# IN THE MATTER OF AN ARBITRATION UNDER

CHAPTER ELEVEN OF THE NORTH AMERICAN FREE TRADE AGREEMENT AND THE UNCITRAL RULES OF 1976				
ON, DOUGLAS /ARE, INC.				
Claimants/Investors				
Respondent				

#### I. INTRODUCTION

This statement is supplemental to my Witness Statement dated December 13, 2016
 ("my December Witness Statement") in these proceedings. I make this statement
 in response to the Expert reports of the Brattle Group dated June 9, 2017 (the
 "Brattle report") and SC Market Analytics dated June 9, 2017 (the "SCMA report").

#### II. PERMITS, LICENSES, AND AUTHORIZATIONS

- 2. As a professional Engineer and Project Manager, having practiced in Nova Scotia for over 40 years, and as the Project Manager of the Whites Point Quarry Project, I was intimately familiar with every aspect of the Whites Point Quarry Project from its inception to the Ministers' denial of environmental assessment approval in 2007.
- 3. I was also (and remain) very familiar with the published policies of the Government of Nova Scotia which promote the development of quarries generally, and deep water quarries in particular, for the export of Nova Scotia stone to the United States. This is demonstrated most recently by the approval in 2016 of the Black Point mega quarry, following a streamlined environmental assessment by way of a Comprehensive Study. I am also aware that private property, with a storied history and owned by the same family for almost 200 years, was expropriated to facilitate the development of the Black Point mega quarry.
- 4. If the Whites Point Quarry Project had received environmental assessment approval, the Governments of Canada and Nova Scotia would undoubtedly have issued all of the permits, licenses and authorizations required to operate the Whites Point Quarry and Marine Terminal.

5. I am aware that Canada has stipulated as follows:

Canada stipulates that it has no examples where a proponent of a project which received environmental assessment approval from the Government of Canada (under the version of the Canadian Environmental Assessment Act applicable to the Whites Point EA), and applied to the Department of Fisheries and Oceans, Transport Canada, or Natural Resources Canada for any permits, licences or authorizations required for the operation of the project, was denied those permits, licenses or authorizations.

Canada stipulates that it has no examples where a proponent of a project which received Nova Scotia environmental assessment approval, and completed applications for Part V approval and/or other relevant permits, licences or authorizations required for the operation of the project, was denied that approval or those permits, licences or authorizations.

- 6. Based on my knowledge of the Whites Point Quarry Project, the extensive environmental studies and work conducted in respect to the Project, and the approach of the Governments of Canada and Nova Scotia to the approval of quarry projects and the expansion of operating quarries, there could be no honest basis to deny the Whites Point Quarry any of its permits, licences and authorizations, including *Navigable Waters Protection Act* and *Fisheries Act* authorizations. All of these permits, licences and authorizations would have been granted in the ordinary course to the proponent of any comparable quarry and to the Whites Point Quarry Project after environmental assessment approval.
- 7. I was fully aware throughout the environmental assessment process that, if the Whites Point Quarry Project received environmental assessment approval, further authorizations would be required to proceed with the Project, including authorizations under the *Navigable Waters Protection Act* and the *Fisheries Act*.

- 8. Early on, I commenced the process of obtaining a number of non-environmental assessment approvals, but the Governments of Canada and Nova Scotia both deferred these approvals until after the completion of the environmental assessment process.<sup>2</sup>
- 9. In addition to the ordinary Provincial industrial permits which, in my opinion, there could not be any honest basis to deny and would have been issued in the ordinary course, there were three collateral Nova Scotia permits and a water lot grant which needed to be considered for the Whites Point Quarry Project.

#### (i) Crown Lands Act

- 10. Under the *Crown Lands Act*, the Nova Scotia Minister of Natural Resources is responsible for Crown lands, including submerged lands along the coast of the Province.<sup>3</sup> Under the *Act*, a permit was required to "build or enlarge a wharf" on submerged Crown land<sup>4</sup> and the granting of a water lot was required.<sup>5</sup>
- 11. The Nova Scotia Department of Natural Resources continued to actively promote Whites Point as an attractive quarry site throughout the period of the environmental assessment.<sup>6</sup> There was no legitimate reason for the Minister of Natural Resources to deny Bilcon of Nova Scotia a permit in relation to the Marine

For example, Coastal Waters Application and Report of Mark Saywood to Joy Dubé dated February 24, 2003 (Buxton Reply Exhibit 1: *Investors' Schedule of Documents, Tab C45, p. 7*).

For example, letter from Melinda Donovan to Paul Buxton dated September 19, 2003 (Buxton Reply Exhibit 2; Investors' Schedule of Documents, Tab C1378) and letter from Phil Zamora dated November 24, 2005 (Buxton Reply Exhibit 3; Investors' Schedule of Documents, Tab C136).

Nova Scotia Department of Natural Resources: <a href="https://novascotia.ca/natr/land/submerged-land.asp">https://novascotia.ca/natr/land/submerged-land.asp</a> (Buxton Reply Exhibit 4; Investors' Schedule of Documents, Tab C1379).

<sup>&</sup>lt;sup>4</sup> Nova Scotia Department of Natural Resources: <a href="http://www.novascotia.ca/sns/paal/dnr/paal066.asp">http://www.novascotia.ca/sns/paal/dnr/paal066.asp</a>, (Buxton Reply Exhibit 5; Investors' Schedule of Documents, Tab C1380); Crown Lands Act, 1987, c. 5, s. 38 and 39 ("Crown Lands Act") (Buxton Reply Exhibit 6; Investors' Schedule of Documents, Tab C1381).

Nova Scotia Department of Natural Resources: <a href="http://www.novascotia.ca/sns/paal/dnr/paal064.asp">http://www.novascotia.ca/sns/paal/dnr/paal064.asp</a> (Buxton Reply Exhibit 7; Investors' Schedule of Documents, Tab C1382); Crown Lands Act, s. 16(1) (Buxton Reply Exhibit 8; Investors' Schedule of Documents, Tab C1383).

Investors' Damages Memorial, dated March 10, 2017, Appendix B, Industrial Mineral Potential in Nova Scotia, Opportunities for Deep Water Aggregate Quarries.

Terminal or to deny the granting of a water lot. Bilcon of Nova Scotia would have readily complied with and satisfied any and all conditions for the granting of the water lot.

12. In all of the circumstances of the Whites Point Quarry Project, there can be no honest doubt that the permit and grant required under this *Act* would have been issued.

#### (ii) Beaches Act

- 13. The main purposes of the *Beaches Act* were to protect beaches and associated dune systems, to provide for the regulation and enforcement of activities on beaches (including aggregate removal) and to control recreational and other uses of beaches that may cause undesirable impacts on beaches and associated dune systems."<sup>7</sup>
- 14. The only beach near the Whites Point Quarry site is a small beach which is not used for recreational purposes and is not a sand beach. If a permit was required under the *Beaches Act*, there can be no honest doubt that it would have been issued for the Whites Point Quarry. Bilcon of Nova Scotia would have readily complied with and satisfied any and all conditions to be met for the issuance of the permit, if required.
- 15. I also note that during the environmental assessment of the Whites Point Quarry Project, the Nova Scotia Department of Natural Resources was actively promoting Port Mouton Island, which was close to a pristine beach area in Nova Scotia, as a site for a deep water quarry. The fact that Port Mouton Island was promoted for quarry development by the same Department responsible for approving permits under the *Beaches Act* underscores for me that the same Department actively

Beaches Act, RSNS 1989, c. 32, s. 2, 13 (Buxton Reply Exhibit 9; Investors' Schedule of Documents, Tab C1384).

promoting deep water quarries was headed by the same Minister who was responsible for issuing permits under the *Act*.

16. Bilcon of Nova Scotia would have readily complied with and satisfied any and all conditions of any permit issued under the *Beaches Act*.8

#### (iii) Watercourse Alteration

- 17. I was similarly aware of the requirement for a watercourse alteration application under the *Environment Act* (now a notification) if a watercourse on the Whites Point Quarry Project property would be altered.
- 18. Watercourse alterations refer to activities that alter the bed or bank of a fresh water body, such as installing a crossing. There were two very small creeks on the Whites Point Quarry site. Neither of those small creeks would have been altered, and thus no watercourse alteration permit was required.
- 19. There could therefore be no honest basis to deny Bilcon of Nova Scotia any necessary permits, licences, grants, authorizations or approvals to operate the Whites Point Quarry Project. In my professional opinion, put simply, there was no risk at all that Bilcon of Nova Scotia would not have received all necessary permits, licenses, grants, authorizations or approvals had the Ministers granted environmental assessment approval.

#### III. THE ENVIRONMENTAL IMPACT STATEMENT (EIS)

20. It was widely known and understood by those involved in the environmental assessment process in the 2000s that an EIS was drafted at a very early stage of a project, was intended to be conceptual, and was naturally focused on the

<sup>&</sup>lt;sup>8</sup> Investors' Damages Memorial, dated March 10, 2017, Appendix 2, pages 27-31.

environmental effects of a project and mitigation measures, not the specifics of the project's business model or design.

- 21. In the 2000s Canada encouraged proponents to undertake an environmental assessment early in the planning stages of a project, and Canada continues to do so.
- 22. Canada's website entitled "Basics of Environmental Assessment" explains that "[a]n environmental assessment should be conducted as early as possible in the planning stage of a designated project in order for the proponent to be able to consider the analysis in the proposed plans, including incorporation of mitigation measures to address adverse environmental effects".9
- 23. Specific business-related facts and dollar amounts referred to in an EIS, and business plans drafted at the early stages of the process were, by necessity, and as is usual, approximations made at the early stage of the project, always subject to revision in response to changing conditions and circumstances. These projections would ordinarily be revised and refined, and be expected to be revised and refined, as detailed planning and design specifications were developed and finalized during and following the industrial permitting phase of the project.
- 24. Estimated capital and operating costs, anticipated prices for product, details like the number of sailings from port of origin to point of destination (for Whites Point, to the New Jersey/New York City area) as expressed in an EIS, were known and understood to be approximations, obviously and normally subject to change. This was expected, was routine and was not a problem, as long as the design and construction of the project did not materially expand the environmental footprint.

Government of Canada Website – "Basics of Environmental Assessment" (Buxton Reply Exhibit 10; Investors' Schedule of Documents, Tab C1385, p. 2).

- 25. Where the Brattle report and the SCMA report suggest that the business parameters of the Project, the specific numbers or the Investors' projections or expectations in that regard or specific production volumes cited were cast in stone in the EIS or in the draft of a business plan, they are mistaken.
- 26. Projected production volumes were also approximations, again as was usual for environmental assessment purposes and widely understood. Various references are made in the EIS to "metric tons", "tonnes", and "tons". A "metric ton", also referred to as "tonne", is 1,000 kilograms, or approximately 2,200 pounds. A "short ton", which is sometimes written simply as "ton", is 2,000 pounds.
- 27. The EIS refers in numerous places to "metric tons" or "tonnes". For example:
  - a. Section 1.0 in Volume I of the EIS (Plain Language Summary) states that "Bilcon has leased 150 hectares of land and, at a production rate of 2 million tonnes [approximately 2.2 million short tons] per year, anticipates a quarry life of 50 years". It also states that "[s]hipment of crushed product is anticipated to be approximately 40,000 tonnes per week". In
  - b. Volume IV of the EIS contains a section entitled "Units of Measure" which includes numerous references to metric tonnes, for example defining "tph" as "Metric tonnes per hour" and "tpy" as "Metric tonnes per year". 12
  - c. Section 1.1 in Volume IV, Chapter 1 of the EIS states that "[p]roduction is expected to reach 2 million tonnes of aggregate per year, or approximately 40,000 tonnes per week". 13
  - d. Section 10.0.4 in Volume VII, Chapter 10 of the EIS (Cumulative Effects) states that "Clayton's requirement is for 2M tonnes per year and the capacity

EIS and Revised Project Description Excerpts (Buxton Reply Exhibit 11; Investors' Schedule of Documents, Tab C1386, p. 1).

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EIS and Revised Project Description Excerpts (Buxton Reply Exhibit 11; Investors' Schedule of Documents, Tab C1386, pp. 2-3).

EIS and Revised Project Description Excerpts (Buxton Reply Exhibit 11; Investors' Schedule of Documents, Tab C1386, p. 4).

of the Whites Point Quarry operation has been designed to supply this quantity".<sup>14</sup>

- 28. The Revised Project Description also refers to metric tons. For example:
  - e. At page 137, the Revised Project Description states that "At the present time, Clayton does not anticipate a future demand in excess of two million metric tons a year from the White[s] Point site". 15
  - f. At page 138, the Revised Project Description states that "[t]here is sufficient rock on the Whites Point site to enable two million metric tons to be extracted for a fifty-year period". 16
- 29. The expression of volumes in metric tons or short tons was an irrelevancy from an environmental footprint standpoint, because the environmental footprint of the Whites Point Quarry Project was not materially affected by differences of this relatively small magnitude.

#### IV. WHITES POINT INCREASE IN OUTPUT COMMENCING IN 2021

30. A very modest increase in production of marketable aggregate from 2 million to annually, over a five year period commencing after ten years of operation is normal, expected and inconsequential in Nova Scotia, as illustrated by the doubling of production at Martin Marietta's Auld's Cove Quarry to almost four million tons. This modest increase in output is also entirely in line with the EIS, properly understood and interpreted as a conceptual document drafted at the early stage of a project for environmental assessment purposes.

31.

<sup>&</sup>lt;sup>14</sup> EIS and Revised Project Description Excerpts (Buxton Reply Exhibit 11; *Investors' Schedule of Documents*, *Tab C1386 p. 5*).

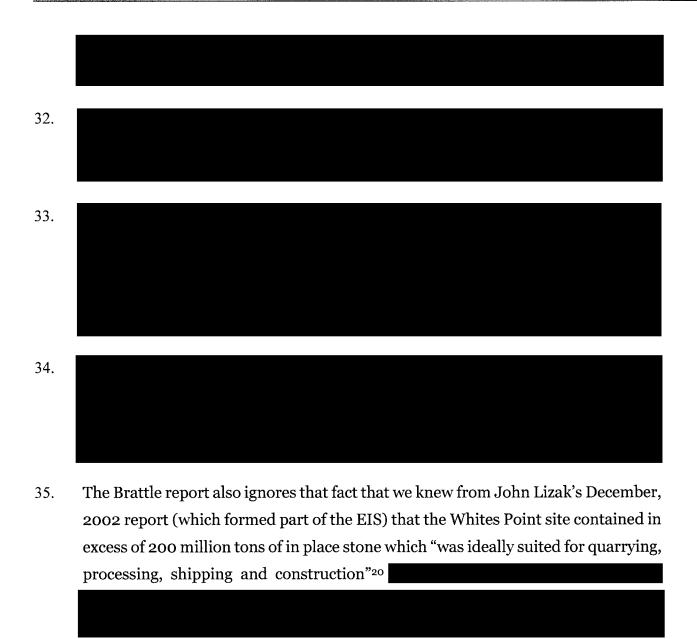
<sup>&</sup>lt;sup>15</sup> EIS and Revised Project Description Excerpts (Buxton Reply Exhibit 11; *Investors' Schedule of Documents*, *Tab C1386 p. 6*).

EIS and Revised Project Description Excerpts (Buxton Reply Exhibit 11; Investors' Schedule of Documents, Tab C1386, p. 7).

<sup>&</sup>lt;sup>17</sup> Brattle report, para. 117.

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<sup>&</sup>lt;sup>18</sup> EIS and Revised Project Description Excerpts (Buxton Reply Exhibit 11; *Investors' Schedule of Documents*, *Tab C1386*, *p. 6*).

<sup>&</sup>lt;sup>19</sup> Expert Report of FTI Consulting (Howard Rosen), dated December 15, 2016, paras 5.8-5.16.

Witness Statement of John Lizak, dated July 8, 2011, Exhibit 1.

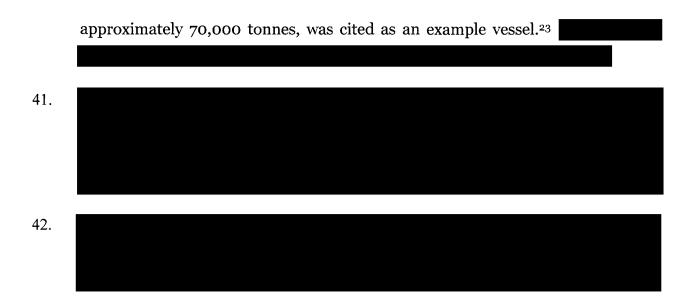
#### V. FREIGHT AND SHIPPING

36.	The Brattle report claims that "[t]he EIS stated that each Whites Point cargo would
	be approximately 40,000 tons",
37.	
31.	
38.	
39.	The shipping parameters of the Project included in the EIS were based on
37.	circumstances as they were understood at the time.
	oneumstances as they were understood at the time.
40.	
	In the Revised Project
	Description the CSI Spirit a Panamay-sized vessel capable of carrying

<sup>Brattle report, para. 121.
Brattle report, para. 121.</sup> 

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#### VI. JUDICIAL REVIEW

- 43. The Brattle report claims that if the Investors had successfully pursued a judicial review of the JRP report, then "studies conducted for the JRP may have required updating rather than a full reassessment from scratch".<sup>25</sup>
- 44. Mr. Evans says that "all possible stages of the applications for judicial review would have been completed by late 2012, or five years after the JRP issued its Report".<sup>26</sup>
- 45. Allowing for a six-month delay between the ultimate disposition by the courts and the announcement of a new JRP, and a further six months to have a new Joint Review Panel constituted with all agreements and Terms of Reference in place, the new JRP environmental assessment process would actually have been underway by the end of 2013, at which point much of the data gathered for the first EIS would have been approximately eight to ten years old. If the matter did not proceed to

Revised Project Description Excerpt re. Shipping (Buxton Reply Exhibit 12; Investors' Schedule of Documents, Tab C1387, p. 2); Details of CSL Spirit (Buxton Reply Exhibit 13; Investors' Schedule of Documents, Tab C1388).

<sup>&</sup>lt;sup>24</sup> Details of Alice Oldendorff (Buxton Reply Exhibit 14; Investors' Schedule of Documents, Tab C1109).

<sup>&</sup>lt;sup>25</sup> Brattle report, para. 61.

<sup>&</sup>lt;sup>26</sup> Evans report, pp. 28-29, para. 83.

the Supreme Court of Canada that data would have been approximately six to eight years old.

