

*9.3.5 Economy*

**EIS Reference: EIS Volume VII, Chapter 9, Section 9.3.17**

**INDEX OF COMMENTS**

**9.0 Environments and Impact Analysis**

**9.3 Human Environment and Impact Analysis**

**9.3.5 Economy**

Panel WP1452.....	2
Nova Scotia Department of Environment and Labour WP 1498 .....	36
Fisheries and Oceans Canada WP 1541.....	37
Health Canada WP 1542.....	43
Partnership for Sustainable Development WP 1625.....	45

### 9.3.5 Economy

#### WP 1452 – Joint Review Panel

#### 9.3.9 Economy – WPQ and Marine Terminal

9.3.9.1 – Provide details on the EcoTec Economic Impact Model and a summary of its inputs, outputs and assumptions.

---

#### RESPONSE

The economic impacts for the study have been estimated using an interprovincial input-output model which was developed by Marcel LeBreton (Masters Economics) and is owned by EcoTec Consultants. The model has been in development for over 20 years and is constantly being updated and upgraded with new capabilities.

This model is based on Statistics Canada input-output tables and data from the 1999 to 2002 period. The input-output matrices are at the Large Level aggregation of 476 commodities and 117 industries. Both open (indirect impacts) and closed (induced impacts: consumer expenditures) versions of the models were used to calculate the impacts.

The model is a mixed input-output and econometric model with a number of econometric modules operating around the input-output core. The modules intervene at each round of expenditures to modify coefficients in the input-output tables, resulting in a non-linear model. The model is also dynamic and can generate impacts spread over as many as 15 years after initial expenditures. All Input-Output data as well as the data series used to calculate the coefficients for the econometric modules are from Statistics Canada.

The role of the econometric modules is to reduce the linearity of the input-output core, to have a model that behaves more closely to the actual economy and to provide statistics on economic impacts that go beyond what is traditionally available from input-output models. The two most important econometric modules in the model are :

- A labour market module that uses the statistics generated by the input-output core to calculate the impact on the number of unemployed workers as well as the impact on the unemployment rate by province.
- An elasticity module for consumer expenditures modifies at each round of expenditures the pattern of households expenditures according to changes in per capita income in the previous round of expenditures.

The model estimates economic impacts due to change in economic activity related to (in this case) the construction and the operation of the quarry. The main outputs of the model are:

- Sales by industry;

### 9.3.5 Economy

- Gross Domestic Product;
- Employment by industry;
- Federal and provincial tax revenues;
- Labour market impacts

#### *Model Assumptions*

The main assumptions of the model are:

- No economies of scale resulting from the construction or the operation of the quarry. Given the small size of the quarry with regard to the Nova Scotia economy, this seems like a reasonable assumption.
- The technology used by industries in Digby County as well as in Nova Scotia that are impacted by this project is similar to the technology used in other parts of the province and for other projects. Bilcon has no particular reason to believe that this is not the case: firms working for the quarry (either for construction or as suppliers to operations) are unlikely to have production technologies that are materially different from elsewhere in the province.
- The quarry project will have no measurable permanent impact on wage levels, productivity or consumer behaviour, in aggregate, in either Nova Scotia or in Digby County. Again, this is reasonable given the transitional nature of the construction and the relatively small scale of the quarry once in operation (compared to the total provincial economy).

A simulation always estimates the incremental level of economic activity (as measured by sales, employment, GDP, etc.) resulting from an increase in demand. This increase in demand is represented by the direct expenditures on construction and on the annual operations of the quarry. Figure 1 shows an outline of the structure of the model.

#### *Leakages*

One of the most important notions to understand in local and regional economic development is that of leakages. Leakages are in essence the different ways by which money spent in the area will leave the local economy for other parts of the province, the country and the world.

Leakages are an important determinant of the actual economic benefits of a given expenditure. High leakages will result in relatively low impacts in a local economy and vice versa. For example, the economy of regions such as Southern Ontario is efficient at generating employment because of its ability to keep money spent in the region for a longer period of time.

### *9.3.5 Economy*

The bold red arrows in Figure 1 represent the flows of money leaving the local economy. There are three main sources of leakages that reduce the amount of money available in the local economy: (1) Imports of goods and services, (2) Government taxes, and (3) Savings and retained earnings. Each of the three sources are discussed in more detail below.

