



# SIERRA CLUB ATLANTIC

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Please accept our comments on the Environmental Impact Statement (EIS) or the **Black Point Quarry Project** (Registry reference number 80064).

Given the significant environmental impacts of the project that cannot be mitigated and the lack of assessment of certain key areas required by Terms of Reference for the EIS, Sierra Club Canada does not support approval of this project. Moreover, there are concerns surrounding lack of detail in the EIS and limited analysis of alternatives to undertake the project.

We wish to note that this is based on our overall assessment of the impacts, and that community members consulted as part of this project are not endorsing this position. Their concerns about incomplete aspects of this EIS did contribute strongly to our overall position.

## **Summary of Major Findings:**

- ghg emissions associated with the project are not completely assessed and will result in climate change impacts that cannot be mitigated.
- Archaeologically significant areas are recognized through recommended buffer zones which have not been addressed in the mitigation of this plan.
- Numerous wetlands will be destroyed as part of this project. Wetlands are ecologically important and are also important features for water budgeting.

- Marine environment impacts, damage to a region identified as an Ecologically Significant Biological Area, and the value of coastal areas to local residents and industries (particularly fishing and tourism) were not assessed in a comprehensive manner or using an ecosystem approach.
- Residents have expressed concerns regarding the economic impacts (lost opportunities for tourism, conservation and other resource industries) and lifestyle impacts (air and noise pollution and its impacts on visual amenity, property prices and quality of life) of the proposed quarry. In addition, residents question the proposed job creation and whether it will truly positively impact their community.
- Concerns regarding self-regulation and monitoring have been raised; independent monitoring and evaluation of site operations is required to ensure compliance. More specific information on who will be responsible for monitoring on-going environmental changes and identifying adaptive management practices, and implementing these practices is needed.
- The EIS does not provide enough information on location of topsoil stockpiles, hazardous waste storage, monitoring stations for air quality, wetland compensation (type of wetlands and location at which they will be recreated), comprehensive information on ecological processes (natural disturbance regime, structural complexity of habitats) that exist at the site. It is difficult to truly understand the impact of the project with these missing pieces.
- The project proponent has done very little analysis to identify alternative ways to undertake the project; for example, the feasibility of using alternative renewable energy sources for generating electricity on-site was not considered. Similarly, septic waste management responsibility is offloaded by transportation of waste to an offsite location. Due to the long-term operation of the site, it is important to consider innovation of this sector during this critical planning stage.

We appreciate your detailed consideration of these concerns.



**Kelly Schnare - Interim Atlantic Chapter Coordinator**

<b>Comment Category</b>	<b>EIS section Pg. #</b>	<b>Rationale for request</b>	<b>Question/Comment/Information request</b>	<b>References/Suggestions</b>
Hydrogeology		Provincial Regulations (Common Ground Report recommendations)	Drawing 12 boundaries extension requested for estimated average annual 'recharge' (mm/yr) for more than project boundaries to further assess potential of recharge to other localized aquifers. A comprehensive water management plan to collect and control all water in contact with the facility.	Accurate recharge patterns of domestic wells and runoff drainage for recharge in rock zones which are not granite ensuring no more than a 20% change recharge for 'localized aquifers'
	vol. 2 App. A Attachment B & AECOM p. 6 report	Fractures frequencies in core drilling are not summarized as to their significance AECOM p. 6 report: " the pumping well indicated the wells are hydraulically connected, likely through fractures in the bedrock"	Granite recharge is not localized, analysis missing for significant fault zone frequency in core drilling	Water Balance using identified fault zones in granite and further modeling is suggested, Additional hydrogeological data should be collected to support the evaluation of groundwater impacts. This includes: additional monitoring wells to assess groundwater levels and aquifer properties in the horizontal and vertical direction.
	App. B - Pg 4	Acid rock drainage potential - Kinetic tests attempt to mimic the natural oxidation reactions that occur in the field; it is	The static test of BC Research Initial Test Method has been used - Why was this method chosen? ; Why were no kinetic tests employed (Particularly for samples from the Halifax formation)?	

		important to understand the potential of materials to generate acid in kinetic conditions		
Hydrology	Section 1 p. 146	Unaddressed Risk of saltwater Intrusion	Section 1 p. 146 describes impacts unaddressed in management and mitigation measures "appendix C Groundwater Inflow – in addition to runoff collecting within the pit, it is anticipated that groundwater seepage into the pit may need to be managed. Given the close proximity to the coastline and the deep nature of the quarry, it may be that seawater seeps into the pit, which may impact upon the natural salinity of surface water receptors if pumped out alongside runoff."	The Project will remove granite from below the water table, with a proven tidal influence "tidal influence- 10-30mm high tide and GW levels" which in turn will affect the local groundwater table. Quarry above the water table; - design blasting procedures to minimize off-site effects; - groundwater monitoring plans; - contingency plans to address impacts to water wells.
	3.7.1 p.29	5 m thick layer of overburden conveys recharge latterly 3.7.1 p.29	off the project site the overburden will continue to flow latterly into neighbouring aquifers	What percentage do neighbouring 'localized' aquifers rely on recharge from site, how will they be affected and what if they are connected by fractured granite seams that are not characterized