- 46. In either case, the data and expert opinions relating to biological and marine elements and social/human elements gathered in the 2002 to 2005 period would have been either useless or of marginal use in a new JRP process. New studies would undoubtedly have been necessary.
- 47. My best estimate is that about 10% to 20% of the information submitted in the first JRP environmental assessment process would have been useful in a second JRP process.
- 48. In the first JRP process, it took approximately four and a half years from the time the JRP was announced (July, 2003) to the time of the Ministers' decisions (November/December, 2007).
- 49. I have no reason to believe that a second JRP process would be any less complicated or expensive than the first. Assuming a second JRP process was announced by mid-2013, based on the duration of the first JRP process, the second JRP process would be completed at some point in the latter part of 2017, with, in Mr. Evans words, "an outcome that cannot be predicted".<sup>27</sup>

#### VII. ALLEGED "MISSING COSTS"

50. The Brattle report asserts that Mr. Rosen's valuation report is missing certain costs, including environmental monitoring costs, property taxes prior to 2011 and managerial time during construction.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> Evans report, para. 80

<sup>&</sup>lt;sup>28</sup> Brattle report, paras. 151-154.

v Canada

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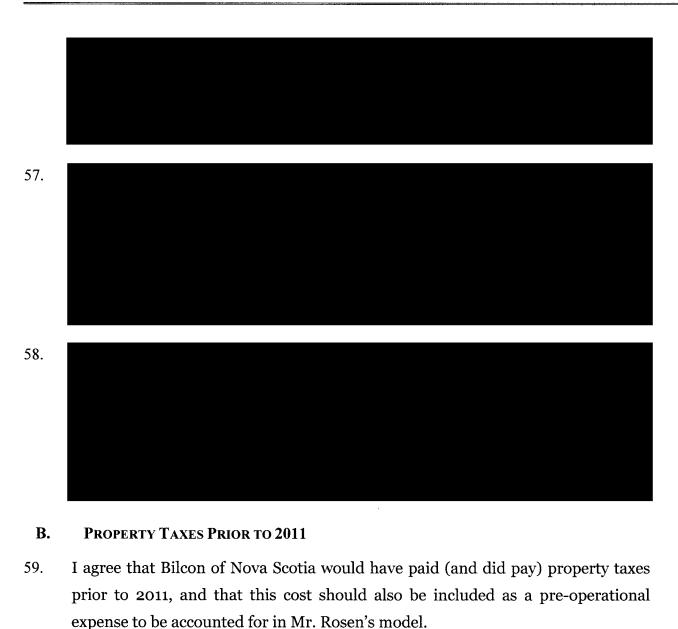
51.		
52.		
53.		
54.		
55.		
56.		

<sup>&</sup>lt;sup>29</sup> Brattle report, para. 151.

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60.

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Property taxes paid by Bilcon of Nova Scotia were approximately

in 2006 and in 2007. I estimate that if it had received

environmental approval for the Whites Point Project, Bilcon of Nova Scotia would

have paid approximately in property taxes in each of 2008, 2009 and 2010.

#### C. MANAGERIAL TIME DURING THE CONSTRUCTION PERIOD

- I also agree that there would be a cost associated with the management of the Whites Point Project during the construction period, and that this cost should be included as a pre-operational expense to be accounted for in Mr. Rosen's model. This would cover the salaries of the Quarry Manager (John Wall) and the Project Manager (myself), along with other incidental costs.
- 62. I estimate that the cost associated with this management would be approximately CAD which would be incurred in equal portions during the years 2008, 2009 and 2010. Of this amount John Wall would be paid approximately in each year as the Quarry Manager and I would be paid approximately in each year as the Project Manager.

#### VIII. OPERATING COSTS

63. The SCMA report states that

64. In fact,

#### IX. HISTORIC (SUNK) COSTS

65. In my December Witness Statement, I stated that the "amounts the Investors expended on the Whites Point Quarry, up to and including December 18, 2007,

<sup>&</sup>lt;sup>30</sup> SCMA report, para. 95.

Reply Witness Statement of George Bickford, dated August 8, 2017, paras. 9, 31.

I attached as Exhibit 4 to my December Witness Statement a one-page document summarizing these expenditures.<sup>33</sup>



67.

Their

investment in the environmental assessment process demonstrated their longterm commitment to establishing and operating the Whites Point Quarry.

- 68. The documents comprising Exhibits C 1169 to C 1318 were the product of meticulous record-keeping and, to the best of my knowledge, include receipts and/or invoices for all expenses incurred. There is no evidence that I am aware of that any of the invoices in the evidentiary record were not paid, and I am virtually certain that all of the invoices submitted were paid. The Brattle Group appears to have misapprehended the evidentiary record available to it and its assertion that only
- 69. The Brattle report also refers to instructions "by counsel to define the JRP-related EA costs as those incurred from 3 November 2004, when the JRP was constituted, through 22 October 2007, when the JRP issued its report".<sup>35</sup>

Witness Statement of Paul Buxton, dated December 13, 2016, para. 33.

Whites Point Quarry and Marine Terminal Project Expenses (Buxton Reply Exhibit 15; *Investors' Schedule of Documents, Tab C1389*).

<sup>&</sup>lt;sup>34</sup> Brattle report, para. 54.

<sup>35</sup> Brattle report, para. 46.

- 70. This is a fundamental mischaracterization of "JRP-related EA costs". From the end of May, 2002 until December 17, 2007, the Investors were fully engaged in an environmental assessment process, and all of the costs I refer to in Exhibit 4 to my December Witness Statement were costs incurred by the Investors in relation to the environmental assessment and development of the Whites Point Quarry Project.
- 71. From May 2002 until July 2003, I spent a very significant amount of time and effort preparing a Comprehensive Study for the Whites Point Project, based on what Canadian Officials had told me and my own experience. Until the Project was referred to the JRP the common understanding was that the environmental assessment of the Whites Point Quarry would be by Comprehensive Study.<sup>36</sup>
- 72. On June 26, 2003, the Federal Minister of Fisheries and Oceans, Robert Thibault wrote to the Federal Minister of the Environment, David Anderson, referring the Whites Point Project to a Joint Review Panel.
- 73. On September 10, 2003, the proponent was formally notified that the Whites Point environmental assessment would be a Joint Review Panel.
- 74. On October 26, 2003, I met with the Canadian Environmental Assessment Agency's Steve Chapman, the Nova Scotia Department of Environment and Labour's Chris Daley, and Helen MacPhail to discuss the Joint Review Panel process.
- 75. The Joint Review Panel was constituted and named on November 3, 2004.
- 76. From May, 2002 until November, 2004, I was fully engaged in the preparation of the EIS and oversaw a very significant amount of technical work in relation to the

<sup>&</sup>lt;sup>36</sup> Government Documentation Referring to Comprehensive Study (Buxton Reply Exhibit 16; Investors' Schedule of Documents, Tab C1390).

Whites Point Quarry Project. Some of the studies and other documentation that I oversaw the preparation of during this time period are listed in the Appendices to the EIS.<sup>37</sup> I have also attached a list of studies and expert reports completed prior to November 3, 2004 as Appendix A to this Reply Witness Statement.

- 77. The ongoing work by experts and the expert reports completed during the period May, 2002 to November, 2004 became an integral part of the EIS and the Joint Review Panel process.
- 78. The JRP process was concluded when Bilcon of Nova Scotia was formally advised of Canada's decision to deny approval of the Whites Point Quarry on December 17, 2007.
- 79. All of the costs incurred by the Investors in relation to the environmental assessment should be included in the calculation of historic costs, but should not in any way be understood as the measure of the damages the Investors have suffered.

# X. BILCON OF NOVA SCOTIA'S PURCHASE OF NOVA STONE'S INTEREST IN GLOBAL QUARRY PRODUCTS

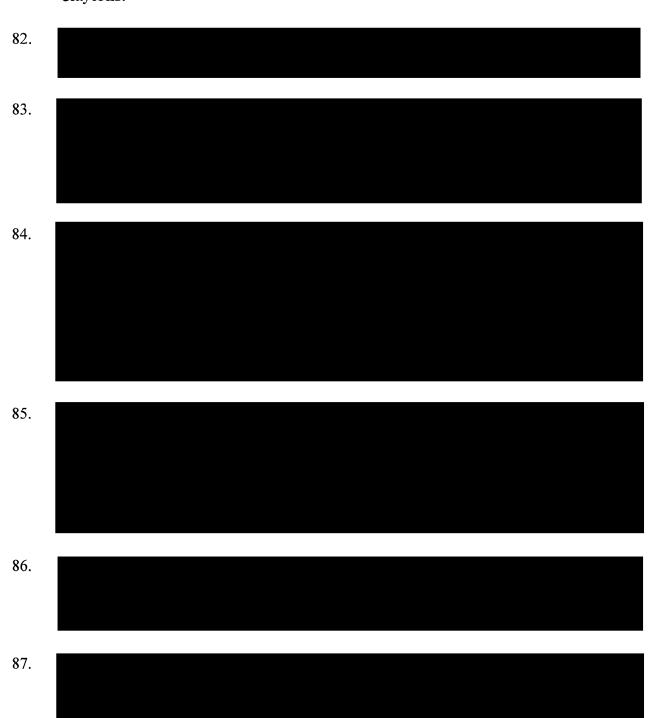
- 80. The Brattle report characterizes, as "indicators of value",

  Bilcon of Nova Scotia's acquisition of its stake in Whites Point and Bilcon of Nova Scotia's purchase of Nova Stone's interest in Global Quarry Products in 2004".38
- 81. Through my involvement in the Whites Point Quarry Project from its earliest days,
  I am very familiar with the context surrounding these transactions, which were not

Appendices to Volumes I, III and IV of the EIS (Buxton Reply Exhibit 17; Investors' Schedule of Documents, Tab C1391).

<sup>&</sup>lt;sup>38</sup> Brattle report, paras. 62-79.

in any way indicators of the value of the Whites Point Quarry Project to the Claytons.





- 88. This partnership was established at the earliest stage of the Project, and the amount paid by the Investors at this time was not, in any sense, an indication of the value of the Whites Point Quarry Project to the Claytons.
- 89. As I have said previously, from discussions I had with government agencies and representatives in 2002 and early 2003, it appeared most likely that the environmental approval process would take the form of a Comprehensive Study, and, as noted earlier, significant EIS-related work was undertaken in 2002 and early 2003.
- 90. When the Project was put into the Joint Review Panel process it was clear that the cost of the environmental approval process would increase very significantly and the receipt of all Industrial Approvals would be delayed, likely for some years.







93. Having said that, the Claytons were generous in their business dealings with others.



- 94. All of this aside, having been involved in the Project from the beginning and throughout, and having worked very closely with the Claytons for many years, and having seen first-hand how they conduct their business affairs, with a sophisticated long-term, multi-generational vision, and generous approach, Nova Stone's sale of its interest in the Whites Point Quarry Project in 2004 is in no sense any indication of the value of the Whites Point Quarry to the Claytons or anyone in their position.
- 95. As I said in my December Witness Statement, the Claytons were long-term visionary entrepreneurs, who would obviously and undoubtedly have operated this very valuable, strategically located quarry very profitably for many decades.

Dated: August 18, 2017

PAUL BUXTON

<sup>&</sup>lt;sup>39</sup> Financial Statements of Global Quarry Products (Buxton Reply Exhibit 18; Canada's Index of Exhibits, Tab R-719, BIL000546).

<sup>&</sup>lt;sup>40</sup> Agreement between Bilcon of Nova Scotia Corporation and Nova Stone Exporters, Inc., dated April 1, 2004 (Buxton Reply Exhibit 19; *Investors' Schedule of Documents, Tab C23, p. 2*).

#### APPENDIX A

#### STUDIES AND EXPERT REPORTS COMPLETED PRIOR TO NOVEMBER 3, 2004

- 1. **28 February 2004.** Brylinsky, Michael, PhD., "Interpretation of a Sublittoral Benthic Survey along the Shoreline of Whites Point, Digby Neck, Nova Scotia".
- 2. **30 June 2002.** Brylinsky, Michael, PhD., "Results of a Survey of the Intertidal Marine Habitats and Communities at a Proposed Quarry Site Located in the Vicinity of Whites Cove, Digby Neck, Nova Scotia"
- 3. 6 October 2003. Carver, C.E., M.Sc., and Mallet, A.L., M.Sc, Mallet Research Services Ltd., "A Preliminary Assessment of the Risks of Introducing Non-Indigenous Phytoplankton, Zooplankton Species or Pathogens/Parasites from South Amboy, New Jersey (Rartian Bay) into Whites Point, Digby Neck, Nova Scotia".
- 4. **8 October 2003.** Christian, John, M.Sc., LGL Limited, "Whites Cove Quarry Blasting: Potential Impacts on American Lobster".
- 5. August 2003. Hannay, David E., M.Sc., JASCO Research Ltd., and Thompson, Denis M.Sc., LGL Limited, "Peak Pressure and Ground Vibration Study for Whites Cove Quarry Blasting Plan".
- 6. **December 2002.** Hogg, Dwayne, M.Sc, P.Eng., Jacques Whitford Environmental Ltd., and MacFarlane, David, M.Sc., P.Geo., Jacques Whitford Environmental Ltd., "Preliminary Hydrogeological Assessment, Proposed Quarry, Whites Cove, Digby Neck, Nova Scotia".
- 7. **December 2002.** Lizak, John, M.Sc, P.Geo. Mineral Valuation and Capital, Inc., "Geological Assessment of the Whites Cove Site".
- 8. *July 2002.* Moody, Barry, PhD., "Whites Point Quarry Property Historical Background, Digby Neck, Nova Scotia".
- 9. *July 2002.* Newell, Ruth E., M.Sc., "Plant Survey of Whites Cove Property, Digby Neck, Digby County, Nova Scotia". *August 2002.* Addendum to report entitled "Plant Survey of Whites Cove Property, Digby Neck, Nova Scotia".
- 10. *May 2003*. Watrall, Charles R., PhD. "Category C Archaeological Assessment Whites Point/Whites Cove Quarry Project, Digby Neck, Digby County, Nova Scotia Heritage Research Permit Number: A 2002 NS 36".
- 11. *June 2003.* Water Marine Water Chemistry, Metals, Bacteria (Source: PSC Analytical Services.
- 12. 2002 and 2003. Philip Analytical Water Surface/Intertidal Water Quality.

#### OTHER EXPERT STUDIES IN PROCESS DURING 2002-2004

- 1. Started in May 2002 Eastcan Geomatics Ariel photos, survey services, digital contour
- 2. Started in *July 2002* Scotia Surveys –Quarry site surveys
- 3. August 2002 Canadian Seabed Research Geophysical/bathymetry/mapping
- 4. September 2002 O'Halloran Campbell –Marine terminal concept
- 5. Started in 2002 Mineral Valuation & Capital Inc J. Lizak quality of rock
- 6. Started in 2002 Logan Drilling core samples
- 7. **December 2002** David Kern commenced assembling EIS
- 8. **2003** Philip Analytical water testing
- 9. **December 2003 -** K. Bishop Community consultation
- 10. January 2004 Canadian Seabed Research EIS Marine Mapping
- 11. February 2004 Michael Brylinsky Assembling EIS Biology, Structure of EIS
- 12. **June 2004 -** TPH Applied Fisheries Research EIS salmon
- 13. *May 2004* George Alliston EIS wildlife (Birds, bats, etc)
- 14. July 2004 James Ross Marine mammals/ fish Blasting for EIS

# EXHIBIT 1

# REPLY WITNESS STATEMENT OF PAUL BUXTON



RR# 1 Barton, N.S. . B0W 1H0

February 24th, 2003

Joy Dubé
Habitat Management Division
Dept. of Fisheries & Oceans - Maritime Region
1 Challenger Drive
B 500, 5<sup>th</sup> Floor Polaris Building
P.O. Box 1006
Dartmouth, N.S. B2Y 4A2

Re: Proposed Whites Point Quarry Marine Terminal

Joy,

Please find enclosed for your information, a copy of a coastal waters application and my report for the proposed Whites Point Quarry Marine Terminal in Digby County.

I trust this package contains all the information you require. If you do require additional information or if you have any questions regarding this application, please do not hesitate to give me a call. My number is 245-2164 and my e-mail is saywoomr@gov.ns.ca.

Sincerely,

Mark Saywood
Forest Technician
DNR Digby.

cc. John Stacey, Senior Technician, DNR Digby Peter Francis, Forester, DNR Lawrencetown 03-FCR-020 Diglay Cu R11+82 (E) P.Z.

DFO - BIO RECORDS OFFICE

FEB 26 2003

File: \_

## Memorandum

To:

Peter Francis

From:

Mark Saywood

Date:

February 24, 2003

Subject:

Proposed Marine Terminal, Whites Point, Digby Co.

Attached is information, including my report, on the proposed Whites Point Quarry Marine Terminal on Digby Neck. If you have any questions regarding my report, please give me a call.

Mark Saywood

Forest Technician

Digby

cc. John Stacey

Joy Dubé, Habitat Management Division, Dept. of Fisheries & Oceans



# REPORT ON COASTAL WATER APPLICATION

REGION:	Western	COUNTY:	Digby	FILE:				<b>D</b> A	ATE:	Feb.2	21, 2003
APPLICANT:	Glob	al Quarry Product	s. Agent:	Paul G. E	Buxton	, P. EN	G.				
ADDRESS:	P.O.	Box 98				ном	E PH	ONE:			
	Anna	polis Royal, N.S.				WOR	K PH	IONE:		638-	8108
	BOS	1 <b>A</b> 0				CELI	L PHO	ONE:			
FAX NUMBER	(902)	638-3522				COT	ΓAGE	Е РНО	NE:		
ADMINISTRA	TION FE	E COLLECTE	);		Ţ	YES			N	0	Х
ADMINISTRA'	TION FE	É SENT TO FIN	ANCE D	IVISION	-REC	EIPT N	 O.:			_	
REASON FOR	REQUE	ST:									
Construction of	a Quarry l	Marine Terminal									
NAME OF ARI	EA:	Whites Point			C	OUNT	<b>Y</b> :		Digby		
WATERCOUR	SE:	Bay of Fundy			M	IAP BC	OK:		P.70 Y	/1 E4	
RESOURCE M	: <b>AP</b> :				_ _ r	DEX S	HEE	T: -			
INLAND	COA	STAL X	U.T.M. C	CO-ORDI	MATI	ES	N	SEE MAP		E	
UPLAND OW	NER: A	PPLICANT	YES	}		NO	X			-	
IF "NO" LET	TER OF	CONSENT	YES	}	X	NO		<b>_</b>			
WATERBED	OWNE	RSHIP:	CRO	)WN	X	WAT	ERL	— ОТ G	RAN'	Т	
OWNER OF V	WATER	LOT:									
AQUACULTU			 	NO	X				-		•
OWNER OF I			<del></del>								
OWNEROIL	JE ROE.					·					
ENVIRONME	ENTAL (	CONCERNS:									
Upon completin	g my ins	pection of the sit	e, I could	see no u	nique	wildlif	e habi	tat. I c	lid obs	serve	
several dozen d	ucks in th	e area and a fish	ning boat	just off th	ne coa	st.					
Impact to both	wildlife a	nd marine life sh	ould be c	onsidered	—— I.						