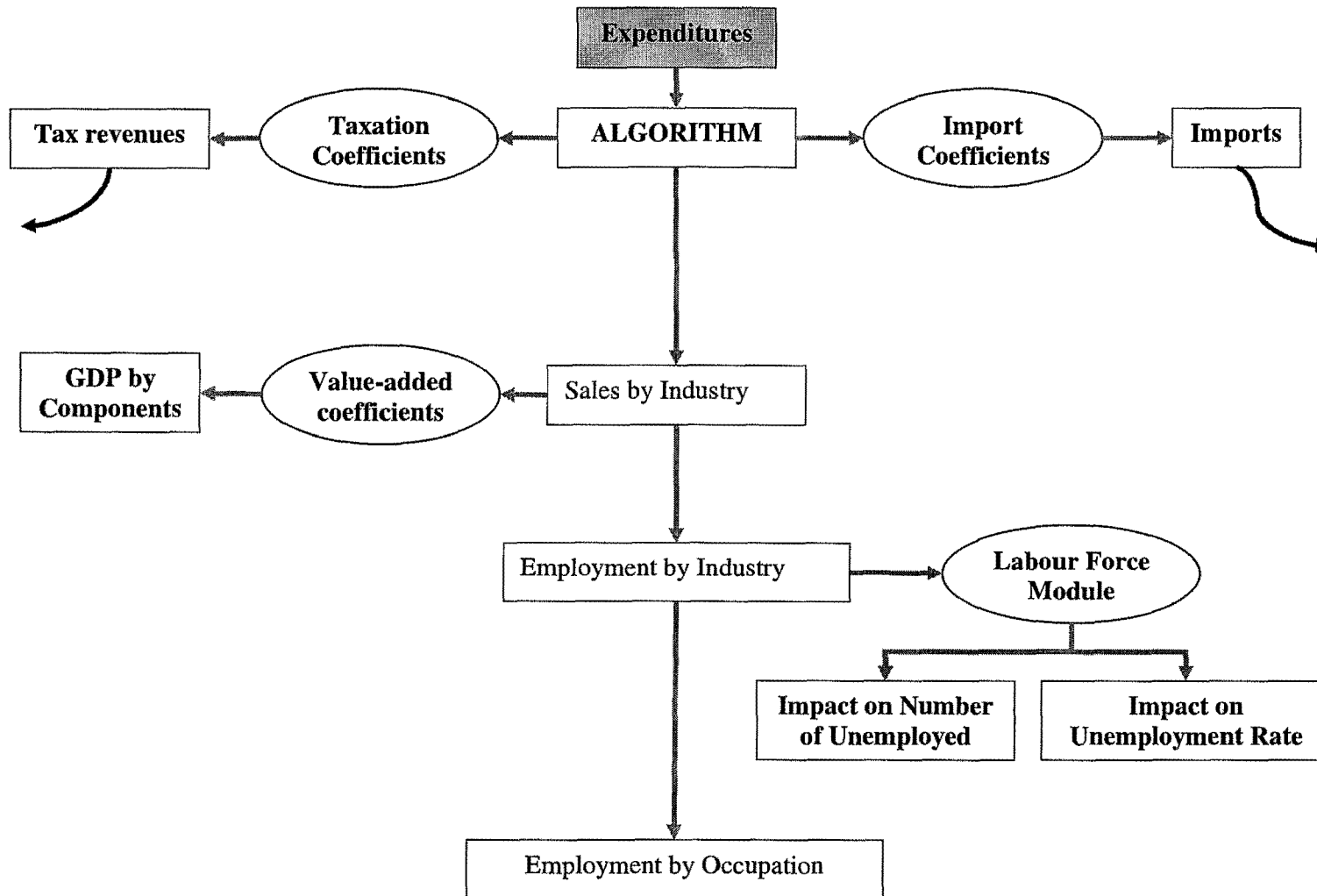
#### *Imports of goods and services*

Imports of goods and services from outside Digby County or Nova Scotia are the most important cause of money leaking out. The vast majority of goods and some services consumed in any given economy are not made locally: they are imported from elsewhere. The smaller an economy is (and the less developed its manufacturing, retail trade and services sectors are), the higher its imports (proportionally) from outside the region. Imports of goods and services take two different routes: either through the retail sector or direct purchases (shopping trips, internet, tourism expenditures, etc.)

#### *Government Tax Revenues*

Federal and provincial tax revenues are the second most important source of leakages for a local economy. Households are the most important source of government revenues with income tax paid on salaries and sales tax (a form of indirect tax). The private sector is the other source of tax revenues through taxes on corporate profits and indirect taxes on production.

9.3.5 Economy



### 9.3.5 Economy

#### *Savings and Retained Earnings*

The third and least important source of leakages is income that either households or businesses have available for purchases but that is set aside for future use. In the case of households this phenomenon is called savings and for businesses it is labelled as profits in the diagram.

#### *Main Algorithm*

A simulation starts with a shock to the economy which enters the model as a data set containing expenditures by goods and services to (in this case) either build the quarry or operate it. The main algorithm is essentially used to allocate the expenditures on each and every goods and services to the industries that produce them. They (the industries) in turn purchase goods and services required to produce the items that have been purchased initially, etc. Figure 2 shows the logical structure of the main algorithm that estimates the volume of sales by industry.