	AECOM report app. E & F & G p. 16	no domestic well discharge rates only approximations describing sandy matrix recharged by local precipitation with only describing the Conductivity ( $2 \times 10^{-5.6}$ ) of ONE WELL : 001 which was not screened just tested	describing sandy matrix recharged by local precipitation with only describing the Conductivity ( $2 \times 10^{-5.6}$ ) of ONE WELL : 001 which was not screened just tested	
	App. A - pg. 19 - 21	In Nova Scotia, there are two wet seasons (spring and fall) and a dry season (summer). Maximum groundwater levels occur during a spring recharge (Between March and May).	<p>Groundwater monitoring under different seasonal conditions is required. Apart from the continuous monitoring (Four granite core holes); groundwater was monitored only in two occasions, June &amp; August</p> <p>It is important to know the Depth to groundwater under different seasonal conditions because it can influence the times of the year when the concentration of water pollutants would be higher</p>	NS Groundwater Observation Well Network - 2012 Report
	App A - Drawing 9		The map extent in drawing 9 is different than the map extent in all other drawings. Drawing 9 should have the same map extent, and the dug residential wells (BPRWA001, BPRWA002, etc) should be visible	

Species at Risk		<p>Species at Risk (SAR) and of Conservation Concern (SOCC) (7.12)</p> <p>Implement a Fisheries Offset Program to recreate fish habitat that has suffered "serious harm".</p>		<p>Has not addressed additional changes that may be necessary if climate change predictions for the region were taken into account. High-volume, high flow-rate discharges from the ponds may be necessary in anticipation of exceptional storm events</p> <p><a href="https://www.ecologyaction.ca/files/images-documents/file/Coastal/On%20Solid%20Ground,%20Final.pdf">https://www.ecologyaction.ca/files/images-documents/file/Coastal/On%20Solid%20Ground,%20Final.pdf</a></p>
	Section 7.11 - Marine Species and Habitats, p. 98 - 111.	<p>Impacts on an ecologically significant marine area are not evaluated. Possible impacts of the project could result from noise, accidents, habitat loss, etc. There are also implications for planning Canada's network of Marine Protected Areas.</p>	<p>Use scientific information and advice about the area (i.e. information used by DFO in identifying the area as ecologically significant) to evaluate impacts on the marine environment. Also, incorporate possible impacts on key features such as spawning areas, important habitats, marine mammals, etc.</p>	<p>Canso Ledges Area (which includes the Black Point / Fogarty's Cove area), has been identified by DFO as an Ecologically Significant Biological Area and thus warrants greater evaluation and incorporation in integrated spatial planning processes than the proponent provides . Please see: Reference C "This is an area of high productivity: cod, wolffish, lobster, snow crab, cod spawning (historical). There is an extensive <i>Ascophyllum nodosum</i> bed in the area. There is a steep depth gradient close to shore, therefore</p>

			<p>species which are traditionally spread out in quite a narrow span (e.g., lobsters, snow crab, shrimp) are found here. Fin whales used to aggregate here in winter but it is uncertain whether they still do. There is probably a general concentration of dolphins in the summer. It's a feeding area for marine mammals. Spring staging area for migrating waterfowl, particularly Common Eider (late March-April). Also within the area are breeding colonies of Great Blue Heron, Common Eider and Double-crested Cormorant (April to late August) and probably Common and Arctic Terns as well. The area includes Fox Island which in 1987 was a fairly large Eider colony, however the current status is unknown because current data are not available." (p. 26). The area was subsequently selected as part of planning Canada's network of marine protected areas, since, in addition to meeting the primary criteria of being an ESBS (uniqueness, aggregation, and</p>
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				fitness consequences) the area also meets the Ocean's Act Marine Protected Area criteria. Please see: Reference D
		opportunist sightings in Canso have been made in proposed shipping routes heading south west from Canso	Feeding ground potential for endangered North Atlantic Right Whale	"To the best of expert Dr. Kimberley T. A. Davies' limited knowledge of the region, surveys for North Atlantic right whales and their food base (the copepod <i>Calanus finmarchicus</i> ) have not been conducted in the Chedabucto Bay, and such information is not published anywhere in the academic literature. One opportunistic right whale sighting near Bonnet Lake Barrens southwest of Canso was recorded in 2014."
	Section 7.12. Species At Risk and Species of Conservation, p. 112	Information on endangered / threatened marine mammals and sea turtles is not provided or is inadequate. Ship strikes, noise, and accidents (e.g. oil spills) could affect these species' migratory pathways and/ or injure / kill animals.	Proponent should consult local experts to determine latest information on distribution of marine mammals and sea turtles in Chedabucto Bay and along the transect ships will travel when they leave the shipping lane to approach Black Point. As part of adaptive management and monitoring, the proponent should commit to monitoring for marine mammals and sea turtles, since there seems to be little information on their distribution in the area.	Please see: P. Doherty and T. Horsman. 2007. Ecologically and Biologically Significant Areas of the Scotian Shelf and Environs: A Compilation of Scientific Expert Opinion. Can. Tech. Rep. Fish. Aquat. Sci. 2774: 57 + xii pp. ( <a href="http://www.dfo-mpo.gc.ca/Library/331606.pdf">http://www.dfo-mpo.gc.ca/Library/331606.pdf</a> ) "This is an area of high productivity: cod, wolffish, lobster, snow crab, cod spawning (historical). There is an extensive