04/08/02

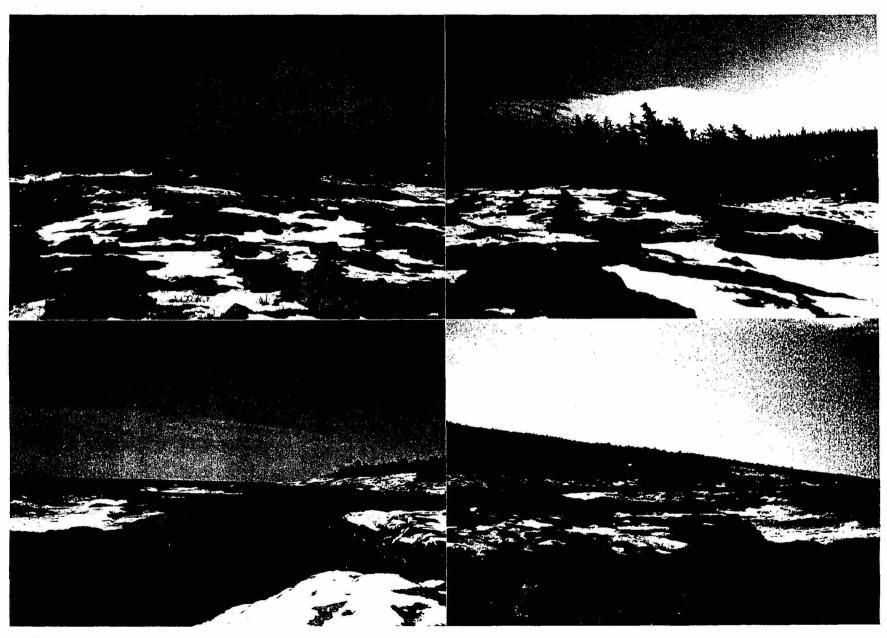
IDENTIFY KNOWN HAZARDS (IF ANY) AND MEANS BY WHICH TO ADDRESS SU HAZARD(S).
no hazards seen.
RECOMMENDATION BY TECHNICIAN:
If appropriate measures are taken to protect both wildlife and marine life in the area, I see no reason
why this project should not proceed. I recommend this application for approval.
SIGNATURE: North Saywood DATE: Feb. 24, 200
RECOMMENDATION BY AREA SUPERVISOR:
SIGNATURE: DATE:
PARKS AND RECREATIONS CONCERNS:
SIGNATURE: DATE:
PROTECTED AREA: YES NO
RECOMMENDATION BY REGIONAL BIOLOGIST:

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SIGNATURE:	DATE:
PECONDENDATION BY DECIONAL CEOLOGIC	m.
RECOMMENDATION BY REGIONAL GEOLOGIS	1:
SIGNATURE:	DATE:
·	
RECOMMENDATION BY REGIONAL FORESTERS	:
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<u></u>	
SIGNATURE:	DATE:
RECOMMENDATION BY REGIONAL LAND ADM	INISTRATION COORDINATOR:
	INISTRATION COORDINATOR:  DATE:
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## **IFIDENTIAL**



Top left: photo of proposed marine terminal site, Whites Point. Bottom left: photo taken from proposed site looking Northeast.

Top right: photo taken from proposed site looking landward.

Bottom right: photo taken from proposed site looking Southwest.



# **Global Quarry Products**

Mr. Mark Seywood,

Jan. 23rd 2003

Nova Scotia Department of Natural Resources,

RR #1,

Barton,

Digby County,

BOW 1HO

Dear Mr. Seywood,

## re: Application for Permanent Structure on Coastal waters

Please find enclosed the completed Schedule A as requested.

I can advise that the marine terminal will be constructed of steel and concrete and that no treated wood products will be used.

If you require further information please call.

Paul G. Buxton P.Eng.

Tel: 902-245-2567

Fax:

Mailing Addresses:

General Interest:

P.O. Box 2113

Digby, NS

**BOV 1A0** 

Billing:

Suite 282, 450 LaHave Street, Unit 17

Bridgewater, NS

B4V 4A3

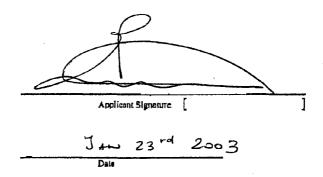
JAN 28 2003

V. SHOULD A CONVEYANCE OF CROWN LAND COVERED BY WATER BE REQUIRED THE CONVEYANCE WILL ONLY BE MADE TO THE ADJACENT UPLAND OWNER.

This application may also require:

- 1. A Declaration of Exemption under the terms of the Navigable Waters Protection Act issued by Transport Canada Coast Guard;
- 2. Referral to the provincial Department of Environment for review and approval for fresh water bodies;
- 3. Referral to the federal Department of Fisheries and Oceans Habitat Management Branch for review and approval;
- 4. Written authority from the Department of Transportation and Public Works;
- 5. Municipal approvals.
- VI. Provide the U.T.M. Coordinates for the location of the proposed activity. These coordinates are derived from the 1:50000 Topographic Series. Do not use the M.T.M. Coordinates used on the 1:10000 mapping series. 725 = 4925 H

Appropriate administration fee will be collected upon completion of application review.



3.



## Schedule "A"

# Application for Permanent Structures/Activities on Coastal Waters

ı.	PERSONAL INFORMATION:		
	Name or Incorporated Body:	GLOBAL QUARRY PROD	jucts
	and Contact Person	PAULG. BUXTON, P. ENG.	
	Mailing Address:	P.O. BOX 98	
		AHHAPOLIS ROYAL, NS BO	o <i>Al</i> ec
	Telephone #	902-638-8108	
II.	LOCATION OF PROPOSED S	TRUCTURE/ACTIVITY:	
	Name of Community:		
	County:		
		BAY OF FUHDY	•
-			
m.	DESCRIPTION OF PROPOSE	D USE OF CROWN LAND:	
•		MUAL WY BERTHING DOLPH	HHS,
	SHIP LUADER	幸 COHVEYOR SYSTEM	
	Estimated Starting Date:	1 PRIL 2003	
	Estimated Completion Date:	SEPT. 2004	
IV.	PLEASE SUBMIT A SKETCH O	OR PLAN SHOWING:	
	of the adjacent upland. If	l activity in relation to the sideline property boundaries the applicant is not the adjacent upland owner, the ritten consent of the upland owner and forward it with	
	2. The names of all other affect	ted upland owners;	

A top and side view of any proposed structure complete with dimensions.

December 2, 2002

To: Global Quarry Products P.O. Box 2113 Digby, N.S. BOV 1AO

Dear Sir:

This letter will provide authorization for you to make application for a marine terminal under the Navigable Waters Protection Act. The undersigned are the owners of the abutting property. The property identification number is 30161160.

John A. Johnson

Joan L. Johnson

Jason R. Lineberger

Lida C. Lineberger Lidu C. Linebe

## Paul G. Buxton P.Eng.

P.O. Box 98 Annapolis Royal, BOS 1AO

> Telephone 902 638 8108 Fax 902 638 3522

January 8, 2003

Mark Saywood Nova Scotia Department of Natural Resources RR 1 Barton Nova Scotia B0W 1H0

RE: Whites Point Quarry Marine Terminal

Please find attached a copy of Global Quarry Products' Navigable Waters Protection Application dated January 8, 2003.

If you have any questions, please call.

Yours truly

Paul G. Buxton P. Eng.

### NAVIGABLE WATERS PROTECTION APPLICATION

WHITES POINT QUARRY MARINE TERMINAL

Global Quarry Products December 1, 2002

### Paul G. Buxton P.Eng.

P.O. Box 98 Annapolis Royal, BOS 1AO

> Telephone 902 638 8108 Fax 902 638 3522

January 8, 2003

Regional Superintendent
Navigable Waters Protection
Canadian Coast Guard
P.O. Box 1000
Dartmouth, Nova Scotia B2Y 3Z8

#### RE: WHITES POINT QUARRY MARINE TERMINAL

Please find attached a completed Navigable Waters protection application.

In addition to the Application, we are providing the following information:

- 1. The name of the adjacent property owners are: Jason R. and Lida C. Lineberger and John A. and Joan L. Johnson, 1601 Ed Clapp Road, Siler City, NC 27344. No civic number presently exists for the property. The Property Identification Number (PID) is 30161160 see Map 1.
- 2. The project owner is Global Quarry Products. The agent/contact for Global Quarry Products is: Paul G. Buxton, P. Eng.

P.O. Box 98

Annapolis Royal, Nova Scotia B0S 1A0

- 3. The location of the project is shown on Map 2, 44degrees 27' 47"N, 66degrees 08' 31"E.
- 4. The plot plan with the project shown is on Map 3.
- 5. Plan view of the project is shown on Drawing 1, with water depths referenced to chart datum.
- 6. Elevation of the project is shown on Drawing 2.
- 7. No dredging or dredge spoil will result from the project.
- 8. A letter of permission from the upland land owner is attached.
- 9. The name of the contractor/firm doing the work is not known at this time.
- 10. An Environmental assessment for the Whites Point Quarry for the Nova Scotia Department of Environment and Labour is presently underway. A waterlot lease/permit has not been obtained at this time.
- 11. Copies of this Application will be furnished to:

Nova Scotia Department of Environment and Labour

Nova Scotia Department of Natural Resources

Fisheries and Oceans Canada - Habitat Management Division

Canadian Environmental Assessment Agency

Environment Canada - Environmental Assessment

If you have any questions, please contact me.

Paul G. Buxton, P. Eng

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Canadian Garde côtière Coast Guard canadienne

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CMA 8200-	
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١	NAVIGABLE W.	ATERS PROTECTION	ON AF	PLICATION	<b>T</b>			
Name of Owner: GLOBAL QUARRY PRODUCTS ACENT: PAUL G. BUXTON, P. ENG.								
•	Mailing Address:				Postal Code:			
İ	P.O. BOX98 ANH	APOLIS ROYEL, HO	OVA S	41702	Bus 1Au			
I	Home Telephone No:	Business: 902-638-81	රේ	Other:				
ľ	Are you the original owner of this work?	ダYes No Previous Appl	ication to th	is Department Ye	s VNo			
ـ د	Previous Owner Approximate Date of Previous Application							
	Contractor/Firm (if applicable):	AT THIS TIME						
	Address:				Postal Code:			
	Telephone #:	Fax #:		Contact Person:				
		LOCATION OF WORK SITE	E					
	Location/Civic Address: NO CIVIC HUMBER PRESENTLY EXISTS FOR THE PROPERTY  THE LOCATION IS SHOWN ON MIDPL - PID NO. 30161160  County:  Province:  Name of Upland JOHN A. and JOHN L. JUHNSON  Property Owner: JASON R. and LIDAC. LINEBERGER  Name of Cove, Harbour, Lake, River (Waterway):  WHITES COVE. BAY OF FUNDY							
D	scription of project (Work) (Please circle one	or more):		Status of Project (Plea	se Circle):			
W	HARF RETAINING WALL BREAKWAT	ER BOAT SLIP/RAMP INFIL	L	NEW REPAIRS TO	O ADDITION C			
O1	HER MISSINE TERMILIAL Prop	posed Start-up Date: APIZIL 2	203					
	ate: JAJ. 8 2003	Signature;						
	FOR OFFICE USE ONLY							
Ple	We acknowledge receipt of your application, which is presently under review by officials of the Canadian Coast Guard pursuant to the Navigable Waters Protection Act.  Please Note: Approval under the Navigable Waters Protection Act is not approval of construction. It is the applicant's responsibility to obtain any other forms of approval, federal, provincial, or municipal, including building permits. Should you have any questions, please do not hesitate to contact our office in Dartmouth at (902) 426-2726.							
1	Date application received in NWP Office	Yo	our Ref. Nº					
		D	eate receipt	mailed:				
(					Revised 02/08/22			

December 2, 2002

To: Global Quarry Products P.O. Box 2113 Digby, N.S. **BOV 1AO** 

Dear Sir:

This letter will provide authorization for you to make application for a marine terminal under the Navigable Waters Protection Act. The undersigned are the owners of the abutting property. The property identification number is 30161160.

