

August 21, 2017

Ruth Simons
Executive Director
Future of Howe Sound Society
futureofhowesound.org

Re: Review of the Environmental Assessment Certificate Application for the BURNCO Aggregate Project

Dear Ms. Simons,

LGL Limited environmental research associates (LGL) is pleased to submit these comments in follow up to the responses from Golder Associates (dated January 10, 2017) on our review of the Environmental Assessment Certificate (EAC) application for the BURNCO Aggregate Project (dated September 27, 2017). In this letter, we provide comments on the responses related to the three fundamental themes identified in our initial review: 1) the lack of regional land use planning for Howe Sound, 2) cumulative effects and 3) the approach used for determining the significance of potential effects. We preface these comments by elaborating on the overall need for the project that we raised in our initial review.

Need for the project

The proponent (BURNCO/Golder) has not demonstrated the necessity for the project. Under Section 2.2 of its EAC application, the proponent described the purpose of the project, but it did not justify the need for the project. On page 2-3 of the EAC application, the proponent stated, “With the steady growth of the population of BC’s South Coast, along with the continued depletion of existing local aggregate supplies, there is a need to locate and develop new sources of aggregate in proximity to the Lower Mainland.” This statement remains mis-leading. In our initial comments, we suggested that the EAC application include a forecasted supply and demand from all aggregate sources in the Lower Mainland during the life of the project. In our comments, we provided information from the Fraser Valley Regional District Aggregate Inventory Atlas that identified about 1500 million cubic meters

of granular aggregate supply that would be sufficient sources of aggregate material for well over 100 years.

Further, in its response to our comments, the proponent admitted that it currently obtains aggregate from three facilities for its Lower Mainland processing plant: the Orca Quarry in Port McNeill, BC, Treat Creek Operations in Jervis Inlet, BC and the gravel mine in Sechelt, BC. These operations are long-lived and are expected to operate well into the future. The creation of the BURNCO Aggregate Project at McNab Creek would mean that the proponent would have its own aggregate source to supply its processing plants and that transportation of aggregate that it uses would be reduced. The proponent has argued that there would be a reduction in barge tow distance of up to 280 km, because of its project, but this assumes that the aggregate from the facilities mentioned above is not being shipped to other buyers.

In summary, there appears to be an ample supply of aggregate in currently permitted facilities to support development in the Lower Mainland. Therefore, the primary benefit of the proposed project at McNab Creek is the cost savings that will be realized by the proponent.

Regional planning

As mentioned in our review, according to the British Columbia Aggregate Operator's Best Management Practices (BMP) Handbook, aggregate production must be carried out in an environmentally sensitive manner, which can be accomplished through careful planning and use of BMPs on the property, and through coordinating project development with the environmental activities of the immediate neighbouring area (Ministry of Energy & Mines 2002). Aggregate producers must work with local governments to reduce conflicts and address incompatible land uses, plus they must also consider and accommodate the concerns and interests of local communities. This approach appeared to be lacking for the BURNCO Aggregate project.

Sustainable economic growth is at the forefront of land management in the Howe Sound region despite the lack of a regional land and resources management plan. This is evident by the coalition of organizations working together to achieve conservation and stewardship of Howe Sound. In its EAC application, the proponent referenced the Sunshine

Coast Regional District (SCRD) sustainability plan, particularly the core value of ‘economic vitality’ and it stressed that the project would add diversification to the SCRCD economic base. Economic vitality is, of course, only one part of the path to sustainability. The other core values of the SCRCD sustainability plan (Sunshine Coast Regional District 2012) were not included in the EAC application. These include: health and social well-being, cultural vitality, and environmental responsibility – all of which must work together, and not in isolation, to achieve sustainability goals. Further, economic vitality in the SCRCD sustainability plan is defined by the following strategic direction:

- Recognize that with a strong economy, people may overcome barriers to adopting sustainable behaviour;
- Identify, and build upon, the skills and resources unique to the Coast as well as encourage collaborations that create value-added businesses, products and efficiencies;
- Strive to make the Coast more self-sufficient and resilient in the face of change and uncertain economic conditions; and
- Understand and address the changing economy by supporting best practices, challenging our conventional approaches, and by fostering a culture of creativity, innovation, and learning.

Upon further inspection, the BURNCO Aggregate Project does not fully align with the strategic direction and core values to develop a sustainable regional community; it does not minimize the dependence on non-renewable resources or minimize the disturbance on ecological processes. Finally, the property is currently zoned by the SCRCD as rural land use and the zoning would have to be changed for industrial use, which would be a departure from the current path to sustainability.