			<p>Ascophyllum nodosum bed in the area. There is a steep depth gradient close to shore, therefore species which are traditionally spread out in quite a narrow span (e.g., lobsters, snow crab, shrimp) are found here. Fin whales used to aggregate here in winter but it is uncertain whether they still do. There is probably a general concentration of dolphins in the summer. It's a feeding area for marine mammals. Spring staging area for migrating waterfowl, particularly Common Eider (late March-April). Also within the area are breeding colonies of Great Blue Heron, Common Eider and Double-crested Cormorant (April to late August) and probably Common and Arctic Terns as well. The area includes Fox Island which in 1987 was a fairly large Eider colony, however the current status is unknown because current data are not available." (p. 26). The area was subsequently selected as part of planning Canada's network of marine protected areas, since, in</p>
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				<p>addition to meeting the primary criteria of being an ESBS (uniqueness, aggregation, and fitness consequences) the area also meets the Ocean's Act Marine Protected Area criteria. Please see: Reference D. Please also see latest satelite tracking of leatherback sea turtles, which shows a coastal route of animals along NE Nova Scotia and into the Gulf of St. Lawrence (<a href="https://canadaseaturtle.wordpress.com/tag/tagging/">https://canadaseaturtle.wordpress.com/tag/tagging/</a>). Also, in a survey of the site performed by Bob Bancroft in 2000 noted that a fin whale was spotted from shore at Black Point.</p>
	Section 7.11 - Marine Species and Habitats, p. 98 - 111.	Invasive species introductions are a major threat to marine ecosystems and industries that rely on intact marine ecosystems (e.g. aquaculture, fisheries). Ballast water is a major vector for marine invasive species,(hulls and anchor lockers are	Where this project will result in the discharge of massive amounts of ballast water into a relatively undeveloped coastal area over a 50 year timeline, the proponent should perform a risk assessment of invasive species introductions associated with the project, including estimates of ballast water volumes discharged over time, identifying likely marine bioinvaders based on ports of origin of the ships traveling to the site, and providing	Please see the Invasive Species section in the Joint Review Panel Report for the Whites Point Quarry and Marine Terminal Project (pp. 58-59) and and Fitzgerald, G.M.E. 2006. Comments on the Environmental Impacts Statement for the Whites Point Quarry and Marine Terminal Project. Submitted the CEAA ( <a href="http://www.ceaa-acee.gc.ca/B4777C6B-docs/WP-1636.pdf">http://www.ceaa-acee.gc.ca/B4777C6B-docs/WP-1636.pdf</a> )

		<p>also of concern) and this project will involve the discharge of millions of litres of ballast into Chedabucto Bay on a regular basis. Because the region is relatively unpolluted, the likelihood of successful establishment of invasive species may be even higher than in more industrialized and polluted ports. It is well known that ballast water exchange performed to reduce the likelihood of invasive species does not result in the elimination of the risk of invasive species introductions, and exchange with oceanic water can even increase the number and viability of plants and animals carried in ballast. Since the coast near the proposed marine terminal is very dynamic, the likelihood</p>	<p>alternative mitigation measures (in addition to ballast water exchange) to prevent the introduction of marine invasive species. Monitoring for invasive species should also be part of the mitigation measures required for the project. The proponent should also provide a response plan for how it will respond if and when an invasive species is detected.</p>	
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		of containing the spread of invasive species is very low. This makes it even more vital that this environmental impact be assessed more fully.		
Birds/ Ecology	p.27		Have not Identified exactly how the site is used as an area frequented by migratory birds and invasive species	Description, many questions remain regarding specific impacts on nesting or migrating birds, mammals, lobster, herring, waterfowl etc. Reference E
	7.12.3	Four lichen are listed as sensitive on the GSWSC	Working group (including members of government, TCC, THREAT and representatives of RCDC) recommended for reviews of fisheries, wildlife, archaeology and environmental management	
		The risk of invasive species mitigation with duration of 5 and Frequency of 7 is considered not significant		The level of baseline information was often inadequate and insufficient to implement meaningful monitoring programs that would detect long-term changes and trigger mitigative action.
Wetlands/Terrestrial			Identification of ecological processes that capture ecosystem functioning (Natural disturbance regime, structural complexity). The existing baseline data identifies location of different habitats,	Threshold for Determination of Significance: 3-5 generations to return the population to pre-project levels (after start or end of project)