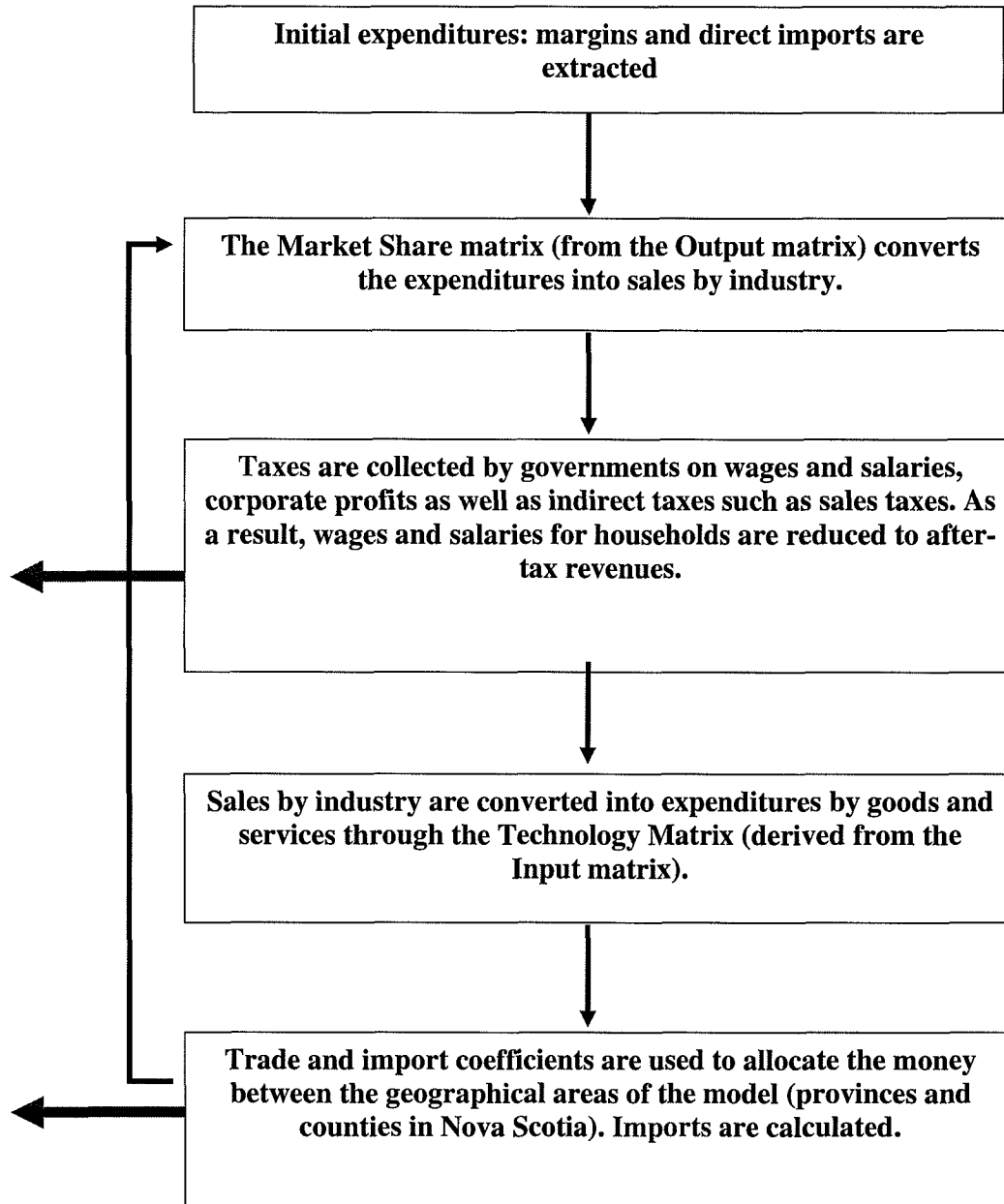
The core of the model operates with a standard input-output algorithm. When expenditures first enter into the model, retail, wholesale and transportation margins are extracted and reallocated to the retail trade, wholesale trade and transportation industries. Import coefficients are applied to the remaining dollar amounts to leak out expenditures for items which are not produced in the province. The dollars remaining in the province are allocated to the industries which produce the commodities. In turn, those industries will consume commodities used to produce the commodities purchased to build and operate the quarry. An interprovincial trade flow matrix is used to allocate production by industries by provinces.

