

BLACK POINT AGGREGATE QUARRY PROJECT

FREQUENTLY ASKED QUESTIONS

FALL/WINTER 2014

Q What is the Black Point Quarry Project?

A Morien Resource Corp., a Nova Scotia based mineral exploration company, and Vulcan Materials Company, the largest producer of construction aggregates in the U.S., formed a joint venture in April 2014 to develop a proposed construction aggregate quarry and marine terminal at Black Point in Guysborough, Nova Scotia. Processed aggregate consisting of crushed granite used in the construction industry (for highways, roads, bridges, and many other forms of public and private construction) will be loaded onto ocean vessels and transported to the Eastern and Gulf Coasts of the U.S. and potentially to markets in Canada and the Caribbean. Based on preliminary timelines, the proposed project could begin operations in 2021 and have a lifespan of more than 50 years. The project is currently in the environmental assessment phase.

Q Walk me through the aggregate production process.

A Granite taken from the quarry face will be loaded onto haul trucks for transport to nearby primary crushers. After being reduced in size, the rock will be transported on a conveyor to a pile located near the secondary crushers that will feed into the processing plant. The processing plant will separate and stockpile the different aggregate according to size. The aggregate will then be rinsed on wash screens prior to being loaded onto ocean vessels.

Q How many people will the project employ?

A During peak construction the project will employ 120 to 150 people directly and indirectly, and 50 to 60 direct full time employees during the operations phase. The three year construction phase is scheduled to start in 2018.

Q How many people from Guysborough will be hired?

A It is estimated that 95% of the jobs will be filled by local workers. Some existing Vulcan employees, who have extensive aggregate mining experience, will work on the site to establish and ensure safety and efficiency standards. It is worth pointing out that Vulcan's Calica quarry and port operation in Mexico directly employs 320 people. All are Mexican citizens.

Q What types of jobs will the quarry generate?

A Typical job descriptions include supervisors, plant operators, mobile equipment operators, fixed equipment maintenance, mobile equipment maintenance, electricians, welders, health and safety specialists, environmental specialists, quality control specialists, and general labourers.



Haul truck and Loader



Q Will these jobs be high-paying?

A A 2013 study by Halifax-based economic firm Gardner Pinfold, prepared for the Nova Scotia Department of Natural Resources, revealed that the average wage in the primary mining sector is over \$1,100 per week, more than 40% higher than the average of all economic sectors, and the highest of all resource sectors.

Q Will these jobs be safe?

A Yes, mining and quarrying jobs are among the safest of all industrial sectors. A 2014 report by the Workplace Safety and Insurance Board noted that mining has a lower lost time injury rate than many industrial sectors including agriculture, construction, forestry, health care, municipal government, automotive and transportation. Additionally, Vulcan has a strong commitment to worker safety and has an exemplary health and safety record at its more than 340 operations in the U.S., Mexico and the Bahamas. Vulcan has received many awards for its safety record and programs.

Q What activity is happening on the project site at this time?

A Representatives of Morien and Vulcan are on site frequently to conduct baseline environmental studies for the Environmental Assessment. There has been no clearing or construction.



Project representative on site collecting baseline environmental data.

Q What level of noise will I hear?

A Vulcan is a leader in noise prevention practices within the mining industry, and has received many awards for noise prevention practices in the work environment. The prevention of noise within the quarry will naturally minimize any noise heard outside the quarry.

Vulcan employees believe that it is very important for Vulcan to be a good neighbour in the communities where Vulcan operates quarries. The distance from the plant area to the nearest residence is approximately 2.7 km, and from the quarry operations (after 50 years of operations) it is approximately 1 km. In addition, the quarry faces north and the topographic ridges between the quarry and the residences will direct most sound north toward Chedabucto Bay.

Quarry noise will depend on the location and direction of residences in relation to the quarry, atmospheric conditions such as humidity and wind direction, season, and actual operations at the site. As part of the Environmental Assessment, Vulcan is conducting baseline background noise studies. Vulcan will also create buffer zones around the quarry to further keep noise to a minimum.



Q How will you protect the environment?

A Vulcan is committed to the responsible stewardship of the environment and has earned many environmental awards and recognitions. As an example, developing wildlife habitat buffer lands around operational facilities is an important environmental program for Vulcan, which now has 42 certified wildlife habitat sites across the U.S., ranking the Company second in the nation with certified habitats and third globally. Additional wildlife protection and conservation measures will be described in the Environmental Assessment report.

Q Will the quarry have any effect on nearby public roads?

A All finished aggregate will be sent to markets by ocean-going ship using the marine terminal to be built adjacent to the quarry site. Haul trucks are not anticipated to be traveling on local roads, including Highway #16. It is anticipated that some equipment will be delivered to the site by truck during the construction phase, and there will be increased traffic on the road as local workers will use the Highway to access the site.



Rank Island at Vulcan's River Rock Facility in Fresno, California.

Q What will happen to the land once mining is finished?