			species composition and diversity. However, it is important to identify unique ecological processes that exist and that can potentially be impacted by the project	
Climate Change		Wetlands provide the function of carbon storage and it is important to include quantitative assessments as part of the global carbon budget	The carbon budget should account for the loss of carbon uptake by wetlands and vegetation	
Site preparation	Part 1 - 3.2.3 - pg.73		How will the timber from clearing activities be salvaged? It is recommended that grubbing activities take place in frozen or dry conditions to minimize topsoil compaction. More details on when and how grubbing will be conducted is needed	
Hazardous material management	3.3.6 - pg. 87	Hazardous material should be stored at a minimum of 100 m from any watercourse/water body and should be ideally located away from environmentally	Where will hazardous material be stored? (locations should be identified in a map with environmentally sensitive areas such as wetlands) How will these hazardous material storage sites be protected? Who will have access to the sites?	

		sensitive regions and high traffic areas; therefore it is important to identify storage locations		
Topsoil management	6.1.2		How will topsoil piles be managed? Where will topsoil piles be located (piling soil formation, how will be wind and water erosion managed?)? What is an estimation of topsoil volume that will be removed? (More detail required in section 6.1.2)	
Weed Management	7.12.7.1	7.12.7.1 includes a proposal for identification and removal of invasive weeds; more detail on weed management is required	Will equipment be cleaned of mud and vegetation to avoid introduction of invasive weeds? Re-vegetation, will exposed soil be allowed to re-vegetate naturally or will seeding be used?	
Noise and Vibrations		Monitoring accountability		Continuous noise levels would be generated by mobile equipment and at the processing plant. During ship loading, noise levels would be elevated by the conveyor operation, the use of the radial ship loader, and the filling of the holds. When necessary, ship loading would continue through the night.

				Uncertainties about the Project's blasting requirements and protocols made it difficult to determine the configuration and size of the area over which wildlife would be impacted by operational noise and blasting. Because of the lack of specificity in the Project
Social Impacts		"Social Impact Assessment 1. Loss of Land; 2. Loss of Structures; 3. Loss of Livelihood;"	Socio-economic Impact Assessment (SEIA)	Alternatives describing the Precautionary Principle: Where there are threats of serious or irreversible damage, the precautionary principle suggests that uncertainty does not reduce the need to try to prevent environmental degradation.
		Request for a Cost-Benefit Analysis	It is unclear whether the socio-economic benefits (Job creation, tax, etc) of this mining project outweigh the social and economic cost of environmental damage. Additional information on existing socio-economic conditions is required.	
Tourism & Recreation	7.13.4 land and resource use	Non-inclusive "goals and objectives of community"	full social impact Assessment requested to determine Municipal vision meets provincial strategy	Significant loss of tourism related revenue to Campground, Mainstreet and Stanfest participants

	7.14.2.4	low demand for existing resources is not supported by reviewer	monitoring requested for data of tourism related changes and baseline	full social impact Assessment requested
	7.13-1 table	Anticipated residual effect to economic activity and area has been affected by past human activity	How will this project impact the collective memory from the Aero disaster in 1970, monitoring requested for data of tourism related changes and baseline	Because of the special issues associated with coastal quarries, [we] recommend a moratorium on new approvals for development along the North Mountain until the Province of Nova Scotia has thoroughly reviewed this type of initiative within the context of a comprehensive provincial coastal zone management policy and established appropriate guidelines to facilitate decision-making. ENVIRONMENTAL ASSESSMENT OF THE WHITES POINT QUARRY AND MARINE TERMINAL PROJECT JOINT REVIEW PANEL REPORT EXECUTIVE SUMMARY OCTOBER 2007
	Vol. 3 App. L p.43	Findings of major importance to local residents and provincial regulators	Significant loss of historical burial grounds on Fogarty property as mentioned in survey	100 m buffer around features recommended in conclusion of consultant's report and should be followed regardless of property

				zoning using an Ecosystem Approach
Economic	7.13-1 table	possibly markets in eastern/ central Canada for construction aggregates as competition	How will the proponent not compete with local quarry's	Bayview excavator has been operating with community license for over ten years, how will they be affected? The major benefits of the Project would accrue to the Proponent in the form of long-term access to a major aggregate resource. To a much lesser extent, the local economy would benefit from economic development and diversification from export production. The jobs created during construction and operation of the facility would aid local employment and could reduce migration of young workers to other regions. Modest amounts of tax revenue would accrue to the federal, provincial and municipal governments. Some of the direct and indirect expenditures would assist local and provincial businesses. (Reference: A)

