 to February 3, 2012**. Please note that all comments received are considered public and will become part of the public registry.

Comments can be sent to:

**BY EMAIL:** [BurncoAggregateMine@ceaa-acee.gc.ca](mailto:BurncoAggregateMine@ceaa-acee.gc.ca)

**BY FACSIMILE:** 604-666-6990

**BY MAIL:** BURNCO Aggregate Mine Project  
Canadian Environmental Assessment Agency  
410 – 701 West Georgia Street  
Vancouver BC V7Y 1C6