The model continues to iterate until there is no money left in the model (imports, taxes and savings are all leakages which eventually reduce to zero the amount of money spent to either build or operate the quarry). The model then stops and the total impacts by industry are added up from all iterations. The statistic generated by the Input-Output model is called the Gross Production (sales) by industry. Employment is calculated by extracting salaries data by industry from the Gross Production table and dividing it by the average annual salaries by industry for each province.

The Gross Domestic Product (GDP) is calculated by extracting from the Gross Production by industry the primary inputs components: indirect taxes (for example GST), subsidies, salaries and benefits for employees, profits and depreciation for the private sector. Extraction of both (i) salaries to calculate employment and (ii) GDP components is based on coefficients contained in the Use (Technology matrix) tables.

9.3.5 Economy

Figure 2: Structure of the Main Algorithm



### 9.3.5 Economy

#### *Types of impacts*

There are three main types of economic impacts: direct, indirect and induced. The direct impacts are simply the initial expenditures with which a simulation is done: \$50 million in construction costs, \$20 million per year in operating expenditures, etc. Direct employment is, for example, the employees of the quarry working directly for the quarry owner.

#### *Indirect impacts*

Any expenditure made by a given industry can be divided into two main categories: wages and salaries and non-wage items (goods, services and indirect taxes). Indirect impacts result from inter-industry purchases of goods and services.

After-tax industry expenditures can be split between profits (in fact retained earnings) and other expenditures on goods and services. These expenditures will either be made locally or will be purchased directly outside the local economy. Most businesses, especially in the manufacturing sector, purchase a significant amount of goods and services directly from wholesalers or from the producers of those goods and services that are located outside the region.

The local purchases that go directly to local producers of goods and services will remain within the local economy and will be re-spent on wages and salaries, taxes and other goods and services. For example, if initial expenditures made by the quarry involve money spent at a local firm for routine repair and maintenance, this expenditure will initially stay in the local economy.

Other local purchases will be made through retail stores. An example of such expenditure will be a local firm buying office supplies at a local stationary store. The stationary store will keep a portion of the sales (its gross profit margin) and will send the rest of the money outside the region to the manufacturers of the office supplies purchased by the local firm. The stationary store will in turn spend its gross profit margin on items such as wages for employees, taxes, rent, etc.

The portion of the initial expenditure that stays in the local economy for the next round of expenditures is composed of the gross retail trade margins collected on sales in local stores plus the money given directly to local businesses (often mechanical repair shops and business services firms).

The next round of expenditures will go through the same process for non-salary expenditures. This money will be re-spent as expenditures that will again be split into taxes, salaries and expenditures on goods and services other than salaries. This iterative process will continue until the leakages (and taxes and savings) reduce the initial amount of money spent in the local economy to zero. The total amount of money by industry that was collected by local



### 9.3.5 Economy

firms through all the rounds of expenditures represents the indirect sales. All the other impact statistics (employment, GDP, etc.) will be calculated from these indirect sales.

#### *Induced impacts*

The sole source of money for induced impacts is household income. The most important source of household income is wages and salaries. The amount of wages paid by an industry (for example the quarry) is reduced by personal income tax collected at the source on behalf of senior levels of government. The resulting after-tax income is divided into two portions: the largest one are expenditures on goods and services with the rest going towards savings. Most consumer expenditures is made locally with the rest going towards purchases outside the region (shopping trips, tourism or Internet). Local expenditures are split three-ways:

- Shopping in local stores, where governments collect sales taxes. Stores will keep a gross retail margin that will be re-spent locally as salaries and other operating expenses. The rest of consumer purchases will either go to local producers (mostly for personal services) or leak outside the region to pay the producers of goods and services bought by consumers. The latter is the most important source of leakages for a local economy;
- Residential rent. The income received by local landlords will be re-spent into the local economy;
- Some household expenditures are made directly with the producers of goods. For example agricultural products such as U-Pick strawberry operations, local handicraft, etc.

As it was the case for indirect impacts generated by non-salary expenditures, only a small proportion of consumer expenditures stay in the local economy for a second round of expenditures: rent paid to landlords, retail trade margin and the local production of some goods and services purchased by households. After a few rounds of expenditures, the original amount of wages and salaries spent in the local economy will be reduced to zero by the combined effects of imports, taxes and savings.

Total sales by industry that result from the initial amount of wages and salaries spent in the local economy (from initial spending until no money is left in the local economy) is called induced sales by industry. From these sales the model calculates employment by industry and Gross Domestic Product.

*The Panel is surprised that the number of individuals employed in “mining, quarrying and oil well” is so low that it rounds down to zero for all census years shown in Table E-1 (pg 70). Since there are at least two other quarries in the area, verify these figures. Explain why tourism and ecotourism are not included as industries, either separately or together in Table E-1, Pg 70.*

### 9.3.5 Economy

---

#### RESPONSE

The data contained in Table E – 1 of the EIS is modeled from Statistics Canada, Census of Population 1991, 1996, and 2001. The figures presented in Table E – 1 are correct – see reference for Table E – 1. As verification, the Census of Canada Profile data for 2001 Dissemination Areas for Digby Neck and Islands were reviewed. No indication of any employment in mining, quarrying, or gas well was recorded.