Reclamation and Remediation		What alternatives for remediation are considered, and how will this be funded?	Best practice for open pits is to backfill the pit and re-vegetate the surface to represent the original topography. The proposal of a pit lake raises questions; It is necessary to estimate precipitation, evaporation and the possible impact of the pit lake to the existing water table conditions	Danger risks in large depth to surrounding community and safety liability for visitors
19 - Accident and Malfunction Scenarios, p. 171 - 187		Inadequate information is provided on mitigating impacts of accidents and malfunctions to adequately assess impacts of the project. For instance, no model of the trajectory of a marine oil spill is provided, and methods for containing the impacts of most of the accidents discussed are not provided.		
Fuel storage and refilling	*	There are statements demonstrating no refueling of cargo ships will be done at the Black Point Quarry	What is the fueling plan in place to quantify this and how will it account for changing weather patterns and frequent storms which have 12-24 hour notice by Environment Canada standards	
Blasting type	3.3.1 pg.80		Blasting agents that are proposed to be used are ammonium nitrate and fuel oil	In addition, please refer to the comments submitted to by

		<p>(ANFO). The Joint Review panel for the White Points Quarry Project (A) identifies certain environmental effects caused by using these blasting agents. Concerns include the negative effect of ANFO on surface water resources (the presence of nitrates in freshwater can encourage algal growth and cause eutrophication and consequently affect aquatic life)</p>	<p>Ashraf Mahtab for the White Point Quarry Project. The document discusses DFO guidelines and informs us ANFO should not be used in or around water</p>
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## **References**

- A** Environmental Assessment of the White Point Quarry and Marine Terminal Project Joint Review Panel Report, Executive Summary, October 2007
- B** ON SOLID GROUND: Community Voices for Changing Nova Scotia's Mining Policies  
(<https://www.ecologyaction.ca/files/images-documents/file/Coastal/On%20Solid%20Ground,%20Final.pdf>)
- C** P. Doherty and T. Horsman. 2007. Ecologically and Biologically Significant Areas of the Scotian Shelf and Environs: A Compilation of Scientific Expert Opinion. Can. Tech. Rep. Fish. Aquat. Sci. 2774: 57 + xii pp. (<http://www.dfo-mpo.gc.ca/Library/331606.pdf>)
- D** Marine Protected Area Network Planning in the Scotian Shelf Bioregion: Objectives, Data, and Methods. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/064. DFO. 2012 (<http://www.dfo-mpo.gc.ca/Library/347557.pdf>)
- E** "Comprehensive Air Management System:A Proposed Framework to Improve Air Quality Management. Comprehensive Air Management System Steering Committee, April 2010  
([http://rcen.ca/sites/default/files/uploads/ae\\_cams\\_framework\\_doc.pdf](http://rcen.ca/sites/default/files/uploads/ae_cams_framework_doc.pdf))
- F** FEDERAL POLICY ON WETLAND CONSERVATION GUIDANCE FOR APPLICATION AND IMPLEMENTATION IN ENVIRONMENTAL ASSESSMENT Canadian Wildlife Service Environment Canada April, 2014.
- G** NOVA SCOTIA NATURALLY: Mainland moose decline due to poor forest management Bob Bancroft, 2015  
(<http://thechronicleherald.ca/thenovascotian/1273546-nova-scotia-naturally-mainland-moose-decline-due-to-poor-forest-management>)

## **2.0 Local Collection**

### **Obtaining Information on Community Values, Concerns, and Recommendations**

#### **Methods**

In preparation for the Participant's planned community meeting, local news agents were contacted including community event and articles/ interviews with local radio stations and the local press were provided with a public service announcement. Phone calls and email were used to contact multiple local community group organizations including the local library, Antigonish & Guysborough Counties Waste Info, the Guysborough County Inshore Fishermen's Association, and local MLAs. Personal visits were made with The Municipality of the District of Guysborough office to collect maps, engage to initiate discussion and to generate interest in a community session. A list of potential contacts was developed in consultation with Sierra Club staff, contacts made during earlier Project information meetings, and internal Club membership information.

Over a period of two information session days, approximately ten individuals were contacted either by email or by phone to discuss the purpose of the community meeting. Additionally, each was asked to inform others of the meeting, and to provide further suggestions of interested persons who could contribute to the discussion. Those contacted included a local fishermen, members of local information groups, and others involved in community affairs. Individual communication was considered complete when all names suggested had been contacted.

Several individuals volunteered to distribute posters and provincial contact lists were shared, the Sierra Club office provided posters for this purpose, and they were subsequently distributed in Guysborough and adjacent communities. In addition, the local radio station and newspaper were provided with a public service announcement.

The public meeting took place over two days. The initial day was done by opening phone line (the call in number was advertised on the local Fire Hall community sign and in all promotion) and included three expert presentations, and in-depth expert question and answer. The second day consisted of a rescheduled (due to weather) in-person public information session which included a presentation on the project and environmental impacts and was followed by a question and answer sessions to ask the experts. Attendees were then asked to discuss in a sharing circle the project:

- How do you feel about the proposed project, what would you like to know more about?
- As a community member, what activities do you engage in the region of the project? Can you list them?