A Vulcan recognizes that mining at Black Point is an interim use of Guysborough's land. Vulcan keeps the site's end use in mind, and realizes that responsible land management is key to sustaining the Company's success. The future use of each property represents significant value to the community, and when possible, Vulcan engages the local community in the evaluation of post-mining options. Vulcan is renowned for its award-winning environmental stewardship. For example, Vulcan has been recognized by the State of California Department of Conservation Office of Mine Reclamation with the Award of Excellence in Reclamation for its natural restoration of its River Rock project in Fresno, California. An initial reclamation plan describing progressive restoration and revegetation will be included in the Environmental Assessment report, with more detail required at the permitting phases following the Environmental Assessment.



Vulcan continually trains its employees on safety. Personal Protective Equipment (PPE) are required to safeguard employees.



Q Will the quarry be visible from Highway #16 or Chedabucto Bay?

A The quarry operation and equipment will not be visible from Highway #16 (it is at least 1 km away surrounded by an earthen barrier). The marine terminal will be visible from the water by passing ships and from Gaulman Point near Half Island Cove, nearly 3 km to the West.

Q Is crystalline silica a concern if I work at the plant or live nearby?

A Crystalline silica (basically fine sand) is an abundant naturally occurring mineral that is widely present throughout the earth in soil and rock formations. It is also found in a wide variety of consumer products and applications including pharmaceuticals, household cleaners, cosmetics, play sand, golf courses and ball fields. The rock that will be mined and processed at Black Point is granite, which contains silica. However, Vulcan will be continually monitoring the dust levels at the site, and the dust control measures that Vulcan will employ are very effective at controlling air emissions. Vulcan has been nationally recognized by the U.S. Department of Labor for its industry-leading programs in protecting employee health from any respiratory issues associated with producing construction materials. The low levels of crystalline silica that may result from plant operations will not have an impact on neighbours or employees.



Material being moved by conveyor belt to stockpile.

Q Will the quarry generate dust that will affect local residents?

A Ensuring that the local residents are not impacted by dust from the operation is a priority for Vulcan. Vulcan has extensive experience in the control of dust from rock mining operations. This experience has enabled Vulcan to be recognized as the industry leader in the prevention of workplace exposure to dust. Control measures within the facility to prevent workplace exposures also ensure that neighbors outside of the facility boundary are protected. These measures include the use of engineering design best practices, the use of dust suppressions systems (water sprays), and application of water to stockpiles and haul roads. Vulcan will also evaluate whether other dust control measures such as dry dust collection systems (bag houses) are needed as part of the engineering design.

Q Will there be dust plumes on windy days?

A Vulcan will take steps to control any windblown dust. Controls include application of water for dust suppression and other engineering best practices. Clearing of vegetation for expansion of the quarry pit will be done as needed to minimize the amount of soil that is exposed at any time. A water truck will be used to provide additional dust suppression to stockpiles and other areas that may not normally be dusty but could be on extremely windy days.

Q Will the quarry generate any water runoff?

A The proposed operation is being designed to maximize the collection, containment and use of water. Runoff from precipitation that falls on project affected areas will be collected for re-use as aggregate wash water. All water from the processing operation will be routed through a treatment system to remove sediment so that it can be reused in the operation. The intent is to not discharge any water from the operation except in the case of storm events such as hurricanes where total containment may not be possible. Discharge would require approval from the Nova Scotia Department of Environment which will also set maximum limits for suspended solids.

Q Will there be any negative effect on the groundwater table?

A Part of the ongoing Environmental Assessment is the evaluation of project impacts on water resources including groundwater. No adverse impacts are anticipated and the Environmental Assessment will thoroughly cover this topic. Representatives of the project team recently visited several homes and businesses around the perimeter of the project area to gather data on current groundwater use and quality. Information regarding existing groundwater availability and quality within the project area is also being collected.

Q How much silt, if any, will be discharged (in storm water or process water) into Chedabucto Bay and how far will the tides and currents disperse the silt?

A The operation is being designed to maximize the containment and reuse of water associated with the operation. The intent is to eliminate the need for routine discharges from the operation that could result in silt releases into the Bay. In addition, areas of ground disturbance that could potentially result in silt runoff to adjoining creeks or other water bodies that discharge to the Bay will have storm water management best practices installed and maintained to reduce any potential release of silt or other sediment.

Q How will the quarry operators ensure that ships do not discharge ballast water near the site?