There are two other basalt quarries – one in Rossway and one in Tiverton on Long Island. A possible explanation as to why the mining, quarrying, and oil well industries show zero labour force is that these quarries were recently permitted for operation and after Census data was compiled. The Tiverton quarry was permitted March 24, 2003 and the Rossway quarry approved July 28, 2000 with an Amendment approved May 22, 2002 (*pers. com.* Jacqueline Cook, NSDEL 2006). The data in Table E – 1 represents population 15 years of age and over who worked at some time since January 1, in the year prior to the Census. In this case, the 2001 census would not have included the workforce at these two recently permitted quarries. Unfortunately, the 2006 Statistics Canada Census of Population has not yet been compiled. So more current statistics are not available.

Statistics Canada uses North American Industry Classification Codes (NAICS) for industry sector identification and there is no primary or subcategory for tourism or ecotourism. Therefore separate labour force data is not contained in Table E – 1 for tourism and ecotourism. Certain sectors of the tourism industry, such as accommodations, food and beverage services, retail trade and other services may be included under these NAIC industry categories.

*9.3.9.1.2 Identify the “local planning strategy” referred to at the bottom of Pg 80.*

#### RESPONSE

The local planning strategy in this context does not mean a development plan or land use by-law, since they are not in place in the Municipality of Digby. It would have been better to refer to the local economic development strategy.

*9.3.9.1.2 Provide evidence to substantiate the statement that “similar operations in Nova Scotia have not affected the tourism industry in those areas” (Pg 80).*

#### RESPONSE

The EIS in Volume VII, pages 103 - 104 of 9.3.14 Economy–Tourism, sets out evidence with respect to the quarry operation at Cape Porcupine.

Further evidence is set out in Reference Volume VI, Tab 32, Appendix I and II, and provides evidence with respect to Cape Porcupine and Hantsport, Nova Scotia.

### 9.3.5 Economy

The Case Studies completed on Strait of Canso and the Town of Hantsport provides information to help address this question. A summary follows:

#### **Strait of Canso, Nova Scotia**

##### *Situation*

Martin Marietta operates a major aggregate quarry at Cape Porcupine near the Canso Causeway in the Strait of Canso. This quarry exports a significant volume of product on an annual basis to the United States. The ocean-going vessels are similar to those proposed to be used at White's Point. This operation is of interest to Bilcon due to its prominent location and its visibility to tourists. The marine aspect is also of interest due to the interaction between the marine shipping activity and the lobster fishery.

- The Strait of Canso Superport is 20 km long and can handle vessels up to 500,000 dwt. It is central to North America and international shipping routes.
- In 2004, total cargo handled at all facilities was 24.8 million tonnes making it the second largest cargo port in Canada.

##### *Tourism*

The Canso Causeway provides the only road access to Cape Breton Island. The vast majority of visitors access the Island by crossing the Causeway. Cape Breton Island is a world-renowned tourism destination. Conde NESTE Traveller, a National Geographic magazine, recently recognized it as second place in the world as an island travel destination.

The Cape Breton "Tourism Road Map" Destination Development Plan prepared for the Cape Breton Growth Fund Corporation in March 2003 is the most comprehensive document available on the tourism industry on Cape Breton Island.

Their market analysis shows:

- 1 million person-trips take place annually in Cape Breton
- Majority 2/3 are by Nova Scotians
- Visitors from mainland Nova Scotia are their largest market
- Cape Breton – 25%
- Other NS – 41%
- New England – 5%
- Ontario – 8%
- Other US – 11%
- Other Atlantic – 6%
- Other – 4%
- Port Hastings (where the Causeway enters Cape Breton) has the highest visitor traffic flow – 430,000 person trips.
- Behind visiting friends and relatives, sightseeing is the number one activity visitors participate in – 36%

### 9.3.5 Economy

To assess the impact the quarry operation at Cape Porcupine has on the tourism industry, Gardner Pinfold consulted with the manager of the Nova Scotia Visitor Centre located just across the Causeway on the Cape Breton side. This centre is the busiest in Nova Scotia. Visitors to the Centre have a direct view of the quarry located about 2 km across the Strait.

Gardner Pinfold understands that the quarry operation does generate a number of questions from visitors. Although quantitative data is not kept, the manager estimated that on a typical busy day with 2,000 visitors, approximately 40 might ask a question about the quarry. The nature of the questions vary greatly. About half would concern just general curiosity about the operation, where the product goes, etc. The other half could concern questions related to the environment.