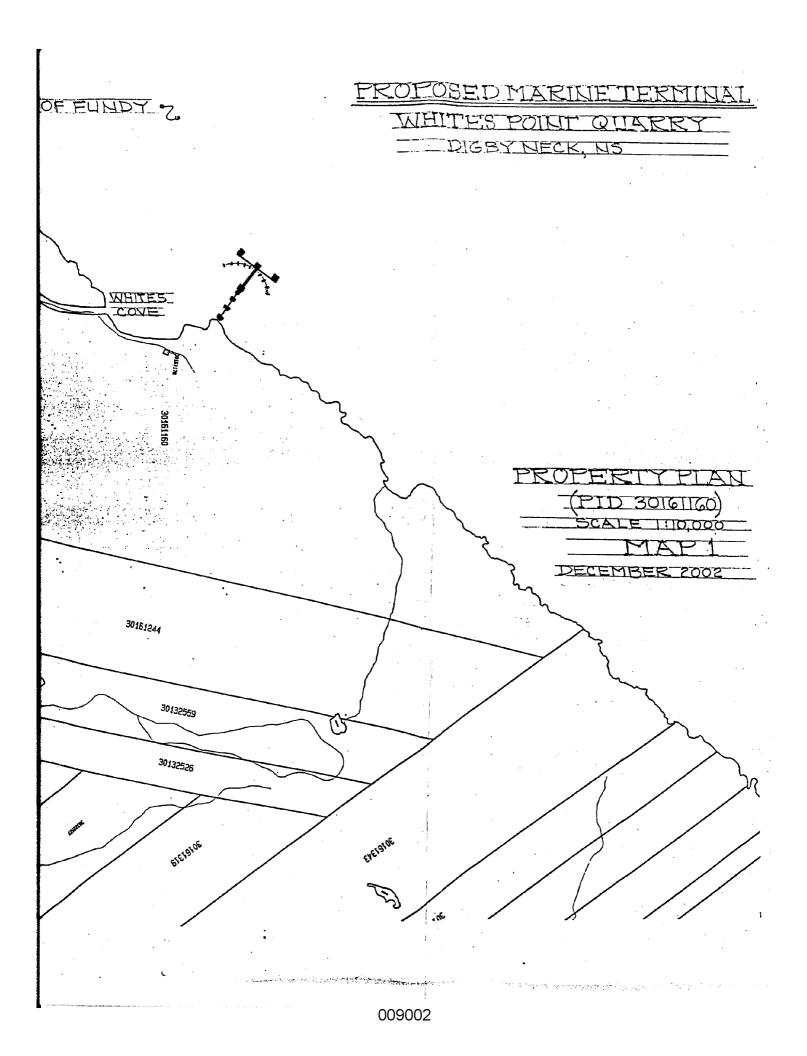
John A. Johnson

Joan L. Johnson

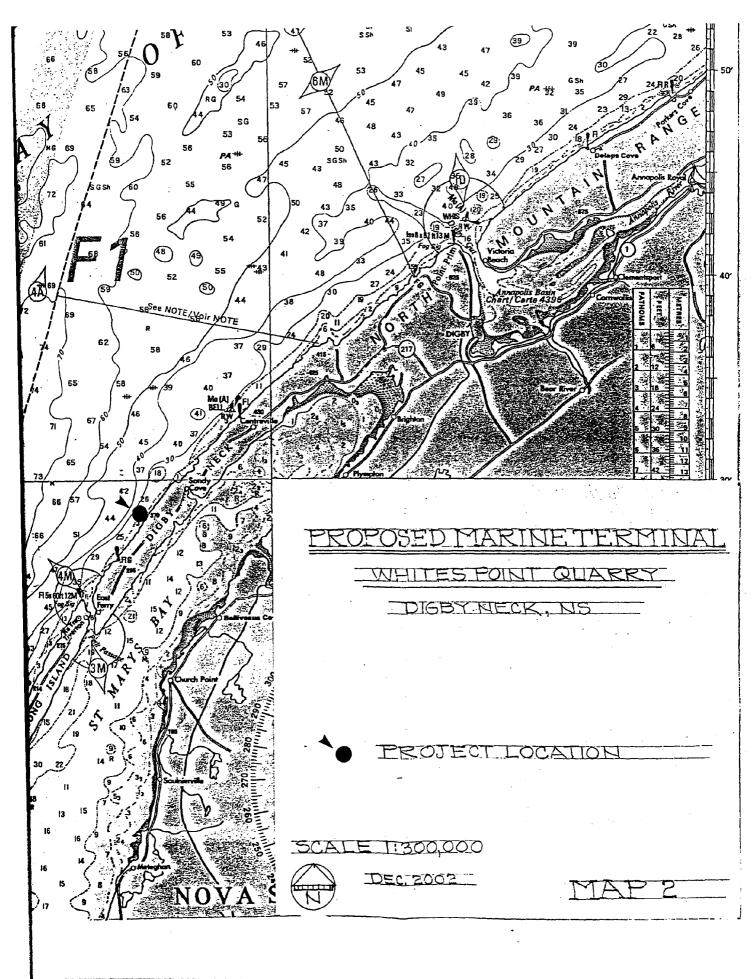
Jason R. Lineberger

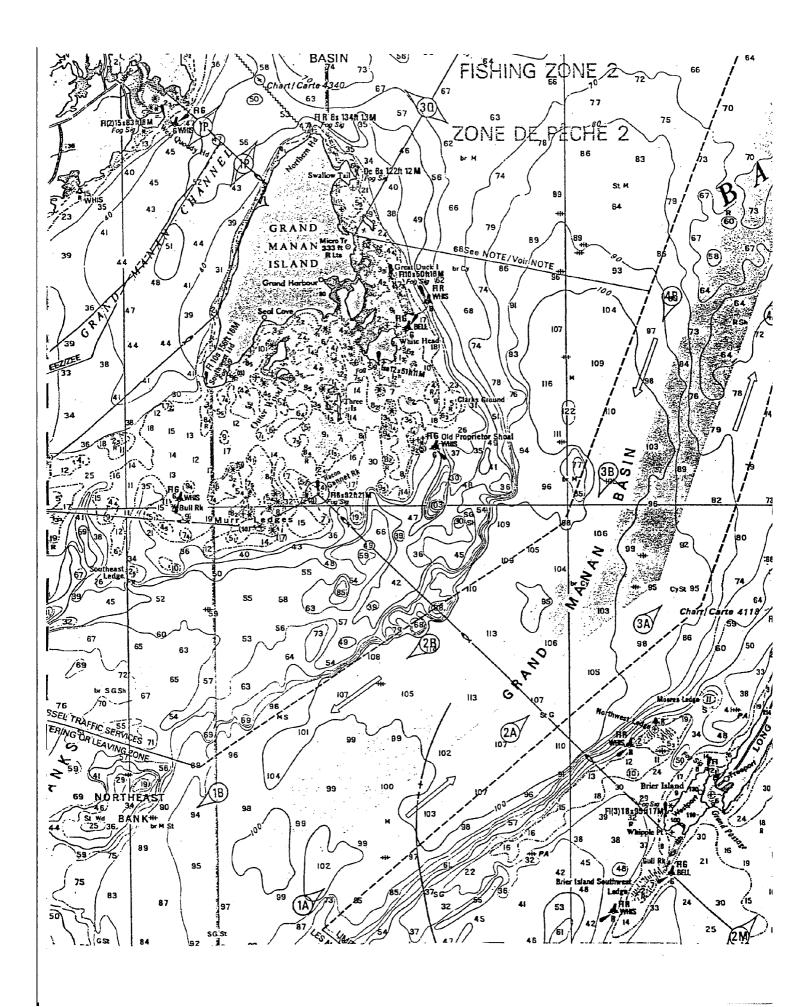
Lida C. Lineberger Lieu C. L

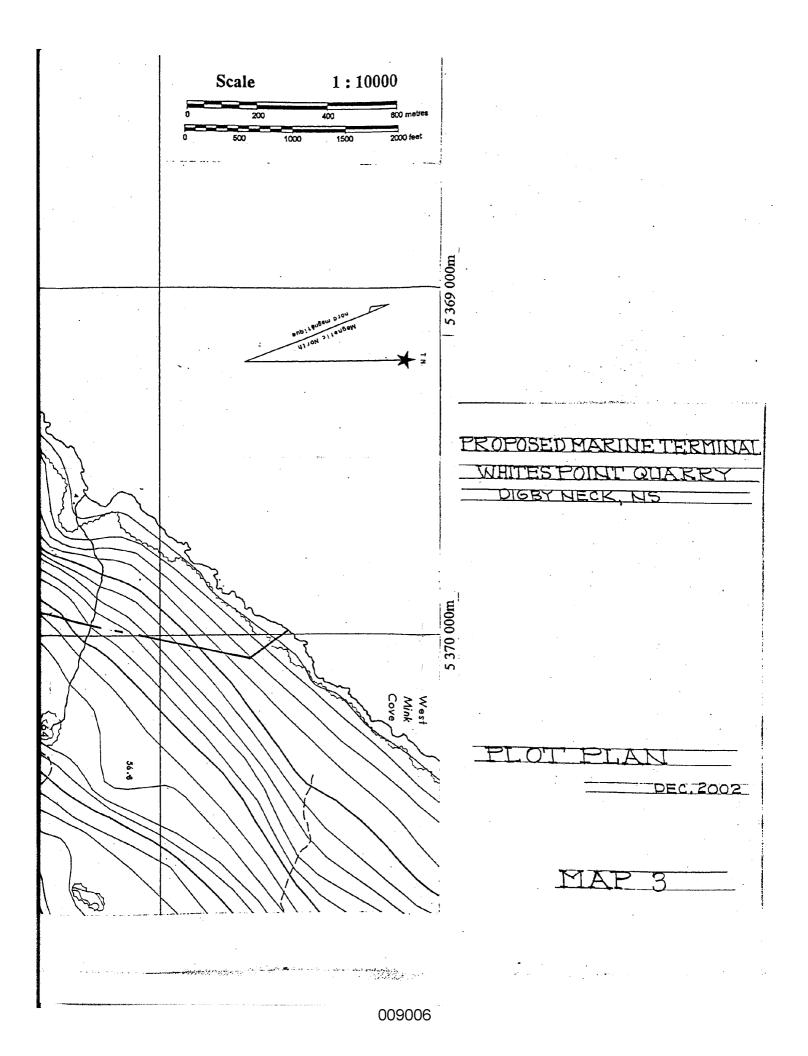
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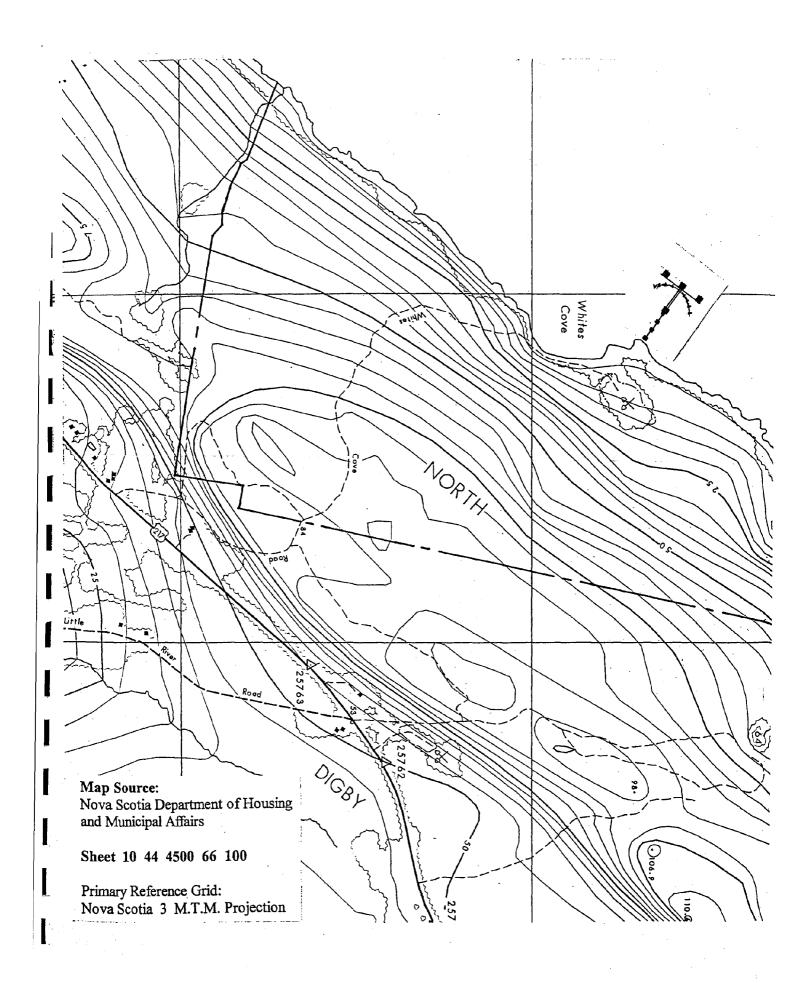


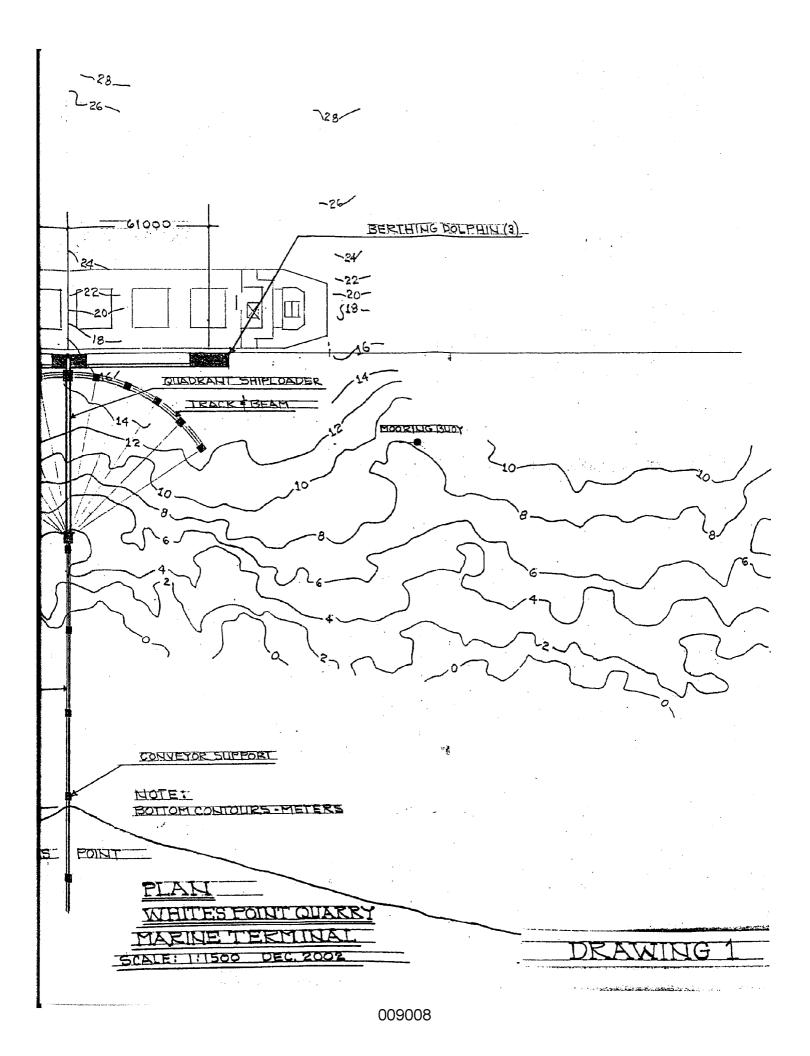




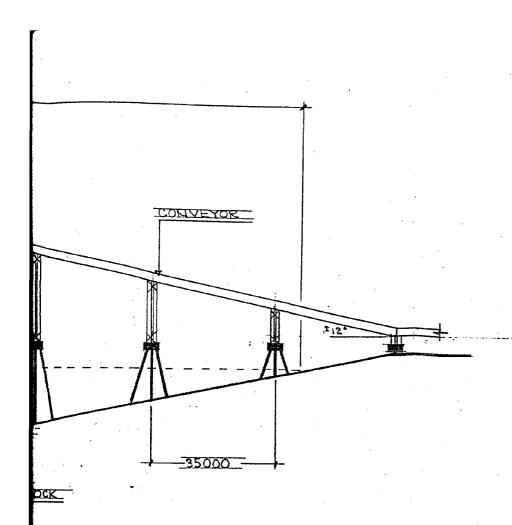








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ELEVATION

MARINE TERMINAL

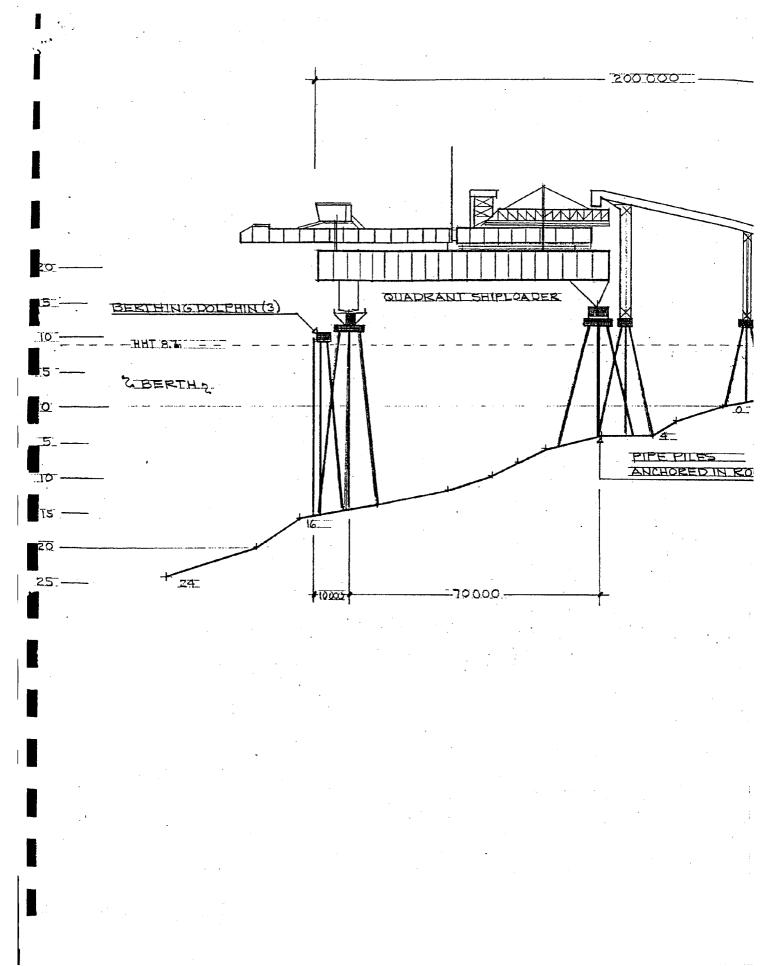
WHITES POINT QUARRY

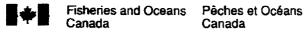
HOR SCALE INDOO

VERT. SCALE 1:500

DEC. 2002

DRAWING 2





Canada

Coast Guard

Garde côtière

Your File Votre référence Our File Notre référence

September 19, 2003

CMA 8200-02-2042

Global Quarry Products Attn: Paul Buxton P. Eng **Project Manager** PO Box 2113 Digby, NS **B0V 1A0** 

#### Re: NWPA: Application for Proposed Marine Terminal, White's Point, Digby County, NS

Dear Mr. Buxton:

Regarding your letter written to our office dated September 4, 2003, requesting what interference to navigation is anticipated from the proposed marine terminal at White's Point, Digby Co, NS, we offer the following:

The proposed marine terminal will extend approximately 600 feet into the Bay of Fundy and will require the installation of navigational aids, and is therefore considered a substantial interference to navigation thereby requiring approval under section 5(1) of the Navigable Waters Protection Act.

Once the Navigable Waters Protection Program has fully assessed the navigational impacts of this project and has respected the timelines imposed by the Panel Review, and considering the outcome of the Panel Review, we will be closer to finalizing our assessment of your project. The authorization issued by our office will have conditions that you will be required to follow in order for your project to be considered a lawful work. As indicated above, there will be a requirement to install navigational aids,

In addition, you are also required to provide our office with finalized engineered construction drawings prior to receiving authorization.

If you required further clarification, please contact our office at 902-426-2726.

Melinda Donovan Regional Superintendent

Navigable Waters Protection Program

Canadian Coast Guard Maritimes Region

cc: Department of Fisheries and Oceans - Habitat Management Division

Canadă

Pêches et Océans Canada

Habitat Management Division P.O. Box 1006 B505, 5<sup>th</sup> Floor Dartmouth, NS B2Y 4A2

Your file Votre réference

Our file Notre réference

03-FCR-020

November 24, 2005

Mr. Paul G. Buxton, Project Manager Bilcon of Nova Scotia P.O. Box 2113 Digby, N.S. B0V 1A0

Dear Mr. Buxton:

### RE: Whites Point Quarry and Marine Terminal – Proposed Habitat Compensation Plan

The Department of Fisheries and Oceans (DFO) has reviewed your submission entitled "FISH HABITAT COMPENSATION PLAN PROPOSAL" dated September 16, 2005 (attached). Based on the preliminary information provided to date, DFO is satisfied that the overall components of this proposed habitat compensation plan would meet the requirements and objectives of the Policy for the Management of Fish Habitat under the Fisheries Act.

As you are aware, an environmental assessment under the Canadian Environmental Assessment Act (CEAA) is required once the need for a Fisheries Act Subsection 35(2) authorization is identified. The Whites Point Quarry and Marine Terminal project is subject to a Joint Panel Review under CEAA and the Nova Scotia Environment Act. The decision to issue a Fisheries Act authorization can only be taken after consideration of the Joint Panel report issued at the conclusion of the environmental assessment.

A final fish habitat compensation plan (including a detailed monitoring plan) and conditions would become an integral part of any potential *Fisheries Act* Subsection 35(2) authorization for the Whites Point Quarry and Marine Terminal project.

(2)

November 24, 2005

If you have any questions, please feel free to call me at (902) 426-4692.

Sincerely,

Phil Zamora Habitat Management Division

S. Chapman M. Freeman Cc.

T. Wheaton

M. McLean



RESIDENTS VISITORS BUSINESSES GOVERNMENT NEWS SEARCH

DNR > Crown Land > Submerged Crown Land

Natural Resources

#### **DNR** Home

#### Alton Gas Project

#### Crown Land

- ▶ About the Land Services Branch
- Accessing or Using Crown Land
  - Submerged Land
  - ▶ Western Crown Land Road Access
- Application for the Use of Crown Land/Application for the Sale of Land to the Province
- Buying, Selling or Donating Land
- ▶ Buying Crown Land
- ▶ Conservation Easements
- ▶ Donating Land to the Province
- ▶ Leasing Crown Land
- ▶ Rights of Way
- Selling Your Land to the Province
- Wharves, Floating Docks, Boat Ramps and Moorings
- ➤ Exchanging Private Land for Crown Land
- · Claims of Crown Land
- Community Easements Act
- ▶ Crown Land Records
- Land Acquisitions
- Land Asset Management
- ▶ Land Titles Clarification
- ▶ Policies & Fees
- Release of Crown's Interest in Lands
- ▶ Surveys & Mapping
- Western Crown Land Planning Process

#### Submerged Crown Land

The Province of Nova Scotia considers submerged land located along the coast of Nova Scotia to be provincial Crown land, owned by the province, unless it has been sold by way of provincial or federal grant or it is considered to be a federal public harbour. Under the Crown Lands Act, the Minister of Natural Resources is responsible for Crown lands, including submerged lands along the coast of the province.

The landward boundary of coastal land owned by the province begins at the mean high water mark on the shore - generally where plants and vegetation begin to be visible and the beach is not impacted by the water.

It is illegal to infill submerged Crown land or construct a wharf, mooring or boat launch without a permit. Such unauthorized structures must be removed at the expense of the person who constructed them.

Under the Crown Lands Act, the Minister of Natural Resources may lease or sell Crown land (including submerged lands).

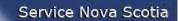
The Department of Natural Resources issues leases on submerged Crown land for commercial purposes such as a wharf, marina, tidal power generation or utility cable landing site. Rent is based on market value.

Easements may be issued by the province for submerged utility cables or for bridges and utility services to private properties.