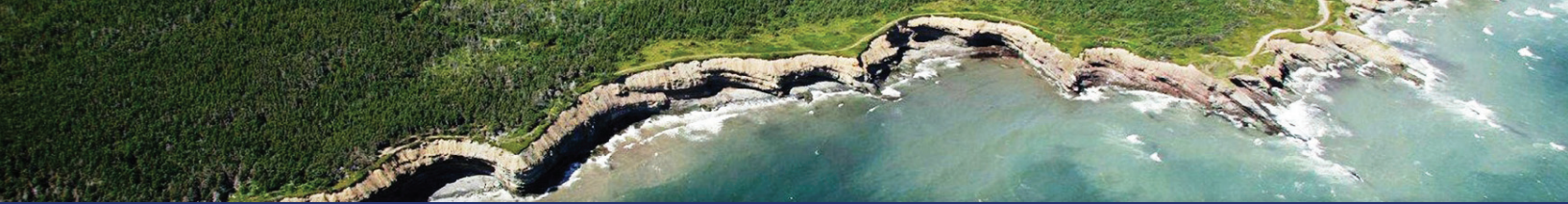
A Vulcan will ensure that all ships exporting aggregate from the Black Point site comply with all applicable regulations. There are federal government regulations that must be adhered to, specifically Ballast Water Control and Management Regulations, that state “Ballast water that is taken on board a vessel outside waters under Canadian jurisdiction must not be released in waters under Canadian jurisdiction unless an exchange is conducted, before the vessel enters those waters, in an area at least 200 nautical miles from shore where the water depth is at least 2,000 metres.”

Q Describe the vessel shipping lane that has been proposed into and out of Chedabucto Bay.

A We are currently consulting with our ship captains, the local fishermen, and relevant agencies to determine a shipping route that will minimize disruption to the local fisheries, while at the same time providing a safe passage for the ships.



One of three ships owned and operated by Vulcan.



Q What are the cumulative traffic effects of additional Vulcan ships combined with new ships when the new container terminal starts up?

A As part of the ongoing Environmental Assessment, Vulcan will include analysis of cumulative impacts. However, the number of ships that will be going to and from the Vulcan marine terminal is minimal compared to the expected traffic going to the container terminal at Melford. Early in the project, there will only be a ship every few days for the Vulcan operation. The ship route to the Vulcan marine terminal is also not expected to be the same route as the container terminal ships. Given these points, Vulcan is not anticipating a major cumulative impact from the two projects.

Q How will the project impact local fisheries?

A Any habitat loss must be compensated for or recreated. Development and operation of the marine terminal is anticipated to result in the loss of some marine fish habitat through the loss of sea bottom in the zone to be occupied by the loading terminal. Vulcan is working closely with local fishers and the Guysborough Inshore Fishermen's Association to limit and mitigate any adverse impacts.

Q How will shrimp and scallop fishers be affected by ships leaving the shipping lane to access the marine terminal?

A Meetings between members of the proponent's project team, and area fishermen and others with fishing interests, are ongoing to discuss the potential impact of the ships' travel lane on fishing activities. Information from these meetings is being reviewed in conjunction with information on possible ship routes to ideally find a solution that minimizes potential impacts.

Q What assurances can you give that you won't harm Chedabucto Bay or the livelihood of fishermen with the explosives and increased ship traffic?

A The importance and significance of the area's fishing industry is something that Vulcan understands, appreciates, and will be proud to be associated with as part of the Black Point project. The Environmental Assessment process that is currently underway will identify any potential impacts and require Vulcan to address each of them. The impact assessment related to the fishing industry, fish species, and habitat is a major part of the Environmental Assessment process. The review of the Environmental Assessment by the federal and provincial environmental agencies should provide a level of assurance of the impacts of the project on the fishing industry before a final decision is reached to approve or deny the project. Vulcan and Morien continue to be engaged in a constructive dialogue with members of the fisheries industry.



Q What was the process that led to the Municipality's acquisition of land at Black Point?

A The Municipality of the District of Guysborough identified this resource as one of the many ways that they could help create jobs and bring revenue to the area. For more information on the property acquisition, please contact the Municipality at [902-533-3705](tel:902-533-3705) or visit <http://www.municipality.guysborough.ns.ca>.

Q What is the status of the Environmental Assessment?

A The Environmental Assessment process for the Project is underway. On Feb 28th, 2014, the Project Description document was formally submitted to the Canadian Environmental Assessment Agency (CEAA). This document is available on the CEAA website, as well as at www.morienres.com. Following this submittal, a 30 day public comment period commenced, and on Apr 28th, CEAA provided the Draft Guidelines for preparation of an Environment Impact Statement (EIS) report. Following a second round of public comments, CEAA and Nova Scotia Environment issued the final EIS Guidelines on Jun 9th, which are available for review on the CEAA website. The guidelines describe the information and studies that will be needed to support the EA report. Vulcan and Morien are currently advancing some of the baseline studies that will support the EA. At this stage in the project, the focus is on collecting data and information about the site (both terrestrial and marine components), while at the same time continuing to identify community questions, responding to any raised about the project.

Q How can I participate in the Environmental Assessment process?

A There are four public comment periods associated with the Environmental Assessment process. Two of these remain: 1) public comments will be solicited once the EIS is submitted to the government, anticipated to be in the fall of 2014; and 2) when CEAA issues a draft EA Report which is anticipated in mid-2015. Additionally, there will be several Vulcan/Morien-hosted information sessions within Guysborough where attendees will have the opportunity to talk with project representatives and have their questions answered. Notice of these events will be made public in advance.

If you have a question about the proposed Black Point Quarry Project, please contact the project team at info@morienres.com or [902-466-7255](tel:902-466-7255).