- What are key features in the area that are important to you? Can you highlight these on the map or list them?

The attendees were then asked to mark areas of concern on a map. Group discussions were written down and areas of concern highlighted. These included: Local Traffic and Roads, Natural Value and Potential, Industrial Zoning and Expropriation, Noise and Blasting, and Beaches and Fisheries.

## Results

### Community Context

The Shiretown of Guysborough has a picturesque waterfront and a main street which serves Fogarty's Cove branded coffee along with its pristine air quality in the summer. While Black Point today is probably best known as a must see with its beautiful Lighthouse Lookoff, a gem along the rolling uninterrupted pristine coastline, for this small community the sense of peace and quiet is a true amenity. Black Point acts as a connecting area for Canso, Guysborough, Larry's River, and Whitehead, where many enjoy outdoor activities including ATV trails, camping at Seabreeze Campground & Cottages and the Bonnet Lake Barrens Wilderness Area as a protected area used for hiking and exploring.

Participants in the public information session were polarized as either being for or against the quarry. There is a need to further engagement and information opportunities conducted by a third party, rather than the proponent, to ensure unbiased information is provided to the public and as a safeguard in this process.

### Results of Breakout Sessions

Please see Appendix for detailed notes from interview follow up and the notes from when groups reconvened to share their thoughts.

#### *Evaluation of Alternatives to the Project*

Most participants felt the quarry did not have an alternative -it was an accepted proposal, or should not happen

#### *Evaluation of impacts to Fishing Industry*

In particular there were concerns that the quarry would displace jobs in fishing and tourism, an impact which had not been quantified or assessed.

#### *Community-based Monitoring*

There were concerns about the lack of information on the monitoring required by the company and how they would be held accountable when standards and limits were not demonstrably achievable targets.

#### *Frequency of Monitoring & Response to Possible Impacts*

Respondents with property were concerned about commitments to respond in a timely manner to damage to sensitive marine species and habitats including local beaches.

#### *Noise Impacts*

Based on their own experiences on the coast, stakeholders were skeptical of noise models presented, and believe all of Chedabucto Bay will be directly affected.

#### *Water Impacts*

Participants in the meeting were concerned about domestic groundwater being impacted, and lack of certainty regarding how this impact will be mitigated and monitored.

#### *Waste Management*

Run-off and from waste areas was of concern, including traffic patterns to move waste.

#### *Air Emissions*

Monitoring station locations are requested for an explicit evaluation of air emission from ships and drift to coastal residents and local schools and residents.

### *Impacts on Renewable Resources*

Without a complete assessment of environmental impacts, participants had many concerns that the assessment of impacts on renewable resources and their associated industries (tourism, fishing) remain incomplete. Landowners near the site wished to know how impacts on property values were assessed and how any loss of property values was quantified and mitigated.

### *Lack of Modeling of Oil Spill*

Local seascape and coastal areas are highly valued. However, the proponent did not carry out an assessment of how oil / chemical spill would impact these areas. Modeling of currents and trajectories should be carried out to determine which areas would be likely to be impacted by a spill.

### *Lack of Balance*

The mitigation details were lacking and vague, making all attendees from both spectrums reach a skeptical consensus of the entire document and process and there is a lack of trust in the proponent or regulatory agencies regarding comprehensive monitoring.

### Recommendations to Regulators of the Project

- Alternative energy and waste management need to be considered
- Aulds' cove comparison for lessons learned
- Full Socio-economic Impact Assessment (SEIA) of localized risks required
- How can this project avoid another Arrow Spill (consequences still being felt)

### Pro-project comments heard

- 300 hectares is small
- The lake created by this project will help with Coastal sea level rise and climate change risks
- Where else are the jobs? What existing possibility is there?

## Summary & Recommendations

As the various public meetings and information sessions progress, something of a tension has emerged within the community. The desire for expanded employment opportunities as represented by that development has been tempered with concern that the longstanding concern that environmental disasters are often a reality with economic development.

The March 25<sup>th</sup> meeting hosted at the Queensport Fire Hall by the Sierra Club was no exception to that opinion – in the words of one participant, “We are for this project, but we are open to information and our opinion can change”. While a range of concerns about the project were raised at this session, further evaluation of the existing ecological resources and tradeoffs using environmental information of the proposed project was the strongest message expressed by those in attendance.