Submerged Crown land is usually sold by the province for market value, as determined by an appraisal, however final authority over the price of any Crown land is determined by the Governor in Council.

As well, under the Beaches and Foreshores Act, the Minister of Natural Resources may sell or lease ungranted flat, beach or foreshore land on the coast of the province. The land may only be sold or leased to the landowner whose property abuts the flat, beach or foreshore land, unless the abutting owner consents to the sale or lease to another person or company. These sales are normally limited to those areas where it can be proven to have been historically infilled and used as an addition to the original privately owned upland area (the land directly adjacent to the shore). The province's policy is that the abutting owner must be able to show that the infilled land is essential to the establishment or ongoing operation of a commercial venture such as a lobster pound, or for a public purpose of benefit to a community or region.







Government Home > Service NS Home > Nova Scotia Permits Directory > Department of Natural Resources > Wharf, Skidways, Boat Ramp: Permit /

NS Permits Directory NS Government

#### Service NS Home

NS Permits Directory

Disclaimer

Special Permit

About the Department
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Services en français
Forms and Applications
Office Locations



#### **Department of Natural Resources**

### Wharf, Skidways, Boat Ramp: Permit - Submerged Crown Land (Excluding Bodies of Fresh Water)

#### Who Needs This Permit?

Anyone who wants to build or extend or enlarge a wharf, skidway or boat ramp on submerged Crown land in Nova Scotia (excluding bodies of fresh water).

#### Issuing Department / Agency:

N.S. Department of Natural Resources, Regional Services

#### Where can you get this Permit and / or further information?

#### Central Regional Office (Truro)

Regional Director

NS Department of Natural Resources

664 Prince St.

(Arlington St. entrance) Truro, NS B2N 1G6

Tel: 902-893-6350 Fax: 902-893-5613

#### Western Regional Office (Lunenburg)

Regional Director

N.S. Department of Natural Resources

300 Green Street Lunenburg, NS 30J 2C0

Tel: 902-634-7557 Fax: 902-634-7577

#### Eastern Regional Office (Coxheath, Cape Breton)

Regional Director NS Department of Natural Resources 300 Mountain Road Sydney, NS B1L 1A9

Tel: 902-563-3370 Fax: 902-567-2535

OR

Any of the <u>Local or Area Offices</u> of the NS Department of Natural Resources. (See <u>Offices</u>, NS Department of Natural Resources.)

#### Application Forms & Process:

An application form for these sorts of permanent structures on submerged Crown land (excluding bodies of fresh water) can be obtained from any <u>Local or Area Office</u> of the NS Department of Natural Resources.

The applicant must provide a plan or a sketch showing location and property boundaries, and where the structure is to be constructed in relation to those boundaries.

When the application is completed, it is submitted to the same office, along with the appropriate fees.

The applicant may also require other documents depending upon the nature of the work; these are listed below under Related Requirements.

If all requirements are met and the application is approved, the applicant will be notified by staff.

#### Waiting Period:

80 business days (3.5 months)

#### Expiry & Renewal:

This permit is valid for a specified time up to 3 years or for 1 year with automatic annual renewals (unless revoked or cancelled).

#### Price:

Initial Application and Annual Renewal: \$62.26 plus applicable tax (HST) \*

\*All fees are subject to change.

#### Related Requirements:

- 1. Environmental Assessment Approval, Nova Scotia Environment;
- 2. Department of Fisheries and Oceans (Canada), fish habitat considerations, etc.;
- Department of Fisheries and Oceans, Canada, (Coast Guard): Approval or exemption under the Navigable Waters Protection Act;
- 4. Permission of other the owner of the immediately adjoining upland;
- 5. Submission Requirements for Watercourse Alterations, Nova Scotia Environment;
- 6. Authorizations subject to existing Water Lot Grants and Leases;
- Large structure may require a transfer of ownership (<u>Water Lot Grant</u>) with applicant responsible for all costs. Issuance of a Water Lot Grant is subject to the approval of Executive Counsel.

#### Additional Information:

none

#### Legislative Authority:

Beaches Act, Revised Statutes of Nova Scotia, 1989, Chapter 32, and Beaches Act Regulations

Crown Lands Act, Revised Statutes of Nova Scotia, 1989, Chapter 114, Sect. 5, Sections 38 and 39.

Environment Act, Statutes of Nova Scotia, 1994-95, Chapter 1

Last Updated: April 2015

Back to the Department of Natural Resources Index in the Permits Directory

#### CHAPTER 114

#### An Act Respecting Crown Lands

#### Short title

1 This Act may be cited as the Crown Lands Act. 1987, c. 5, s. 1.

Object and purpose

- 2 The object and purpose of this Act is to provide for the most effective utilization of Crown lands by
  - (a) the application of proven forest management techniques to enhance productivity on Crown lands and to provide for an increasing harvest of better quality forest products;
  - (b) requiring that leasing and licensing arrangements on Crown lands are providing for equitable stumpage rates, adequate investments in forest improvements and improved market access for privately produced wood;
  - (c) the integration of wildlife and outdoor recreation considerations in the forest management planning process on Crown lands; and
  - (d) the more effective administration and management of all Crown lands. 1987, c. 5, s. 2.

#### Interpretation

- $\mathbf{\dot{3}}$  In this Act,
- (a) "conservation officer" means a conservation officer appointed pursuant to this Act, the *Forests Act* or the *Wildlife Act*:
- (b) "Crown" means Her Majesty in right of the Province;

other resources or product into which it may have been processed is forfeited to and becomes the property of the Crown and may be sold or disposed of in any manner which the Minister deems expedient.

Surplus proceeds

(8) The balance of the proceeds of any sale pursuant to subsection (7), after retaining all amounts due to the Crown shall be paid to the person entitled thereto or, in the case of a dispute as to whom the money is to be paid, it shall be paid into a court of competent jurisdiction and the court's decision with respect to payment shall be final. 1987, c. 5, s. 35.

Scaling standards

36 Where forest products harvested on Crown lands are required to be scaled, they shall be scaled in accordance with the *Scalers Act* and regulations made pursuant to that Act. 1987, c. 5, s. 36.

#### Certificate

37 (1) Where it appears to the Minister that a person, known or unknown, has acquired rights or claim by possession in or to Crown lands and the Minister so reports to the Executive Council, the Governor in Council may authorize and direct the Minister to issue a certificate to the effect that the Crown asserts no interest or claim to the land and upon the issuance of the certificate all interest or claim of the Crown to the land described therein ceases.

Registration of certificate

(2) A certificate pursuant to this Section purporting to bear the signature and seal of the Minister shall be registered in the registry of deeds for the registration district in which the land therein described is situate without proof of the signature. 1987, c. 5, s. 37.

#### Offences

38 (1) A person who without legal justification or without the permission of the Minister or a person authorized by the Minister, the proof of which rests upon the person asserting justification or permission,

- (a) enters upon Crown lands where entry is prohibited by notice;
- (b) engages in an activity which is prohibited on the Crown lands by notice; or
- (c) dumps or deposits materials on or over Crown lands or causes, suffers or permits material to be dumped or deposited on or over Crown lands,

is guilty of an offence.

#### Form of notice

(2) A notice pursuant to this Section may be given orally, in writing or by sign.

Manner of posting sign

(3) Where the notice is by means of a sign, the sign shall be posted so that it is clearly visible in daylight under normal conditions from the approach to each usual point of access to the Crown lands to which it applies.

Notice respecting part of lands

(4) A notice pursuant to this Section may be given in respect of part of the Crown lands.

#### Offence

(5) A person who, without legal justification, removes a sign or notice posted on Crown lands is guilty of an offence.

Additional penalty

(6) In addition to a penalty imposed pursuant to subsection (1), the court may order a person convicted of an offence pursuant to this Section to restore the land to a condition as nearly as practicable as it was before the offence was committed. 1987, c. 5, s. 38.

#### Removal of structure

39 (1) Where a structure is on Crown lands in respect of which there is not in effect a lease or permit issued pursuant to this Act or a structure is placed on Crown lands by a person who is not the holder of a lease or permit issued

pursuant to this Act, the Minister may, by written notice, require the person who erected or occupies or uses the structure to remove it from Crown lands within sixty days after service of the notice upon that person.

#### Service of notice

(2) A notice given pursuant to subsection (1) may be served upon the person to whom it is directed by delivering it to that person personally or, where that person cannot conveniently be served personally, by leaving it at that person's last or most usual place of residence with a person who is apparently not under sixteen years of age.

Posting of notice

(3) Where the identity of a person to whom a notice may be directed pursuant to subsection (1) is unknown to the Minister, the Minister may cause notice requiring the removal of the structure to be posted in a conspicuous place on the structure.

#### Offence

(4) A person upon whom a notice pursuant to subsection (1) has been served pursuant to this Section who fails to remove the structure from Crown lands within sixty days of service is guilty of an offence.

#### Removal or demolition

(5) Where a notice pursuant to subsection (1) has been served or posted and the structure has not been removed from Crown lands within sixty days of the service or posting, the Minister or any person acting by or under the Minister's authority may remove the structure, together with the contents contained therein or demolish the structure in any manner that the Minister considers expedient and the costs and expenses of the removal or demolition may be recovered by the Minister in a court of competent jurisdiction in any action for debt on behalf of the Crown against any person who erected, occupied or used the structure. 1987, c. 5, s. 39.

#### **Offences**

40 (1) Except as authorized pursuant to this or any other Act or by the Minister, a person who





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Department of Natural Resources > Crown Lands Deed or Grant (Water Lot Grant)

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#### **Department of Natural Resources**

#### Crown Lands Deed or Grant: Water Lot Grant (Excluding areas of fresh water)

#### Who Needs This Grant?

Anyone who needs ownership of submerged land in coastal waters to permit the construction of large wharves, causeways, infills or breakwaters.

#### Issuing Department / Agency:

N.S. Department of Natural Resources

#### Where can you get this Grant and / or further information?

Director

Land Administration Division

N.S. Department of Natural Resources

Tel: 902-424-4006 Fax: 902-424-3173 Office Location: Founder's Square

1701 Hollis Street, 5th Floor

Halifax, NS

Mailing Address:

P.O. Box 698 Halifax, NS B3J 2T9

#### **Application Forms & Process:**

An applicant can make a request in writing to the Land Administration Division of the N.S. Department of Natural Resources.

Applicants may need to have the land surveyed at their own cost; and also pay appraisal costs, an administration fee, and the market value of the land.

If all requirements are met, and the application is approved, the applicant will be notified by the Director, Land Administration Division, following a decision by the N.S. Executive Council.

#### Waiting Period:

Up to 2 years

#### Expiry & Renewal:

This grant does not expire.

#### Price:

Administration fee: \$747.93 plus applicable tax (HST) \* plus the Market value of property plus appraisal cost plus survey costs plus migration fee (if applicable): \$500.00 plus applicable tax (HST) \* \*All fees are subject to change.

#### Related Requirements:

None

#### Additional Information:

The applicant should not incur any expense or begin construction without contacting the  $\underline{\text{N.S.}}$   $\underline{\text{Department of Natural Resources}}$ .

#### Legislative Authority:

Crown Lands Act, Revised Statutes of Nova Scotia, 1989, Chapter 114, Section 16(1)(a)

Last Updated: April 2015

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#### CHAPTER 114

#### An Act Respecting Crown Lands

#### Short title

1 This Act may be cited as the Crown Lands Act. 1987, c. 5, s. 1.

Object and purpose

- 2 The object and purpose of this Act is to provide for the most effective utilization of Crown lands by
  - (a) the application of proven forest management techniques to enhance productivity on Crown lands and to provide for an increasing harvest of better quality forest products;
  - (b) requiring that leasing and licensing arrangements on Crown lands are providing for equitable stumpage rates, adequate investments in forest improvements and improved market access for privately produced wood;
  - (c) the integration of wildlife and outdoor recreation considerations in the forest management planning process on Crown lands; and
  - (d) the more effective administration and management of all Crown lands. 1987, c. 5, s. 2.

#### Interpretation

- $\mathbf{\dot{3}}$  In this Act,
- (a) "conservation officer" means a conservation officer appointed pursuant to this Act, the *Forests Act* or the *Wildlife Act*:
- (b) "Crown" means Her Majesty in right of the Province;

Manner of dealing with Crown land

15 Crown lands shall not be granted, conveyed, sold or disposed of in any manner except as provided by this Act. 1987, c. 5, s. 15.

Powers of Minister respecting land

- 16 (1) With the approval of the Governor in Council, the Minister may
  - (a) issue a grant, deed, lease, licence or other conveyance for the disposition of Crown lands or any interest in Crown lands;
  - (b) grant an easement or right of way with respect to Crown lands upon such terms and conditions as the Minister considers appropriate;
  - (c) transfer the administration and control of Crown lands to the Government of Canada or an agency thereof.

#### Transfer of administration

(2) The Minister may by letter transfer the administration and control of Crown lands administered by the Department to another Provincial government department. 1987, c. 5, s. 16.

#### Petition book

17 (1) All petitions for Crown lands shall be entered in a petition book, the original of which is kept on permanent file in the Department.

Method of entry

(2) All entries in the petition book shall be made in the order in which they are received.

Contents of entry

(3) The entry shall specify the name of the applicant, the date of the application and such other details as the Minister deems expedient.

# Beaches Act, R.S.N.S. 1989, c. 32, s. 2

**Nova Scotia Statutes** 

R.S.N.S. 1989, c. 32, s. 2

Nova Scotia Statutes > Beaches Act

# **SECTION 2**

Dedication of beaches

2 (1) The beaches of Nova Scotia are dedicated in perpetuity for the benefit, education and enjoyment of present and future generations of Nova Scotians.

Purpose of Act

- (2) The purpose of this Act is to
  - (a) provide for the protection of beaches and associated dune systems as significant and sensitive environmental and recreational resources;
  - (b) provide for the regulation and enforcement of the full range of land-use activities on beaches, including aggregate removal, so as to leave them unimpaired for the benefit and enjoyment of future generations;
  - (c) control recreational and other uses of beaches that may cause undesirable impacts on beach and associated dune systems.

**End of Document** 

# Beaches Act, R.S.N.S. 1989, c. 32, s. 13

**Nova Scotia Statutes** 

R.S.N.S. 1989, c. 32, s. 13

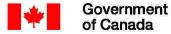
Nova Scotia Statutes > Beaches Act

# **SECTION 13**

Regulations

13 The Governor in Council may make regulations

- (a) for the preservation, control and management of beaches;
- (b) for the granting of leases, licences and permits authorizing the removal of sand, gravel, stone or other material from beaches and determining the fees and charges for such leases, licences and permits;
- (c) providing for the removal from a beach, by specified persons or persons in specified trades or occupations, of quantities of sand, gravel, stone or other material in such amount as he determines;
- (d) exempting any beach from the operation of this Act and the regulations hereto;
- (e) to preserve and protect flora and fauna located on a beach;
- (f) to restrict or regulate traffic by vehicles, vessels or pedestrians on a beach;
- (g) to restrict or regulate certain activities on a beach;
- (h) to prevent the disposal of garbage on a beach;
- (i) prescribing a minimum penalty of not less than fifty dollars and a maximum penalty of not more than two thousand dollars for offences contrary to the regulations;
- (j) respecting the management or preservation of lands adjacent to a beach in accordance with an agreement made pursuant to Section 4 or where the lands are owned or occupied by Her Majesty in right of the Province;
- (k) defining any word or expression used in this Act but not defined herein;
- (I) respecting such other matters as he deems necessary for the carrying out of the intent and purposes of this Act.



Gouvernement du Canada

Home → Canadian Environmental Assessment Agency → Environmental Assessments

# **Basics of Environmental Assessment**



RELATED VIDEO: Participant funding program in a nutshell

The following is for information purposes only. It is not a substitute for the Canadian Environmental Assessment Act, 2012 (CEAA (Canadian Environmental Assessment Act) 2012) or any of its regulations. In the event of any inconsistency between this content and CEAA (Canadian Environmental Assessment Act) 2012 or its regulations, CEAA (Canadian Environmental Assessment Act) 2012 or its regulations, would prevail.

To learn about the purpose and steps of environmental assessments under the Canadian Environmental Assessment Act, 2012 (CEAA (Canadian Environmental Assessment Act) 2012), see the questions and answers below. For general information about CEAA (Canadian Environmental Assessment Act) 2012, see the "features" section on the home page.

Process Diagram: Environmental Assessments Managed by the Agency [PDF (Adobe Acrobat document) - 78 KB (kilobytes)]

# General

- What is environmental assessment?
- What is the purpose of an environmental assessment?
- When should an environmental assessment be undertaken?
- What are the benefits of environmental assessment?

# Canadian Environmental Assessment Act, 2012

- What is the Canadian Environmental Assessment Act, 2012?
- When does the Canadian Environmental Assessment Act, 2012 apply?
- What is a responsible authority?
- What responsibilities do other federal authorities have?

What is examined during a federal environmental assessment ε

# **Types of Environmental Assessment**

- What are the types of environmental assessment under the Canadian Environmental Assessment Act, 2012 (CEAA 2012 (Canadian Environmental Assessment Act))?
- What are the timelines?
- In what case might federal and provincial/territorial governments work together to conduct environmental assessments?
- How does the federal government work with other jurisdictions?
- What is the Participant Funding Program?

# **Environmental Assessments Conducted by the Agency**

- What are the main steps of an environmental assessment conducted by the Agency?
- How can the public participate in an environmental assessment conducted by the Agency?

# **Environmental Assessment by a Review Panel**

- What is an environmental assessment by a review panel?
- What is an environmental assessment by a joint review panel?
- What are the main steps of an environmental assessment process conducted by a review panel?
- How can interested members of the public get involved in an environmental assessment by a review panel?
- What does cost recovery mean?

# **Compliance and Enforcement**

- How does the Canadian Environmental Assessment Act. 2012 ensure compliance?
- What is a decision statement?

# **Regional Study**

• What is a regional study?

# **Questions & Answers**

# General

# What is environmental assessment?

Environmental assessment is a process to predict environmental effects of proposed initiatives before they are carried out.

An environmental assessment:

- identifies potential adverse environmental effects;
- proposes measures to mitigate adverse environmental effects;
- predicts whether there will be significant adverse environmental effects, after mitigation measures are implemented; and
- includes a follow-up program to verify the accuracy of the environmental assessment and the effectiveness of the mitigation measures.

# What is the purpose of an environmental assessment?

An environmental assessment is a planning and decision-making tool. The objectives of an environmental assessment are to:

- minimize or avoid adverse environmental effects before they occur; and
- · incorporate environmental factors into decision making.