Tourists also show genuine concern when dust levels are high and a cloud of dust is visible moving down the Strait. Calls by staff to the operation are usually heeded and dust levels are brought under control.

The Visitor Centre also monitors the blasting schedule so they can post warnings to visitors that they are not experiencing an earthquake. The manager has not heard anyone express a view that the quarry operation has ruined their opinion of Cape Breton and will deter them from making a return visit.

#### **Hantsport, Nova Scotia**

##### *Situation*

Fundy Gypsum currently ships about 1.5 million tonnes of gypsum out of the small port of Hantsport on an annual basis. Hantsport is located in the Minas Basin and vessels transit through the Bay of Fundy to reach the berthing facility. Vessels must arrive in Hantsport just prior to high tide, load within three hours, and depart. The port facilities and storage area for gypsum are located virtually in the downtown. Gypsum arrives at the port via train. It is stored in a storage shed dockside and then is loaded via a new loading system reputed to be the fastest system in North America.

Gardner Pinfold reviewed operations in Hantsport from three perspectives. The impact the cargo handling has on property values, the interaction between the community and the company, and the impact the operation has on the tourism industry.

##### *Tourism*

Hantsport is one of several picturesque small towns that lie in the Annapolis Valley. It is said to be steeped in history of wooden ships and iron men. It actively promotes visits to the Churchill House where the history of ship building is chronicled. Also prominent in its tourism literature is a visit to the community wharf. To quote "one of nature's most extraordinary spectacles the rise and fall of the world's highest tides. These tides lift fishing

### *9.3.5 Economy*

boats and tugboats alike skyward at high tide and then ever so gently sets them on the ocean floor at tide's ebb. Hantsport is set to be, this fall, the home of North America's fastest ship loading facility. With every freighter that arrives, 40,000 tonnes of raw gypsum must be loaded and the boat departed within three hours, at full tide." – (Written just prior to completion of new facility).

Another positive tourism/mining industry interaction relates to the rail service in the area. The local rail line is owned by Windsor Hantsport Rail Company. Much of its business relates to providing rail service from the gypsum mines to Hantsport. Up until two years ago, this rail line offered tourists a special trip on a rail car to tour from Windsor to Grand Pre Park. Unfortunately service had to discontinue not because of a lack of customers, but due to equipment problems that were too expensive to fix.

Bilcon believes its findings related to the work done to review circumstances in Sechelt also provide information that helps address this question.

#### **Sechelt, British Columbia**

##### *Situation*

Construction Aggregates operates a 1,000-acre pit on the Sechelt peninsula located about 30 miles northwest of Vancouver. Sechelt is home to the largest open pit mine and gravel mine operation in North America. Opened by Construction Aggregates Ltd. (CAL) in 1989, the mine is located on the Sechelt Indian Band lands and now has an expected 40-year life span.

The community of Sechelt is home to about 8,000 residents and is located at about the mid point of the Sunshine Coast peninsula.

At full capacity, the quarry produces about 6.6 million tonnes per year, and ships somewhere between one million and three million tonnes per year to the United States. The Sechelt Nation receives about \$3 million per year in royalties.

Gardner Pinfold has reviewed Sechelt's experience as host to major quarry operations and its impact on the tourism industry. Following are findings regarding tourism/recreation at Sechelt:

##### *Tourism*

Since the early 1890s, visitors have come to the Sunshine Coast for holidays, creating Sechelt's early reputation as a tourism destination that continues to this day. Surrounded by ocean, Sechelt provides access to the Strait of Georgia and Sechelt Inlet, gateway to the popular sailing destinations of Jervis Inlet and Princess Louisa Inlet. The local mountains provide numerous opportunities for hiking, mountain biking and backcountry snowsport activities.

### 9.3.5 Economy

The aggregate marine loading facility operates in an area where there is both recreational and some fishing vessel activity.

The Sechelt Nation has a small marina that is currently used by some of the Band's fishing boats and is available for recreational boaters to use. It does not get heavy use because there are no services. The Sechelt area currently has a Marine Access program aimed at re-connecting with the waterfront to increase its attractiveness and use for recreational and tourist purposes. Two projects are in their initial stages, both within a few hundred metres of the marine loading facility. One project is the creation of a waterfront park that will have a focus on children. The other project is to expand the current marina to a 125-slip marina to attract permanent and transient boaters. Attracting small pocket cruise ships to this facility is part of the thinking. There is heavy cruising traffic on the Georgia Strait off Sechelt that currently passes by without stopping because of the lack of adequate marina facilities. Another proposed project is to install a floating wharf off the concrete wharf for day traffic. The concrete wharf is not functional now other than for pedestrians.