In addition to the concerns noted above, participants identified information gaps in the EIS; and they also made a number of recommendations which should be included in an operating permit for this Project, should it proceed:

### Information Gaps

- Day and night sound transmission comparison
- Underwater sound transmission and associated environmental effects
- Water quality and quantity impacts to Chedabucto Bay and surrounding water table
- Recommendations from consultants reports not being incorporated into the mitigation measures
- Economic alternatives to the project not being considered

### Recommendations (Project):

1. Effective ongoing monitoring of Project activities, and enforcement of regulations. Community involvement in monitoring
2. The community benefits/impact agreement as a process should be transparent and open to public record
3. Development of ecotourism: activities in the Region that participants indicated in the breakout sessions were developing on recreational trails, campground usage, promoting clean air and water point of pride and reason for living in Guysborough which include historical fishing practices, bringing ancestral and historical significance to region

Recommendations (Process):

1. Information regarding process for municipal benefits agreement should be publicized and understood in detail by the stakeholders
2. This project has direct and indirect consequences on the existing community, full cost accounting and mitigation measures of impacts need to be addressed in the EIS
3. EIS contains a great deal of information, much of it difficult for the layperson to understand – there should be more opportunities in the earlier stages of the process to discuss that information
4. It is worthy of note that the Sierra Club team that organized and conducted this meeting, was not well received and participants in this community meeting felt that other local stakeholders were scared to speak out against the project for fear of being ostracized in their local community. In addition to the above concern that there should be more sessions where the proposed Project could be discussed with support from the proponent, and the question posed whether there would be follow-up meetings.

**Appendix 1: Other impacts of concern listed by respondents (listed in order of frequency)**

Fishing industry: The Guysborough County Inshore Fishermen's Association has only been a liaison committee for 6 months and cannot speak for all of the fisherman. There are many fisherman heavily invested in gear. The lobster fishery will be affected, how is the Association ignoring this?

Full cost economic account of development as there will be an impact on quality of life from vibrations from ground and water to mining, trucks, barges, large ship traffic, and historical lives as graves will be destroyed.

The watershed is not isolated, the species who use it are at risk, the invasive species will not be monitored, and the wildlife, wilderness and untouched coastline as our quality of life and tourism is going to be impacted. Water is connected underground and there are no localized impacts, wells will be dry because of impacts of quarry on water table.

Transportation - impacts of trucking on roads and dust and smells, impact of hauling waste by highway, road safety is important and more roads and trails are wanted, in 1990 there were 800 people traveling to East Canso for industry and the roads were well maintained (Highway 16).

Need for more info examples include, what is the alternative to this project and what is the *actual* approval rating for this project?

Property values (1 km to campground with major ascetic value) and forgone development opportunities including jobs to small farmers for herbs, cranberries, wilderness, canoe/ kayak, geocaching, historical and federal parks.

Centralized impacts realized as the project is in who's backyard- who is directly affected? By further utilizing 12% protected areas (provincial average) of 1,000 hectares per person, more underutilized protected areas are not wanted.

Cancer rates increasing in an already vulnerable area, with quarry not mining underground, the choice of exposure is not given to the community, and should be explained.

Self-regulation for the industry, is on par with trust of the department of environment to monitor this project.

Impacts that Would Make Project Unacceptable to Respondents:

- Air and Water Pollution
- Quality of life changes
- Tourism impact
- Changes to beaches and inshore fisheries is unacceptable
- Too many risks, no guarantees
- Loss of historical significance

### Collected comments from interviews:

1. **Paula Fredricks** Something I would like asked is - by what means will the corporation 'remediate' the lands affected by the quarrying process, and when will this begin? Will it be done on an ongoing basis or in 50 years, the life of the quarry? AND, how could this land possibly be 'remediated' under such circumstances, when millions of tonnes of stone are to be removed?

What kind of bond could be in place to ensure this is done, and that the corporation completes this remediation. What governmental agency will be the 'watchdog' to assess what is being done?

What will happen if for some reason this corporation dissolves or is otherwise unable to meet its obligations? A very large bond should be in place!

Who is responsible if the water supply for the former Town of Canso is compromised.

What sort of reimbursement is the corporation intending to pay those who live quite near the quarry site?

What of the freshwater fishing in the area? The headwaters of many trout-fishing lakes could easily be compromised.

Who will monitor this?

Who will take water samples prior to the first blast, in every lake and stream that could be affected?

Who is looking at the hydrology of this currently pristine area?

2. **Kimberly Mair Jarvis** Granite dust is carcinogenic. It will be carried downwind for miles, despite the companies efforts to wet it down. The noise pollution for the blasting will be heard for miles. Houses will shake (and be damaged) from the blasting for miles around as well. The fishing grounds in the Bay will be destroyed, despite assurances to the contrary by Vulcan. There are reasons why this company is not allowed to set up quarries in the USA anymore. This quarry will do far more harm than good. Can't even imagine how the people feel who live only a FEW short miles from this proposed environmental boondoggle. The "powers that be" who propose to impact the environment this way will NEVER build a home in the area, or bring their families there. Even the school in Hazel Hill is directly downwind of this proposed mess! They know full well how over time, the air and water around monstrous quarries becomes unusable. The dust is kept down by chemicals that go into the air and water. They tell people there will be a few jobs - but not