# When should an environmental assessment be undertaken?

An environmental assessment should be conducted as early as possible in the planning stage of a designated project in order for the proponent to be able to consider the analysis in the proposed plans, including incorporation of mitigation measures to address adverse environmental effects.

## What are the benefits of environmental assessment?

By considering environmental effects and mitigation measures early in the project planning cycle, environmental assessment can support better decision making and result in many benefits, such as:

- · avoidance or minimization of adverse environmental eff
- opportunities for public participation and Aboriginal consultation;
- increased protection of human health;
- · reduced project costs and delays;
- · reduced risks of environmental harm or disasters;
- increased government accountability and harmonization;
- · lessened probability of transboundary environmental effects; and
- · informed decisions that contribute to responsible development of natural resources.

# Canadian Environmental Assessment Act, 2012

### What is the Canadian Environmental Assessment Act, 2012?

The Canadian Environmental Assessment Act, 2012 (CEAA (Canadian Environmental Assessment Act) 2012) and its regulations establish the legislative basis for the federal practice of environmental assessment in most regions of Canada.

The purpose of CEAA (Canadian Environmental Assessment Act) 2012 is to:

- Protect components of the environment that are within federal legislative authority from significant adverse environmental effects caused by a
  designated project;
- Ensure that designated projects are considered and carried out in a careful and precautionary manner in order to avoid significant adverse environmental effects when a federal authority is exercising a power or performing a duty or function required for the project to proceed;
- Promote cooperation and coordination between federal and provincial governments;
- · Promote communication and cooperation with Aboriginal peoples;
- Ensure that opportunities are provided for meaningful public participation;
- Ensure that environmental assessments are completed in a timely manner;
- Ensure that proposed projects on federal lands or that are outside Canada and carried out or financially supported by a federal authority, are
  considered in a careful and precautionary manner in order to avoid significant adverse environmental effects;
- Encourage federal authorities to take actions in a manner that promotes sustainable development in order to achieve or maintain a healthy
  environment and a healthy economy; and
- Encourage further studies of the cumulative effects of physical activities in a region and the consideration of the study results in environmental
  assessments.

Regulations help put the CEAA (Canadian Environmental Assessment Act) 2012 procedures into effect.

Guidance material to further clarify the application of <u>CEAA (Canadian Environmental Assessment Act)</u>2012 can be found in <u>Policy and Guidance</u>.

### When does the Canadian Environmental Assessment Act, 2012 apply?

<u>CEAA 2012 (Canadian Environmental Assessment Act)</u> applies to projects described in the <u>Regulations Designating Physical Activities</u> and to projects designated by the Minister of the Environment.

When the Canadian Environmental Assessment Agency (the Agency) is the responsible authority for a designated project that is described in the <u>Regulations Designating Physical Activities</u>, upon acceptance of a project description, an analysis is undertaken by the Agency to decide if a federal environmental assessment is required. This step does not apply to designated projects regulated by the National Energy Board and the Canadian Nuclear Safety Commission for which conducting an environmental assessment is mandatory when such a project is designated.

A project may be designated by the Minister of the Environment if he or she is of the opinion that the carrying out of the project may cause adverse environmental effects, or that public concerns related to those effects warrant the designation. An environmental assessment under <u>CEAA (Canadian Environmental Assessment Act)</u> 2012 is required for each project designated by the Minister of the Environment.

## What is a responsible authority?

A responsible authority ensures that an environmental assessment of a designated project is conducted in accordance with <u>CEAA 2012 (Canadian Environmental Assessment Act)</u>, including ensuring the public is provided with an opportunity to participate in the environmental assessment.

Under <u>CEAA (Canadian Environmental Assessment Act)</u> 2012, responsible authorities can be the Canadian Nuclear Safety Commission, the National Energy Board or the Agency.

### What responsibilities do other federal authorities have?

Federal departments and agencies with specific expertise are required to provide information and advice that support the conduct of environmental assessments by responsible authorities.

For projects on federal lands that are not designated projects, before a federal authority or an airport authority may carry out the project or exercise any power or perform any duty or function that will permit the project to be carried out, the authority will have to be satisfied that carrying out the project is not likely to cause significant adverse environmental effects. This also applies if the Governor in Council has decided the project's significant adverse environmental effects are justified in the circumstances. This responsibility also applies to projects outside of Canada that are federally funded or for which the Government of Canada is the proponent.

### What is examined during a federal environmental assessment?

The following factors must be considered:

- environmental effects, including environmental effects caused by accidents and malfunctions, and cumulative environmental effects
- · significance of those environmental effects
- · public comments
- · mitigation measures and follow-up program requirements
- · purpose of the designated project
- · alternative means of carrying out the designated project
- · changes to the project caused by the environment
- · results of any relevant regional study
- · any other relevant matter

# Types of Environmental Assessment

# What are the types of environmental assessment under the Canadian Environmental Assessment Act, 2012?

There are two types of environmental assessment conducted under the Canadian Environmental Assessment Act, 2012 (CEAA (Canadian Environmental Assessment Act) 2012): environmental assessment by a responsible authority, and environmental assessment by a review panel.

An **environmental assessment by a responsible authority** is conducted by the Agency, the National Energy Board or the Canadian Nuclear Safety Commission. Information on the process for environmental assessments conducted by the Agency is provided below. Information with respect to environmental assessments conducted by the National Energy Board or Canadian Nuclear Safety Commission may be found on their websites.

An **environmental assessment by review panel** is conducted by a panel of individuals appointed by the Minister of the Environment and supported by the Agency.

Both types of assessments can be conducted by the federal government alone or in cooperation with another jurisdiction, such as a province.

### What are the timelines?

Upon acceptance of a complete project description, the Agency has 45 calendar days, including a 20-day public comment period, to determine whether a federal environmental assessment is required.

An environmental assessment conducted by the Agency must be completed within **365 days**. This timeline starts when a notice of the commencement of the environmental assessment is posted on the Registry Internet site and ends when the Minister of the Environment makes a decision as to whether the designated project is likely to cause significant adverse environmental effects.

The Minister of the Environment may refer a project to a review panel within 60 days of the notice of commencement of an environmental assessment. An environmental assessment by a review panel needs to be completed within **24 months**. This timeline starts when the proposed project is referred to a review panel and ends when the Minister of the Environment issues the environmental assessment decision statement.

For every environmental assessment:

- The Minister may extend the time limits by an additional three months, to facilitate cooperation with another jurisdiction or to take into account other circumstances specific to the project.
- Upon recommendation of the Minister of the Environment, the Governor in Council may also extend the time limit (in addition to the three month
  extension granted by the Minister).
- The period that is taken by the proponent to respond to a request from the Agency or a review panel (conduct studies, prepare environmental impact statement, collect further information, etc.), is not counted in the timelines.

### In what case might federal and provincial/territorial governments work together to conduct environmental assessments?

A federal environmental assessment may be required because of the adverse environmental effects on areas of federal jurisdiction or that may result from a federal decision about the project. Some projects may also require a provincial/territorial environmental assessment.

To deal with these circumstances, <u>CEAA (Canadian Environmental Assessment Act)</u> 2012 includes provisions for cooperation and coordinated action between the two orders of government. As such, <u>CEAA (Canadian Environmental Assessment Act)</u> 2012 aims to achieve the goal of "one project-one review."

# How does the federal government work with other jurisdictions?

Environmental assessments may be coordinated so that a single environmental assessment meets the legal requirements of both jurisdictions.

A responsible authority may delegate any part of an environmental assessment it is required to conduct to another jurisdiction.

The Minister of the Environment must allow a provincial process to substitute for a federal environmental assessment to be conducted by the Agency, but not federal decision-making, if requested to do so by a province and if the Minister is of the opinion that the provincial process is an appropriate substitute for an assessment under CEAA (Canadian Environmental Assessment Act) 2012 and that conditions contained in CEAA (Canadian Environmental Assessment

Act) 2012 regarding factors to be considered, public participation and the submission of an environmental assessment report will all be fulfilled by the provincial process. The Minister may establish additional conditions as a prerequisite to his approval of a substituted process. The Minister may also approve substitution with other jurisdictions, such as an Aboriginal land claim body.

Under the equivalency provisions of <u>CEAA (Canadian Environmental Assessment Act)</u> 2012, where a provincial process meets all of the conditions for the substitution of a process, the Minister of the Environment may recommend to the Governor in Council that a designated project be exempted from the application of <u>CEAA (Canadian Environmental Assessment Act)</u> 2012.

Substitution and equivalency provisions do not apply if a project is being assessed by the Canadian Nuclear Safety Commission or the National Energy Board or if the project has been referred to a review panel.

### What is the Participant Funding Program?

The Agency administers a <u>Participant Funding Program</u> to provide limited financial assistance to individuals, incorporated not-for-profit organizations and Aboriginal groups to help prepare for and participate in key stages of environmental assessments undertaken by the Agency or by review panels.

# **Environmental Assessments Conducted by the Agency**

# What are the main steps of an environmental assessment process conducted by the Agency?

- 1. **Project description submitted** Where a physical activity is described in the <u>Regulations Designating Physical Activities</u> and the Agency is the Responsible Authority, the proponent must provide the Agency with a description of the designated project that includes the information set out in the <u>Prescribed Information for the Description of a Designated Project Regulations</u>.
- 2. **Project description accepted** The Agency accepts the project description once it is considered to be complete.
- 3. Notification of consideration of whether an environmental assessment is required and comment period on the designated project and its potential effects on the environment Once the project description is accepted, the Agency will post a notice on its Registry Internet site that it is considering whether an environmental assessment will be required. A summary of the project description will also be posted along with a notice of a 20-day public comment period on the designated project and its potential for causing adverse environmental effects.
- 4. **Determining whether an environmental assessment is required** The Agency must decide whether an environmental assessment is required within 45 days of posting the notice of consideration on its <u>Registry Internet site</u>. The Agency must consider the following in making a decision:
  - the description of the designated project provided by the proponent,
  - the possibility that carrying out the designated project may cause adverse environmental effects,
  - o any comments received from the public within 20 days after posting the project description summary on the Registry Internet site, and
  - o the results of any relevant regional studies.

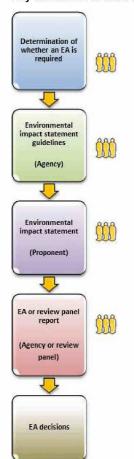
The Agency will post on the Registry Internet site a notice of its decision as to whether an environmental assessment is required.

- 5. **Environmental assessment required** If an environmental assessment is required, the Agency will post on the Registry Internet site a notice of the commencement of the environmental assessment.
- 6. Comment period on draft environmental impact statement guidelines The proponent is required to prepare an environmental impact statement that identifies and assesses the environmental effects of the project and the measures proposed to mitigate those effects, according to the environmental impact statement guidelines prepared by the Agency. The Agency prepares and posts a draft of the environmental impact statement guidelines on its Registry Internet site for public comments on the proposed studies, methods and information required in the environmental impact statement.
- 7. **Final environmental impact statement guidelines issued** The Agency considers public comments, including comments from Aboriginal groups, as well as input from federal departments, and then issues the final environmental impact statement guidelines to the proponent.
- 8. **Participant funding application period and decision on funding requests** Eligible individuals, incorporated not-for-profit organizations and Aboriginal groups may apply to the <u>Participant Funding Program</u>. The President of the Agency makes the final decision on each funding request.
- 9. **Proponent completes environmental studies and submits environmental impact statement to the Agency** The proponent prepares its environmental impact statement according to the guidelines provided by the Agency and submits it to the Agency for review.
- 10. Agency conducts completeness review of the environmental impact statement The Agency reviews the proponent's environmental impact statement to verify that it clearly provides the information required by the environmental impact statement guidelines. If necessary, the Agency may require the proponent to provide additional information prior to starting the sufficiency review.
- 11. Agency conducts sufficiency review of the environmental impact statement The Agency reviews the proponent's environmental impact statement for sufficiency and accuracy. The Agency may require the proponent to provide clarification or further information to understand the potential environmental effects and the proposed mitigation measures.
- 12. **Comment period related to environmental impact statement** A summary of the environmental impact statement and the environmental impact statement report (in the language in which it was produced) are posted on the Registry Internet site. The Agency solicits comments from the public on the potential environmental effects of the project and the proposed measures to prevent or mitigate those effects.
- 13. Proponent revises environmental impact statement information and submits any further information requested by the Agency The Agency reviews the additional information submitted by the proponent for sufficiency and accuracy. If any information gaps remain or clarifications are needed, the proponent provides additional information to the Agency.
- 14. **Agency prepares draft environmental assessment report** The Agency drafts the environmental assessment report that includes the Agency's conclusions regarding the potential environmental effects of the project, the mitigation measures that were taken into account and the significance of the remaining adverse environmental effects as well as follow-up program requirements.
- 15. Comment period on draft environmental assessment report The Agency solicits comments on the draft environmental assessment report.

- 16. Agency finalizes the environmental assessment report and submits it to the initiation of the Environment The Agency finalizes the environmental assessment report and submits it to the Minister of the Environment to inform his or her environmental assessment decision.
- 17. **Determination of whether significant adverse environmental effects are justified** If the Minister's decision is that the project is likely to cause significant adverse environmental effects, the matter is referred to the Governor in Council (Cabinet) who will then decide if the likely significant adverse environmental effects are justified in the circumstances.
- 18. Minister issues the environmental assessment decision statement with enforceable conditions The environmental assessment decision statement includes the determination of whether the project is likely to cause significant environmental effects. If the Minister's decision is that the project is not likely to cause significant adverse environmental effects or if the project is likely to cause significant adverse environmental effects that have been determined by the Governor in Council to be justified in the circumstances, the conditions with respect to mitigation measures and a follow-up program that the proponent must comply with for the proposed project to be carried out, are set out in the environmental assessment decision statement issued by the Minister.
- 19. **Regulatory decision making** If required, federal decisions, such as whether to issue regulatory permits or licenses or to provide funding, that would permit the project to proceed can only be made by federal departments and agencies after the environmental assessment is complete. Federal authorities responsible for such decisions may exercise any power or perform any duty or function in relation to the designated project if an environmental assessment decision statement has been issued stating that:
  - with the implementation of the conditions set out in the decision statement, the project is not likely to cause significant adverse environmental effects, or
  - the significant adverse environmental effects that the project is likely to cause after the implementation of the conditions are justified in the circumstances.
- 20. **Implement mitigation measures and follow-up program** Mitigation measures identified in the environmental assessment decision statement are incorporated into the design plans and implemented with the project. A follow-up program is also implemented to verify that the environmental assessment was accurate and the mitigation measures were effective.

How can the public participate in an environmental assessment conducted by the Agency?

Key Milestones in federal environmental assessment (EA (environmental assessment))



Members of the public can participate at various stages of the environmental assessment process.

Once the Agency receives a complete project description, it must consider whether or not an environmental assessment is required. During this determination, the public is provided with an opportunity to comment on the proposed project and its potential for causing adverse environmental effects.

When it has been decided that an environmental assessment is required, the public is given an opportunity to comment on which aspects of the environment may be affected by the project and what should be examined during the environmental assessment.

Once the proponent submits its environmental impact statement, the public is invited to comment on the identified potential environmental effects of the project and the measures to prevent or mitigate those effects as proposed by the proponent. At this stage, avenues for comment and additional opportunities to participate may include open houses or public meetings.

Finally, the public is provided an opportunity to comment on the draft environmental assessment report. This document includes the Agency's conclusions regarding the potential environmental effects of the project, the mitigation measures that were considered and the significance of the remaining adverse environmental effects.

Check the Registry Internet site for current opportunities for public participation.

# **Environmental Assessment by a Review Panel**

## What is an environmental assessment by review panel?

The Minister of the Environment may refer an environmental assessment to a review panel if the Minister is of the opinion that it is in the public interest to do so. To make his or her decision, the Minister must consider whether the designated project may cause significant adverse environmental effects, whether there are public concerns related to the significant adverse environmental effects, and whether there are opportunities for cooperation with another jurisdiction that may be assessing the project, or any part of it.

A review panel is a group of independent experts appointed by the Minister of the Environment, in cooperation with another jurisdiction in the case of joint review panels, to conduct an environmental assessment. The members are selected on the basis of their knowledge, experience and expertise, and must be free from bias or conflict of interest relative to the designated project.

A review panel assesses whether the environmental impact statement prepared by the proponent is sufficient to proceed to public hearings. The hearings allow interested parties, including Aboriginal groups, to present evidence, concerns and comments regarding the potential environmental impacts of the designated project.

Review panels have the capacity to summon witnesses, and order witnesses to present evidence and produce records related to the environmental assessment.

The review panel prepares a report that includes its rationale, conclusions and recommendations, and submits its report to the Minister of the Environment. The report will also contain any proposed mitigation measures and suggestions for the follow-up program.

# What is an environmental assessment by a joint review panel?

When a proposed project requires an environmental assessment by both the federal government and a province or another jurisdiction, a joint review panel can be established to avoid duplication.

A joint review panel agreement would be negotiated between the federal government and the other jurisdiction for each joint review, outlining the review process and the terms of reference for the joint review panel.

## What are the main steps of an environmental assessment process conducted by a review panel?

- 1. **Project description submitted** Where a physical activity is described in the <u>Regulations Designating Physical Activities</u> and the Agency is the Responsible Authority, the proponent must provide the Agency with a description of the designated project that includes the information set out in the <u>Prescribed Information for the Description of a Designated Project Regulations.</u>
- 2. Project description accepted The Agency accepts the project description once it is considered to be complete.
- 3. Notification of consideration of whether an environmental assessment is required and comment period on the designated project and its potential effects on the environment Once the project description is accepted, the Agency will post a notice on its Registry Internet site that it is considering whether an environmental assessment will be required. A summary of the project description will also be posted along with a notice of a 20-day public comment period on the designated project and its potential for causing adverse environmental effects.
- 4. **Determining whether an environmental assessment is required** The Agency must decide whether an environmental assessment is required within 45 days of posting the notice of consideration on its <u>Registry Internet site</u>. The Agency must consider the following in making a decision:
  - the description of the designated project provided by the proponent,
  - $\circ~$  the possibility that carrying out the designated project may cause adverse environmental effects,
  - o any comments received from the public within 20 days after posting the project description summary on the Registry Internet site, and
  - o the results of any relevant regional studies.

The Agency will post on the Registry Internet site a notice of its decision as to whether an environmental assessment is required.