Cumulative effects

In its response, the proponent re-iterated that it followed cumulative effects assessment methods based on guidance by the British Columbia Environmental Assessment Office and the Canadian Environmental Assessment Agency. However, as indicated in our review, these methods inadequately scoped the identification of potential cumulative

problems, which subsequently failed to include historical conditions and environmental trends (Baxter et al. 2011). The primary activities leading to cumulative effects in the Howe Sound ecosystem are nearshore developments; increased vessel traffic, which can result in increased pollution from vessel effluent and/or introduction of invasive species; and increased noise pollution. By not effectively considering cumulative effects, decisions about natural resource development may be made without fully understanding the implications and impacts on valued components (Auditor General of British Columbia 2015).

The Howe Sound ecosystem is recovering from the pollution of past industrial activities, but to ensure recovery efforts are on target, the acceptable condition of Howe Sound needs to be agreed upon. This is one of the steps of the Cumulative Effects Assessment Framework for Howe Sound that the Ministry of Forest, Land and Natural Resource Operations (MFLNRO) has initiated. It is therefore prudent that land use decisions consider the work completed to date on this framework (Province of British Columbia 2016). The EAC application should have included information on cumulative effects that the MFLNRO has completed to date and this needs to be considered before any ministerial decision on the project.

Significance of residual effects on marine resources

In our initial review, we raised the concern that the environmental assessment for the BURSCO Aggregate Project is based on limited data and evidence, plus the proponent did not follow its prescribed methods for determining the significance of effects. For example, in the Marine Resources component, significance criteria were based on having measurable effects, understanding the range of natural variability, and understanding the viability of self-sustaining populations. However, when it concluded the significance of residual effects on marine components, the proponent determined that the net residual effects of the proposed project were not expected to exceed ecological thresholds or compromise the maintenance of self-sustaining populations in the marine environment, on either a local or a regional scale. It determined that all residual effects would be “negligible – not significant.”

As mentioned on our initial review, the proponent failed to provide an appropriate amount of data and information to not only show that changes to valued components would not be beyond the natural variability of a resource; it also did not provide evidence in the EAC application on component-specific ecological thresholds or self-sustaining population

levels. We raised concerns that surveys for most marine resources were completed within less than one year.

In its response to our concerns, the proponent acknowledged that “the natural variability in species populations in the marine environment was often unknown”, but in making this acknowledgement the proponent focused solely on the marine benthic community. Here the proponent also assumed that natural variation in marine benthos could not be measured given the ecological condition of the site. In other words, the currently disturbed condition of the site from the historic log-booming activities impaired the ability to define the natural variation of marine benthic populations. This does not address the other marine components (e.g., fish, birds, mammals) where the proponent did not include information on the natural variability or self-sustaining population levels.

The proponent also did not present an adequate amount of data and information in the EAC application and supporting studies to show that marine resources are self-sustaining. Self-sustaining populations should be resilient and stable to changes in environmental condition. They should have stable or positive population growth, be strong enough to withstand random events and persist over time without the need for ongoing active management. As mentioned, in Howe Sound restoration and/or recovery efforts have been ongoing in recent years and there is anecdotal information that the ecosystem is recovering; although, information gaps remain and it is unclear if marine resources within Howe Sound are self-sustaining (Rao et al. 2015). Determining the self-sustaining state of a population requires data and information on the population size, population trend and total disturbance in the system. Local scientists agree that there is a lack of baseline data from which conclusions on environmental trends can be attained (Rao et al. 2015). In Howe Sound data gaps remain on fish abundance and distribution, understanding how salmon species use the marine environment, non-commercial invertebrate species, species at risk and the processes associated with estuaries (Rao et al. 2015). Furthermore, a better understanding of the oceanographic processes in Howe Sound is required to determine its resiliency to stochastic changes, particularly in light of the changing climate and oceanography.

The level of information presented in the EAC application did not use the best available science or sound scientific practices. The proponent simply made a determination of significance without the scientific data and evidence to do so.

Closure

In conclusion, to reiterate from our initial comments, it is our professional opinion that the BURSCO Aggregate Project EAC application did not effectively address potential adverse residual and cumulative effects to marine resources, recreational values and land management. We recommend that the British Columbia Environmental Assessment Office, in its environmental assessment report, conclude that the project will cause significant environmental effects. We trust that the comments and recommendation meet the expectations of the Future of Howe Sound Society. Should you have any questions on any of this work please feel free to contact me at your convenience.

Sincerely,



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