A local tourism consultant provided the following comments related to impact of the quarry operation on the tourism industry. Noise is noticeable at times and could be a factor, but it is mainly in the background. The noise from the quarry operation is much less of an issue than the engine roar associated with the take-off of float planes (two companies) that start about 07:30 when bed and breakfast clients apparently wish to be sleeping. Her view was that the Sunshine Coast is still a resource-based community and the gravel operation is part of the mix. She does not see it as a deterrent to further tourism development and in fact would like the company to develop a tour package for visitors so that the gravel operation could serve as a tourism asset.

*9.3.9.2 Analysis, Construction – Provide a breakdown of capital expenditure from the Project that the Proponent commits to spend in Canada, in Nova Scotia and in Digby County, compared to that committed elsewhere. Provide the same breakdown for construction employment estimates.*

---

#### RESPONSE

Following is a breakdown of the proposed capital expenditures for mobile equipment, plant/infrastructure, and marine terminal infrastructure for the Whites Point Quarry and Marine Terminal project. The "source" column identifies where the particular item will be procured. All costs are in 2004 Canadian dollars.

9.3.5 Economy

*Quarry Mobile Equipment*

Equipment	Source	Cost
1 – Caterpillar 990 loader (new)	NS (dealer)	\$ 1,248,000.00
2 – Caterpillar 773D rock trucks (new)	NS (dealer)	\$ 1,492,480.00
1 – Caterpillar 773D rock truck (used)	NS (dealer)	\$ 512,000.00
1 – Caterpillar D9R bulldozer (used)	NS (dealer)	\$ 512,000.00
1 – Caterpillar 345B excavator (used)	NS (dealer)	\$ 348,000.00
1 – Caterpillar 988F loader (new)	NS (dealer)	\$ 736,000.00
1 – Caterpillar 980F loader (used)	NS (dealer)	\$ 160,000.00
1 – Caterpillar 914 loader (new)	NS (dealer)	\$ 112,640.00
2 – 4000 gallon water trucks (used)	NS	\$ 172,800.00
1 – 75 ton crane (late model used)	NS	\$ 512,000.00
1 – service truck for oil, grease, fuel (used)	NS	\$ 147,200.00
2 – welding trucks (used trucks, new welders)	NS	\$ 57,600.00
2 – trailer mounted welders (new)	NS	\$ 35,840.00
2 – 125 cfm compressors (new)	NS	\$ 35,840.00
2 – skid mounted welders (new)	NS	\$ 23,040.00
1 – site flatbed truck (used)Dig	by Co.	\$ 12,800.00
1 – site flatbed truck (new)	Digby Co.	\$ 48,640.00
1 – Caterpillar 232B skid steer loader (new)	NS (dealer)	\$ 40,960.00
1 – Caterpillar 252B skid steer loader (new)	NS (dealer)	\$ 46,080.00
1 – work boat (used)	NS	\$ 250,000.00
1 – barge (used)	NS (dealer)	\$ 125,000.00
1 - drill rig T4BH 400psi @ 1200 cfm (new)	NS(dealer)	\$ 500,000.00
		\$ 7,128,920.00
	freight @5%	\$ 356,446.00
<b>Total mobile equipment</b>		<b>\$ 7,485,366.00</b>

Plant/Infrastructure	Source	Cost
1 – jaw crusher w/feeder and 150 ton rock box	U.S.	\$ 960,000.00
1 – 7' Nordburg standard crusher (used)	U.S.	\$ 384,000.00
1 – HP 500 Nordburg crusher (new)	CDN	\$ 544,000.00
3 – TD screens (new 8x24)	CDN	\$ 307,200.00
40 – conveyors (misc. length and width)	NS	\$ 3,072,000.00*
concrete foundations (1400cu.yds. @\$250.00)	Digby	\$ 350,000.00*
sand processing equipment	CDN	\$ 249,600.00
water lines and pumps	NS	\$ 95,000.00*
1 – water clarifier tank, pumps, erection (used)	U.S.	\$ 160,000.00
dewatering screens for sand products	CDN	\$ 102,400.00