- 5. Environmental assessment required If an environmental assessment is required, the Agency will post on the Registry Internet site a notice of the commencement of the environmental assessment.
- 6. Comment period on draft environmental impact statement guidelines The proponent is required to prepare an environmental impact statement that identifies and assesses the environmental effects of the project and the measures proposed to mitigate those effects, according to the environmental impact statement guidelines prepared by the Agency. The Agency prepares and posts a draft of the environmental impact statement guidelines on its Registry Internet site for public comments on the proposed studies, methods and information required in the environmental impact statement.
- 7. **Final environmental impact statement guidelines issued** The Agency considers public comments, including comments from Aboriginal groups, as well as input from federal departments, and then issues the final environmental impact statement guidelines to the proponent.

- 8. **Referral to review panel** Within 60 days of the commencement or an environmental assessment, the Minister may decide to refer the environmental assessment to a review panel. Referral of an environmental assessment to a review panel is based on several factors. The Minister of the Environment has to consider:
  - the potential for the designated project to cause significant adverse environmental effects;
  - public concerns related to the significant adverse environmental effects that may be caused by the designated project; and
  - o opportunities for coordination with another jurisdiction.

In referring the environmental assessment to a review panel, the Minister will establish the time limits, which combined are not to exceed 24 months, within which:

- the review panel must be established after the referral;
- the review panel must submit its report with respect to the environmental assessment to the Minister; and
- the Minister must, after receiving the review panel's report, issue a decision statement under section 54 of <u>CEAA (Canadian Environmental</u> Assessment Act) 2012.
- 9. Participant funding application period and decision on funding requests Eligible individuals, incorporated not-for-profit organizations and Aboriginal groups may apply to the Participant Funding Program. The President of the Agency makes the final decision on each funding request.
- 10. Comment period on draft review panel terms of reference and joint review panel agreement, if applicable For a federal-only review panel, the Agency will prepare draft terms of reference for the review panel and conduct a public comment period. For a joint review panel, the Agency will work with the other jurisdiction to draft a joint review panel agreement, including terms of reference, and conduct a joint public comment period on this document. The terms of reference establish the mandate and authorities of the review panel, as well as the procedures and timelines for the review panel.
- 11. **Final terms of reference issued** After considering public comments, including comments from Aboriginal groups, as well as input from federal departments on the draft terms of reference for the review panel, the Minister (along with the other jurisdiction, in the case of joint review panels) will issue the final terms of reference and post them on the Registry Internet site.
- 12. **Proponent completes environmental studies and submits environmental impact statement to the government** The proponent prepares its environmental impact statement according to the guidelines provided by the Agency and submits it to the Agency (and in the case of a joint review panel, to the other jurisdiction) for review.
- 13. Completeness Review of the Environmental Impact Statement- The environmental impact statement is posted on the Registry Internet site in the language in which it was produced. The Agency conducts a review of the completeness of the environmental impact statement to ensure all the information required by the environmental impact statement guidelines and applicable legislation is contained in the document. The Agency then determines whether the environmental impact statement contains the enough information to allow the review panel, once appointed, to begin its sufficiency review. In making this determination, the Agency solicits comments from the public, including comments from Aboriginal groups, as well as input from other government agencies. The Agency may require the proponent to provide clarification or further information based on its consideration of the comments received. If the Agency determines that additional information is required, it may hold another comment period on the additional submitted information. The Agency's review does not affect or predetermine the result of the Review Panel's assessment of the sufficiency of the environmental impact statement.
- 14. **Review panel appointed** Before the end of the completeness review of the proponent's environmental impact statement, the Minister (along with the other jurisdiction, in the case of joint review panels) will appoint the review panel. Potential members of the review panel may be selected from a roster of candidates established and maintained by the Agency. The Agency will identify and assess potential candidates for relevant knowledge, expertise and determine if any potential bias or conflict of interest exists. Once the membership of the review panel is finalized by the Minister, review panel appointments are made public and notification is posted on the Registry Internet site.
- 15. **Proponent revises environmental impact statement information and submits it to the review panel** The proponent revises the information of the environmental impact statement based on direction from government officials at the end of the completeness review, and submits it to the review panel for review.
- 16. Review panel determines if environmental impact statement is sufficient, or if additional information is required The review panel will review the environmental impact statement to determine if the information provided is sufficient to proceed to public hearings. A public comment period on the proponent's revised environmental impact statement will be held at the start of this review. The review panel considers all comments received, as well as its own review of the information, in determining sufficiency of the information to proceed to the public hearings. If the review panel is of the opinion that there is insufficient information to proceed to public hearings, it will require the proponent to submit additional information. If the review panel determines that additional information is required, it may hold another 30-day comment period on the additional submitted information.
- 17. **Review panel holds public hearings** Once the review panel determines that it has sufficient information, it will provide notice prior to the start of public hearings. The review panel has a duty to hold public hearings in a manner that offers any interested parties an opportunity to participate. The primary purpose of the public hearings is to allow the review panel to obtain the information required to complete its assessment of the potential environmental effects of the proposed project.
- 18. Review panel prepares and submits report to the Minister, and the province or other jurisdiction, for joint review panels Upon completion of the hearings, the review panel prepares its report containing its conclusions, rationale and recommendations, and submits the report to the Minister of the Environment. In the case of a joint review panel, it will also contain recommendations to the other jurisdiction. The report will also include a summary of the comments received from the public and will recommend mitigation measures and the follow-up program requirements. Based on the review panel's report, the Minister of the Environment decides whether adverse environmental effects are likely to be significant.
- 19. **Determination of whether significant adverse environmental effects are justified** If the Minister's decision is that the project is likely to cause significant adverse environmental effects, the matter is referred to the Governor in Council (Cabinet) who will decide if the likely significant adverse environmental effects are justified in the circumstances.
- 20. Minister issues the environmental assessment decision statement with enforceable conditions The environmental assessment decision statement includes the determination of whether the project is likely to cause significant environmental effects. If the Minister's decision is that the project is not likely to cause significant adverse environmental effects or if the project is likely to cause significant adverse environmental effects that

have been determined by the Governor in Council to be justified in the circumstances, the conditions with respect to mitigation measures and a follow-up program with which the proponent must comply for the proposed project to be carried out, are set out in the environmental assessment decision statement issued by the Minister.

For joint review panels, the other jurisdiction will follow its own decision-making process upon receiving the review panel report. Each jurisdiction retains its independent decision-making responsibility.

- 21. **Regulatory decision making** If required, federal decisions, such as whether to issue regulatory permits or licences or to provide funding, that would allow the project to proceed can only be made by federal departments and agencies after the environmental assessment is complete. Federal authorities responsible for such decisions may exercise any power or perform any duty or function in relation to the designated project if an environmental assessment decision statement has been issued, stating that:
  - with the implementation of the conditions set out in the decision statement, the project is not likely to cause significant adverse environmental effects, or
  - the significant adverse environmental effects that the project is likely to cause after the implementation of the conditions are justified in the circumstances.
- 22. **Implement mitigation measures and follow-up program** Mitigation measures identified in the environmental assessment decision statement are incorporated into the design plans and implemented with the project. A follow-up program is also implemented to verify that the environmental assessment was accurate and the mitigation measures were effective.

# How can interested members of the public get involved in an environmental assessment by a review panel?

The public can get involved at various stages in the review panel environmental assessment process.

The public is given an opportunity to comment on the proposed project and highlight particular issues of interest. Feedback is specifically solicited on the environmental impact statement guidelines, and on the sufficiency of the environmental impact statement submitted by the proponent.

The public is also invited to comment on draft terms of reference for the review panel. For a joint review process, the public is given an opportunity to comment on the draft joint review panel agreement as well.

Hearings are held to encourage the participation of interested parties. The review panel is responsible for determining its hearings schedule, locations and procedures, and notifying the public in advance so that interested parties will have the opportunity to participate.

Check the Registry Internet site for current opportunities for public participation.

### What does cost recovery mean?

Under the Canadian Environmental Assessment Act, 2012 (CEAA (Canadian Environmental Assessment Act) 2012), the Agency has the authority to recover its costs for environmental assessments in accordance with regulations that are made for that purpose.

The <u>Cost Recovery Regulations</u> set out the services and amounts which the Agency can recover from the proponent of a proposed project undergoing an assessment by a review panel.

# Compliance and Enforcement

## How does the Canadian Environmental Assessment Act, 2012 ensure compliance?

If an environmental assessment is required to be conducted by the Agency, proponents are prohibited from proceeding with any aspect of a designated project that would have an effect on a component of the environment that falls within federal legislative jurisdiction, unless:

- the Minister of the Environment has issued a decision statement indicating that the project is unlikely to cause any significant adverse environmental effects or that the Governor in Council has decided that such effects are justifiable in the circumstances; and
- · the proponent has complied with all conditions in the decision statement.

Enforcement officers will verify compliance and the Minister may also seek an injunction to stop activities that violate <u>CEAA 2012 (Canadian Environmental Assessment Act)</u> or to prevent such violations. Contraventions of <u>CEAA (Canadian Environmental Assessment Act)</u> 2012 can result in fines ranging from \$100,000 to \$400,000.

Similarly, a federal authority may not undertake any action that would permit a project to be carried out, in whole or in part, unless a decision statement has been issued and states that the proposed project is not likely to cause significant adverse environmental effects or that the likely effects are justified in the circumstances.

## What is a decision statement?

At the end of the environmental assessment, a decision statement is issued that states whether the proposed project is likely to cause significant adverse environmental effects. It includes conditions, consisting of mitigation measures and a follow-up program that the proponent must fulfil to proceed with the project.

When the Agency is the responsible authority, the Minister of the Environment issues the decision statement to the proponent. When the Canadian Nuclear Safety Commission or the National Energy Board is the responsible authority, they are responsible for issuing the decision statement to the proponent.

If a proposed project is likely to cause significant adverse environmental effects, it is referred to the Governor in Council (Cabinet) to determine whether the environmental effects are justified in the circumstances. The conclusions of the Governor in Council would be included in the decision statement.

# PLAIN LANGUAGE SUMMARY

# 1.0 Background

The Proponent, Bilcon of Nova Scotia Corporation (Bilcon), is proposing to construct and operate a basalt quarry, a crushing operation, and a ship loading terminal at Whites Point on Digby Neck (Map 1). Bilcon has leased 150 hectares of land and, at a production rate of 2 million tonnes per year, anticipates a quarry life of 50 years. Shipment of crushed product is anticipated to be approximately 40,000 tonnes per week, though this will vary with ship availability and weather conditions.

The quarry is anticipated to be operating at full capacity for 44 weeks of the year with a scheduled shut-down for maintenance and bad weather during the winter months. The quarry will directly employ 34 people working two shifts and Bilcon is committed to hiring and training local people. The quarry is expected to expand its operational footprint by 2.5 hectares during each year of operation and reclamation will be carried out on an incremental basis, rather than at the end of quarrying operations,

Land-based structures include rock crushers, screens, closed circuit wash plant, conveyors, environmental control structures and a load-out tunnel. Marine-based facilities will include berthing dolphins and mooring buoys and a quadrant loader capable of loading 5,000 tonnes per hour. The berthing dolphins and the quadrant loader will be supported on pipe piles anchored to the sea floor.

Bilcon will ship by common carrier the crushed rock and grits to New Jersey for use by its parent company, Clayton Concrete Block and Sand, in the manufacture of concrete and concrete block. Testing of the Whites Cove rock indicates that it will produce a high-quality crushed product meeting the standards required in New Jersey and New York.

All projects of this magnitude are required to undergo an environmental assessment to determine how the project could affect people, the environment, and the economy. The Environmental Impact Statement (EIS), of which this plain language summary is a part, is in itself a part of the environmental impact assessment which is a planning tool to identify and mitigate any significant environmental effects.

The EIS is a large, technical document which can be viewed at the places listed in Section 11.0 of this summary. This plain language summary is intended to give an overview to provide an understanding of the issues surrounding this project.



# Units of Measure

% Percent

<sub>0</sub> Degrees

°c Degrees Celcius

cm Centimetres

DWT Deadweight metric tonnes

g Grams

g/cc Grams per cubic centimetre

g/m<sup>3</sup> Grams per cubic metre

h Hour(s)

ha Hectares (10,000 square metres)

HP Horsepower

kg Kilograms

km Kilometres

km<sup>2</sup> Square kilometres

kW Kilowatts

l/s Litres per second

M Millions

m Metres

m<sup>3</sup> Cubic metres



# Units of Measure

masl Metres above sea level

mm Millimetres

Mm<sup>3</sup> Millions of cubic metres

Mtpy Millions metric tonnes per year

Mt Metric tonne

MW Megawatts

ppm Parts per million

ST Short ton (2,000 lbs)

tph Metric tonnes per hour

tpy Metric tonnes per year

C\$ M Millions Canadian dollars

US\$ M Millions US dollars

C\$/t Canadian dollars per metric tonne

US\$/t US dollars per metric tonne

wt% Weight percent

mg/l Milliograms per litre

μg Micrograms

dbA Decibel

Rms Root mean square



# 1.0 ENVIRONMENTAL ASSESSMENT OF THE PROJECT

# 1.1 Background

A Joint Review Panel (the Panel) has been established by the Minister of the Environment, Canada (under the authority of the *Canadian Environmental Assessment Act*), and by the Minister of Environment and Labour, Nova Scotia (under the authority of the *Nova Scotia Environment Act*), to consider the possible environmental effects associated with the Whites Point Quarry and Marine Terminal Project (the Project), proposed by Bilcon of Nova Scotia Corporation (the Proponent/Bilcon).

The Proponent is proposing to construct and operate a basalt quarry, processing facility and marine terminal on Digby Neck, Digby County, Nova Scotia, where quarrying and associated activities are scheduled to take place on 150 hectares of land. Production is expected to reach 2 million tonnes of aggregate per year, or approximately 40,000 tonnes per week. The quarry is expected to expand its operational footprint by four hectares each year of operation. Land-based operations are expected to occur year-round, with aggregate stockpiled for ship loading once each week. Drilling and blasting of basalt rock, loading, hauling, crushing, screening, washing and stockpiling will be done on-site.

Land-based structures will include: rock crushers, screens, closed-circuit wash facilities, conveyors, load-out tunnel, support structures and environmental control structures. Associated construction processes will include erection of on-land aggregate processing equipment, conveyors and wash-water pumping systems.

Marine facilities will include a conveyor, ship loader, berthing dolphins and mooring buoys. Construction processes for the marine terminal infrastructure would include the anchoring of pile support structures to the seafloor, along with the construction of concrete caps as dolphins. Ship visits for the purposes of loading aggregate will occur weekly - (See Reference 37 - EIS Guidelines, Chapter 1 Background).

# 1.2 The Joint Panel Review Mandate

The Panel has been charged with the responsibility to identify, evaluate and report on the potential impacts (adverse and beneficial effects) of the Project on the physical, biological and human environments. The mandate of the Panel is defined in the Agreement signed by Federal and Provincial levels of government (See Appendix 24). The Agreement explicitly states, "The Panel shall conduct its review in a manner that discharges the requirements set out in the Canadian Environmental Assessment Act, Part IV of the Nova Scotia Environment Act and the Terms of Reference attached hereto as an Appendix."



# 10.0.4 Development by the Proponent or Others That May Appear Feasible Because of the Proximity of the Project's Infrastructure

The development of the Whites Point project by Bilcon is designed to supply Bilcon's parent company, Clayton Concrete Block and Sand, with washed aggregates to be used in the current concrete and block operations in New Jersey.

Clayton's requirement is for 2M tonnes per year and the capacity of the Whites Point Quarry operation has been designed to supply this quantity. Bilcon has no other land holdings capable of producing aggregate other than those in the Little River/Whites Point area.

The capacity of the shiploader is estimated to be 5,000 tonnes per hour and, theoretically, significantly more product could be loaded than the 2 M tonnes per year anticipated; however, while the shiploader has surplus capability, there is no additional space for stockpiling.

Bilcon has no intention of making the shiploader available to other producers in the area, since this would have serious effects on the efficiency of the anticipated operation and would create additional environmental impacts from trucking activities.



# Comment

Describe the zone of influence of the marine area expected to be affected by the maneuvering requirements of the ship during varying sea and wind conditions.

# Response:

Please refer to Project Description

# Comment

Identify factors that may alter the rate of removal of aggregate materials from the site. For instance, the EIS suggests the bulk carriers may range up to 70,000 tons capacity. Could this reduce the number of ship trips required per year? Could enhanced demand by Clayton increase the rate of aggregate extraction?

# Response:

Bilcon anticipates employing Panamax-size vessels initially. The carrying capacity is approximately 45,000 tons. However, initial investigations into the use of bulk carriers with up to 70,000 tons capacity have been carried out with the specific intent to reduce the number of ship trips per year. At the present time, there is a general world-wide shortage of bulk carriers due to increased demand for raw material in Asian countries, particularly China. There is currently an approximate three-year waiting list for the construction of new vessels so that in the initial years of the quarry, Bilcon will have to employ what is currently available on the market. It should also be noted that while the Whites Point terminal has been designed to accommodate vessels carrying up to 70,000 tons of aggregate, the unloading ports presently contemplated are restricted due to water depths. Bilcon's parent company, Clayton Concrete Sand and Gravel, is currently investigating alternate sites on the eastern seaboard which would permit the unloading of large vessels. At the present time, Clayton does not anticipate a future demand in excess of two million metric tons a year from the White Point site.

# Comment

In some parts of the EIS, the Proponent indicates that it expects it will have a dedicated ship while in other parts it says it will not. Clarify.

# Response:

As noted above, there is currently a worldwide shortage of bulk carriers. Initial discussions with potential carriers indicates that with a three-year waiting time for new vessels, a dedicated vessel for Whites Point is not a possibility in the immediate future. Bilcon has also investigated the construction of a vessel for its own specific use but, again, due to waiting time, this is not a possibility in the immediate future.



# Comment

Clarify the communications plan that will be used to apprise fishers, whale watchers, or others of Project activities such as blasting or ship loading.

# Response:

Please refer to Project Description

# Comment

Provide a detailed decommissioning plan.

# Response:

Please refer to Project Description

# Comment

The lease the Proponent has on the property extends for 90 years, while the Project plan calls for 50 years. Clarify the intended use of the property for the years remaining on the lease.

# Response:

There is sufficient rock on the Whites Point site to enable two million metric tons to be extracted for a fifty-year period. However, Bilcon deemed it prudent to enter into a lease arrangement for a ninety-year period. At the present time, Bilcon has no specific plan for the property between the 50-90 years, other than to ensure that the reclamation plan is fully functional.