what it will be like to actually live anywhere close by. Poverty in an area is not really helped by this sort of 'development' ... it is only helped by careful planning of sustainable and safe jobs, with thought to impact on surrounding areas. There could be people working on all sorts of projects that do not destroy... instead, all effort in the 'development' of Guysborough County is focused on one of the worst possible types of industrial project you can think of! No one in charge will have to worry - their kids won't attend that school, or drink the water that could be full of chemicals... they will be snug in Halifax or south of the border. We have one of the most gorgeous parts of the world right in front of our doorsteps and people would come from all over the world to spend time here, if only there was a little imagination used. All of this land was part of a plan for a Nature Reserve just a very few years ago. People fought against it because they were afraid they couldn't hunt or use ATVs... NOW do they think they'll be hunting and off-roading there? I don't think so... If this land HAD BEEN PROTECTED PROPERLY by our department of Natural Resources (or whatever it was called then) we would have an incredible resource, with Fogarty's Cove the gem of the whole thing.

3. **David Wimberly** Hauling away to waste treatment plant, the risk is too high and too easy to hide toxins in human waste, immediately mixed in with regular waste septic hauled away. Managed on site can be tested on sit and isolated. Regular practice for monetary savings. Monitoring required. Possibility for sewage for nutrients kept in local ecosystem, Small engineered wetland systems can provide ecological benefits such as improved habitat for aquatic wildlife , ducks and extended wetlands. Lots of local material , lined with compost and biological management is not very high tech, and includes the benefit of a lower cost of processing materials. By running material through compost as a first process biofilter, secondary treatment is into the wetland for both solid and liquid waste management. New economic perspective like GPI Atlantic research demands a better economic review as it doesn't make sense locally to people, precludes alternative opportunity, and gives unnecessary advantages to a fragile economic market to continue in perpetuity, chances of stranded asset is high in world market, where the price of oil is not constant. What is the chance of not fulfilling its obligation - close to 100% with the opportunity for bankruptcy as insurance ? Transparent reparation money fully bonded at the time the break group. Gap fill, recovering costs for how long? We demand remediation costs recouped now.

4. **Mark Dettrick** regarding oceans endangered species from shipping we are unaware of the plankton species that exist in Chedabucto Bay therefore what species which feeding grounds have yet to be identified and require plankton Studies in and around Chedabucto Bay as well as Potential Habitat Characterization that may trigger studies on Marine Endangered Species Species at Risk (SAR) and of Conservation Concern (SOCC) (7.12) Implement a Fisheries Offset Program to recreate fish habitat that has suffered "serious harm".
5. **Junita Dort** (former fisherman) Regarding municipal survey: I read a more detailed report of much the same not long ago. I wondered how many fishermen were on the list being surveyed. My husband wasn't nor was my father-in-law. How many were fishermen? Where were the residents living that were surveyed? Was it in the vicinity of the quarry? This is a very large county and if the residents aren't from our area of this county it won't have any effect on them so they really won't care about it. Of course they will be in favor of the quarry. Most people don't speak out and I have know way of knowing who is for or against it.
6. **Diana Wallis** (maiden name Fogarty) My primary concern is the total destruction of this pristine coastal wilderness and the loss of existing sustainable employment in the area. Out migration is not happening in Guysborough County differently than any other rural area of this province. Other rural areas of this province have made a choice to build their communities without centering it around 'dirty' industry. The quarry project is 20th century planning/thinking, I am sure there is a better way to create employment in the area that doesn't include the end of 300 h. of coastal beauty.
7. ENVIRONMENTAL CONCERNS Facebook thread March 29: Can't even imagine how the people feel who live only a FEW short miles from this proposed environmental boondoggle. The "powers that be" who propose to impact the environment this way will NEVER build a home in the area, or bring their families there. Even the school in Hazel Hill is directly downwind of this proposed mess! They know full well how over time, the air and water around monstrous quarries becomes unusable. The dust is kept down by chemicals that go into the air and water. They tell people there will be a few jobs - but not what it will be like to actually live anywhere close by. Poverty in an area is not really helped

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### **Media Coverage**

1. Facebook shares: <http://www.erswm.ca/>
2. Chronicle Herald: Voice of the People March 17th
3. Port Hawkesbury Reporter - [Interview](#) (by phone for April 1st Publication) included 3 paragraphs describing Sierra Club Information session 4 paragraphs describing proponent. Advertising (1/4 page) March 25th & Community Event March 18th, 25th
4. Guysborough Journal- Advertising (1/4 page) March 25th, Community Event March 18th, 25th
5. Local Radio Stations Interview and community event listings

Example of unwillingness to communicate:

Email response March 18th:

Kelly,

Disappointed in your letter in the Chronicle Herald today……full of falsehoods and fear mongering.

What's worse, is the condescending comments you make towards our knowledgeable fishermen and residents.

Your entire letter is a joke. But hey, you gotta raise money somehow.

Good luck with it.

Barry

Mr. Barry Carroll

Chief Administrative Officer

Municipality of the District of Guysborough

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