# Comment

# **Facility and Component Locations**

The quarry infrastructure plans (Figure 1) for the EIS and the Fish Habitat Compensation Plan of September 2005 (Appendix 17) differ in how they illustrate critical components. Examples include the footprint of the physical plant, orientation of the loading tunnel, the direction of flow in drainage channels, and the use of the "Phase I Reclamation area".

Resolve discrepancies in the drawings to indicate which of these infrastructure plans represents the final proposed design of the Project.

# Response:

Please refer to Project Description



# Land Transportation

Quarried products will be transported by ship thereby eliminating heavy truck traffic on rural roads and through rural residential areas. Truck traffic from Highway 101, to Highway 217, to the quarry site will increase during the one year construction phase. Delivery of materials and equipment, and the construction workforce will increase traffic during the construction phase. Load size and weights will vary and adhere to restrictions by the Nova Scotia Department of Transportation and Public Works. For further details on land transportation refer to **paragraph 9.3.8.** 

# Land Transportation - Construction

Land transportation of equipment, materials and workforce is proposed for construction of land and intertidal facilities. Facilities for unloading equipment and materials would be located within the quarry site at the compound area and at the plant area. The estimated increase in truck traffic to deliver mobile and plant equipment and construction materials over the 18 month construction period, including a 20% contingency, is approximately 10-12 trucks per week.

Bilcon proposes the following mitigation measures to reduce heavy truck traffic on Highway #217 during the construction period. Heavy excavation equipment required for the operation of the quarry will be acquired for use before the construction period thereby reducing general contractors from having to float their own equipment from off-site to the site. Bilcon also intends to utilize site acquired/produced base materials and general construction aggregates in order to reduce the requirement for off-site resources. Further, Bilcon intends to establish an on-site concrete batch plant to reduce the number of heavy concrete trucks traveling along Highway 217. These mitigation measures are estimated to reduce truck traffic on Highway 217 by approximately 350 trucks during the 18-month construction period.

Quantification of various trucking requirements for the types of equipment and materials required, is broken down in response to the Panel's specific comment on **paragraph 9.3.8** of the EIS.

# Marine Transportation

The Whites Point Marine Terminal will be designed to accommodate "Panamax" bulk carriers. The overall length of this type of vessel is approximately 225 metres, a molded breadth of approximately 32 metres, and a molded depth of approximately 19.5 metres. Dead weight is approximately 70,018 tons with a gross tonnage of 41,428. The proposed route of the vessel from the inbound shipping lane to the marine terminal and from the marine terminal to the outbound shipping lane is shown on **Map 4**.



# Ship Route Approach and Departure at Marine Terminal

The proposed route of the ship when approaching and departing the marine terminal is shown on  $\operatorname{Map} \operatorname{SR} - 1$ . An approximate 1.6 km radius will be required to accommodate the bulk carries at the terminal. This radius will provide the option to approach the terminal from either direction, depending on the tide.



The frequency of call at the marine terminal will be on an average of once per week for a duration of an approximate 10 hour loading time. If severe weather is forecast, the ship's captain will determine an appropriate course of action.

Aggregates and sand products are the primary materials to be loaded from the Whites Point Marine Terminal. No off-loading of any materials is anticipated at this time nor will the marine terminal be used for any other purposes except for the Whites Point quarry. If an instance of severe weather develops in the Bay of Fundy, the Whites Point marine terminal could offer refuge for fishing boats or ships in the immediate area. Ship loading will be by conveyor with spill containment. For further details on marine transportation refer to **paragraph 9.3.8.** 

Canadian Environmental Assessment Agency

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### **Early Warning System**

			Date:	January 21, 2003
			Prepared by:	Derek McDonald
			Region:	Atlantic
		The state of the s	White Deint Occur	
1.	Project Name:	-,	Whites Point Quarr	у
			Mhitas Cous Dighy	Nock Nove Costin
2.	Location:		Whites Cove, Digby	Neck, Nova Scotta
•	Duran and Manage		Global Quarry Produ	ote
3.	Proponent Name:	l l	Global Quality Floud	Cis
4	Drainet Descriptions		Aggregate Quarry ar	nd Marine Terminal
4.	Project Description:		Aggregate Quarry at	id Marine Terrinia
5	Region file #: NS-02-1	11		
٠.	ite sz		ı	
6.	EA Process:			
	Federal			
	Provincial			
	Territorial			
х	Unknown at this time			
	Other (please specify):			
	EA is likely to be both fe	ederal and province	cial.	
	,			
7.	Potential RAs / Triggers	(s) (and specify)	:	
	Proponent			
	Financial Assistance			
	Land			
х	Permit			
		uired from DFO (N	NWPA, HADD), IC (co	mmunications tower), and NRCan
	(explosives).			1
8.	Potential Type of Federa	I Assessment:		
	Screening			
X	Comprehensive Study			
_	Panel Review / Mediation	n		
	Other (please specify):			D. His and the Control of the Control
				quarry. Public review is not out of the ect regularly makes the local news.
	question as there is pub	nic opposition in t	ne project area. Proje	ect regularly makes the local news.
9	Contacts (name, departm	nent & telenhone	a)·	
-	Federal Departments:		an, DFO-NWPA, 902.	426 7852
	rederal Departments.		Habitat, 902.426.611	
				lude Industry Canada, NRCan, EC, TC
			and the second second	
	Provincial / Territorial:	Helen MacPhai	il, NSDEL, 902.424.25	81
_				
	Proponent:	Global Quarry I	Products, local Agent i	s Paul Buxton 902.638.8108

#### 10. Issue(s):

Possible issues include dust, noise, and effects on marine biota (e.g. whales) in the Bay of Fundy.

#### 11.What's New:

A meeting with the proponent was held on Jan 6/03. Province, DFO and EC also in attendance. Proponent has submitted an NWPA application for a marine ship-loading facility (Jan 8/03).

#### 12. What's Next:

A draft project description is expected shortly (last week in January – first week in February). Agency will circulate this for comment / feedback, then advise proponent on the adequacy of the project description for purposes of the Federal Coordination Regulation..

#### - DKAFI -

## Highlights and Action Items Whites Point Inter-Agency EA Meeting March 31, 2003

The meeting was chaired by the Canadian Environmental Assessment Agency and attended by representatives of DFO (Habitat and NWPA), Industry Canada, Natural Resources Canada, Nova Scotia Environment and Labour and Environment Canada.

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Federal Coordination Request has been sent out by DFO to Environment Canada, NRCan, Transport Canada and Industry Canada. Recipients anticipate no problems meeting April 10 deadline.
Comprehensive Study is the most likely federal EA track, as opposed to a Panel Review.
Provincially, quarries in excess of 4 Ha require a Class I environmental assessment.
Will need a MOU (or similar but less formal agreement) to harmonize the two EA processes. CEA Act requires public comment on such an agreement (ss.58(3)), if signed by the Minister.
Scope needs to be developed jointly by NS and RA(s) (in consultation with expert FAs). Draft Scope will be made available for public comment.
DFO will act as Lead RA, and establish the Public Registry.
Public participation plans still unspecified, but will include public comment on draft Scope and MOU. Public reaction to Scope and MOU may influence EA track decision.
CEAA will continue to assist with coordination among the various agencies and the proponent.
Preparation of CSR will likely be delegated to the proponent.
A tentative schedule for the EA is recommended, based on expected duration of the various steps of the process.
Need to coordinate communications. All parties to be advised before any announcements, news releases, etc. Need for formal communications plan undecided at this time.

#### - DKAFI -

Proponent needs to be made aware of what will be expected of them (delegation, official languages).

#### **Summary of Action Items:**

- > DFO to prepare a draft scope and circulate it to the group for comment.
- NSDEL to circulate their recently released sector guide for pits and quarries.
- CEAA to provide DFO with a copy of the Deep Panuke Scope.
- NSDEL to prepare a draft MOU, or similar harmonization agreement, and circulate it to the group for comment.
- CEAA to provide NSDEL with a copy of the Deep Panuke MOU.
- > CEAA to draft a tentative schedule for the EA and circulate it to the group for comment.
- > All parties to identify communications contacts and advise other members of the group.
- > CEAA to contact proponent re: expectations (e.g. delegation and official languages).

#### Zamora, Phil

From:

McDonald, Derek [CEAA] [Derek.McDonald@ceaa-acee.gc.ca]

Sent:

Thursday, April 03, 2003 11:10 AM

To:

'Mark G McLean'

Cc:

Cheryl L Benjamin; zamorap@mar.dfo-mpo.gc.ca; Coulter,Bill [CEAA]

Subject:

RE: Digby Neck Quarry agreement

#### Mark,

The Agency sees no requirement for a MOU. But given that it's a Comp Study and the Minister will have a decision to make, it would be appropriate to have something in writing that lays out the major elements of the harmonized process. From a practical perspective, this will at least ensure everyone has a common understanding of the process to be followed. I think a letter of agreement, signed by DFO (and any other RAs identified via FCR), NS and the Agency, can accomplish that.

#### Derek

----Original Message----

From: Mark G McLean [mailto:MCLEANMG@gov.ns.ca]

Sent: April 3, 2003 09:15

To: Derek.McDonald@ceaa-acee.gc.ca

Cc: Cheryl L Benjamin; zamorap@mar.dfo-mpo.gc.ca

Subject: Digby Neck Quarry

Derek as discussed, here the letter of agreement between DFO and NSDEL for the Tusket Loadout Facility. You have the Panuke MOU (probably memorized) so let me know if you have a feel for which format would best fit this project. Obviously the wording would have to be somewhat different but I'm more interest in the format.

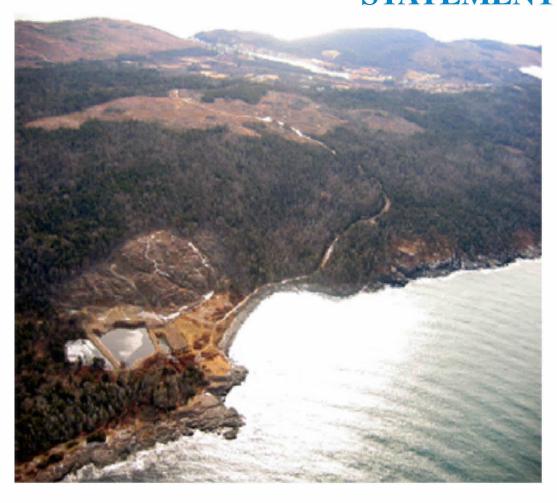
Phil, let me know if there is a preference at DFO if this should be more "formal" like Deep Panuke or is the Tusket letter OK. I worked with Anita on the Tusket project so you can talk to her and see how she felt it worked. Thanks.

Mark

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# ENVIRONMENTAL IMPACT STATEMENT





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#### **Reference Document Contributors**

**Alliston, W. George,** PhD., "Faunal Analysis of the Proposed Whites Point Quarry Site, Digby Neck, Digby County, Nova Scotia". August 2002 revised 13 January 2004 and Supplemental Report – "2004 Breeding Bird Surveys of the Proposed Whites Point Quarry Site, Digby Neck, Nova Scotia". December 2004.

**Alliston, W. George,** PhD., "Wintering Harlequin Ducks in the Digby Neck / Long Island Area, Digby County, Nova Scotia – 2005". 20 May 2005

**Alliston, W. George**, PhD., "Use by Wintering Waterbirds of Digby Neck and Adjacent Coastal Waters of Southwestern Nova Scotia". 7 June 2005

**Brunelle, Paul-Michael** "Odonata Survey 2005 – (Damselflies and Dragonflies) Whites Point Property, Digby County, Nova Scotia". August 2005

**Brylinsky, Michael,** PhD., "Interpretation of a Sublittoral Benthic Survey Along the Shoreline of Whites Point, Digby Neck, Nova Scotia". 28 February 2004

**Brylinsky, Michael,** PhD., "Results of a Sediment Survey in the Near Offshore Waters of the Proposed Quarry Site in the Vicinity of Whites Cove, Digby Neck, Nova Scotia". September 2005.

**Brylinsky, Michael,** PhD., "Results of a Survey of the Intertidal Marine Habitats and Communities at a Proposed Quarry Site Located in the Vicinity of Whites Cove, Digby Neck, Nova Scotia". 30 June 2002. 7

**Brylinsky, Michael,** PhD., "Results of a Survey of the Plankton Communities Located Offshore of a Proposed Quarry Site at Whites Cove, Digby Neck, Nova Scotia". April 2005.



Carver, C.E., M.Sc., and Mallet, A.L., M.Sc., Mallet Research Services Ltd., "A Preliminary Assessment of the Risks of Introducing Non-Indigenous Phytoplankton, Zooplankton Species or Pathogens/Parasites from South Amboy, New Jersey (Rartian Bay) into Whites Point, Digby Neck, Nova Scotia". 6 October 2003

Christian, John, M.Sc., LGL Limited, "Whites Cove Quarry Blasting: Potential Impacts on American Lobster". 8 October 2003

**Dadswell, M.J.,** "Migration of Inner Bay of Fundy Atlantic Salmon in Relation to the Proposed Quarry in the Digby Neck Region of Nova Scotia". November 2004.

**Fader, Gordon B.,** Atlantic Marine Geological Consulting Ltd. "Marine Archaeology offshore Digby Neck, Bay of Fundy Report for the Proposed Quarry and Marine Terminal at Whites Point, Digby Neck, Nova Scotia". March 2005

**Fader, Gordon B.**, Atlantic Marine Geological Consulting Ltd. "Physiography, Geography and Bathymetry of the Digby Neck Area, Bay of Fundy Report for the Proposed Quarry and Marine Terminal at Whites Point, Digby Neck, Nova Scotia". March 2005.

**Fader, Gordon B.** Atlantic Marine Geological Consulting Ltd. "Bedrock and Surficial Geology, Digby Neck, Bay of Fundy Report for the Proposed Quarry and Marine Terminal at Whites Point, Digby Neck, Nova Scotia". March 2005.

**Fader, Gordon B**. Atlantic Marine Geological Consulting Ltd. "Glacial, Post Glacial, Present and Projected Sea Levels: Bay of Fundy Report for the Proposed Quarry and Marine Terminal at Whites Point, Digby Neck, Nova Scotia". March 2005

**Fader, Gordon B.** Atlantic Marine Geological Consulting Ltd. "Seismic Hazard, Faults and Earthquakes: Digby Neck, Bay of Fundy Report for the Proposed Quarry and Marine Terminal at Whites Point, Digby Neck, Nova Scotia". March 2005.

**Fader, Gordon B.** Atlantic Marine Geological Consulting Ltd. "Erosion, Suspended Sediment and Sediment Transport: Bay of Fundy Report for the Proposed Quarry and Marine Terminal at Whites Point, Digby Neck, Nova Scotia". March 2005.

**Fader, Gordon B**. Atlantic Marine Geological Consulting Ltd. "Sidescan Sonar Interpretation, Evaluation and Regional Integration: Offshore Digby Neck, Bay of Fundy Report for the Proposed Quarry and Marine Terminal at Whites Point, Digby Neck, Nova Scotia". March 2005

Fraser, Robert, Gardner Pinfold, "Digby Neck/Islands Economic Profile". October 2005

**Gareau, Pierre L.**, XY GeoInformatics Services. "Whites Point Quarry Project GeoSpatial Data Comparison & Compilation". April 2005.

Hannay, David E., M.Sc., JASCO Research Ltd., and Thompson, Denis M.Sc., LGL Limited, "Peak Pressure and Ground Vibration Study for Whites Cove Quarry Blasting Plan" August 2003



**Herron, Kristy,** BSc. M.Ed, Elgin Consulting and Research, "Digby Neck and Islands Community/ Business Consultation Report". June 2005.

**Herron, Kristy,** BSc. M.Ed, Elgin Consulting and Research, "Digby Neck and Islands Individual Business Consultation Report". August 2005

**Herron, Kristy,** BSc. M.Ed, Elgin Consulting and Research, "Digby Neck and Islands Traditional Knowledge Consultation Report". July 2005

**Hogg, Dwayne,** M.Sc, P.Eng., Jacques Whitford Environmental Ltd., and MacFarlane, David, M.Sc., P.Geo., Jacques Whitford Environmental Ltd., "Preliminary Hydrogeological Assessment, Proposed Quarry, Whites Cove, Digby Neck, Nova Scotia" December 2002.

**Lizak, John ,** M.Sc, P.Geo., Mineral Valuation and Capital, Inc., "Geological Assessment of the Whites Cove Site" December 2002.

**Moody, Barry,** PhD., "Whites Point Quarry Property Historical Background, Digby Neck, Nova Scotia". July 2002.

Neil, Ken, "Adult Butterfly Habitat and Larval Host Plant Survey of Whites Point, Digby Co., NS" August 2005

**Newell, Ruth E.,** M.Sc., "Plant Survey of Whites Cove Property, Digby Neck, Digby County, Nova Scotia". July 2002

Addendum to report entitled "Plant Survey of Whites Cove Property, Digby Neck, Nova Scotia". August 2002.

**Proulx, Gini,** "A Report on a Botanical Survey, Bilcon Property, Whites Cove, Little River, Digby County, Nova Scotia" November 2005

**Sherk, Susan**, and **David, Jacinthe**, AMEC, "Human Health and Community Wellness" / Public Consultation December 2005

**Strajt, David,** Conestoga-Rovers & Associates, "Whites Point Hydrologic Budget Analysis Whites Point Quarry Digby Neck, Nova Scotia". September 2005

Walker, John, Jacques Whitford Environmental Ltd., "Noise and Air Quality Study at Whites Point Quarry". 26 October 2005

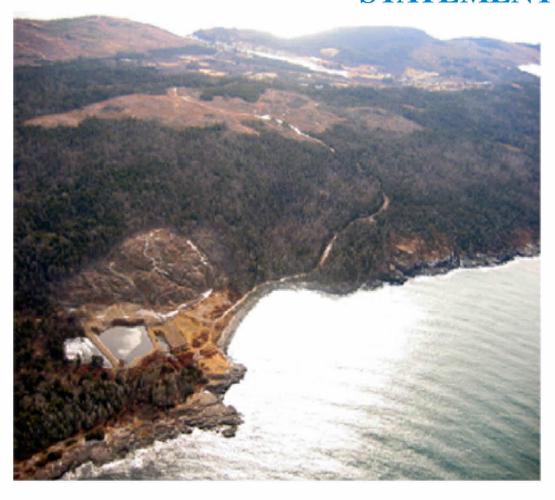
**Watrall, Charles R.,** PhD. "Category C Archaeological Assessment Whites Point/Whites Cove Quarry Project, Digby Neck, Digby County, Nova Scotia Heritage Research Permit Number: A 2002 NS 36". May 2003.



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