9.3.5 Economy

1 – 600 kw generator	NS	\$ 108,800.00
freight on equipment	CDN	\$ 250,000.00
site work – drilling and blasting	NS	\$ 200,000.00*
site work – grading and hauling	Digby	\$ 200,000.00*
plant construction and erection	Digby	\$ 1,250,000.00*
electrical work	NS	\$ 1,000,000.00*
shop, warehouse, office building (8000 sq.ft.)	Digby	\$ 480,000.00*
1 – 20,000 gallon double wall fuel tank	NS	\$ 40,000.00
install fuel tank	NS	\$ 40,000.00*
misc. shop and service equipment	NS	\$ 85,000.00
misc. welding equipment	NS	\$ 20,000.00
compound site development (fencing, well, septic, parking)	Digby	\$ 100,000.00*
environmental control structures	Digby	\$ 50,000.00*
site reclamation	Digby	\$ 28,000.00*
load out tunnel (1000'x12'x12')	Digby	\$ 1,200,000.00*
automation and control	Digby	\$ 350,000.00
lighting	NS	\$ 250,000.00*
upgrade access road (Hwy #217 to property line)	Digby	\$ 100,000.00*
power and communications (Hwy #217 to property line)	Digby	\$ 60,000.00*
		\$12,036,000.00
contingency @10%		\$ 1,203,600.00
*engineering and design @10%		\$ 847,500.00
<b>Total plant and infrastructure</b>		<b>\$14,087,100.00</b>



9.3.5 Economy

*Marine Terminal and Infrastructure*

<b>Steel Pipe Pile Dolphins</b>	<b>Source</b>	<b>Cost</b>
mobilization, demobilization, pile driving templates	NS	\$ 630,000.00
steel pipe piles – driving, infill, jackets, rock anchors, test	NS	\$ 2,220,000.00
cast in place concrete – pile caps and curbs	Digby	\$ 600,000.00
fender piles, fenders, bollards, ladders, kisby	NS	\$ 765,000.00
catwalks, bridge, bridge abutments	NS	\$ 475,000.00
armour stone	NS	\$ 120,000.00
		\$ 4,810,000.00
Contingency @10%		\$ 481,000.00
		\$ 5,291,000.00
Engineering and design @15%		\$ 793,650.00
		\$ 6,084,650.00
<b>Marine Conveyors and Radial Arm Ship Loader</b>	<b>Source</b>	<b>Cost</b>
civil works	NS	\$ 5,222,400.00
ship loader and conveyors	NS	\$7,833, 600.00
		\$13,056,000.00
<b>Total Marine Terminal</b>		<b>\$19,140,650.00</b>

*Construction Employment*

Following is a breakdown of the construction workforce for the marine and land components of the Whites Point Quarry and Marine Terminal. The source column indicates the geographical area for obtaining the necessary workers. It is anticipated that marine construction will take one year and land construction will take two years.

**Marine Construction Workforce**

<b>Occupation</b>	<b>Source</b>	<b>Person Years</b>
steel fabricators (ship loader)	NS/Maritimes	36
off-site marine contractor	NS/Maritimes	5
On-site marine contractor	Digby Co./NS	14
Electrical	Digby Co./NS	4
Mechanical	Digby Co./NS	3
Engineering	NS/Maritimes	9
Environmental monitoring	Digby Co.	<u>2</u>
		73

9.3.5 Economy

Land Construction Workforce

Occupation	Source	Person Years
Land clearing	Digby Co.	2
Survey	Digby Co.	1
Sitework	Digby Co.	12
Portable crushing plant (aggregates)	Digby Co.	12
Steel fabrication and erection	Digby Co.	32
Painting	Digby Co.	2
Electrical work	Digby Co./NS	20
Concrete construction	Digby Co.	12
Engineering	Digby Co./NS	2
Safety and environmental inspector	Digby Co./NS	2
Supervisor	Digby Co.	2
Environmental controls and landscape	Digby Co.	3
Training, job skill and safety	Digby Co./NS	2
Erect multi-plate tunnels	Digby Co.	2
Building construction	Digby Co.	8
		114

Total construction workforce equals 187 person years (1 person - year equals 2000 hours)

9.3.9.2 Analysis, Operation – Provide a breakdown of the calculations concerning employee salary and requirements to allow the Panel to verify and understand the situation. Include, for example, a listing of the jobs and their respective salaries, the requirements of different jobs, the hours of work and any benefits included in the salary and those that are in addition to the salary. Clarify whether the “annual salary” is based on actual earnings over 44 weeks (as projected for the operating season). How many workers will be laid off during the non-operating season and how many assigned to other tasks?

**RESPONSE**

Following is a breakdown of the employment schedule for the Whites Point Quarry and Marine Terminal. The breakdown identifies the type of job and anticipated hourly wage rate for each. Forty-four weeks of production and eight weeks of site development and annual maintenance are planned. The work-week is based on forty-eight hours. During the forty-four weeks of production, a total of thirty-four employees and two shifts will be required. During the eight week period of site development and annual maintenance, one shift of sixteen employees will be required. All employment is expected to be from the Digby County region with the majority from the local community. Wages are based on 2004 wage rate estimates.

9.3.5 Economy

*Production Employment and Wage Schedule*

<b>First Shift (0600 to 1400 hours)</b>		<b>Shift Total 20*</b>
<b>#</b>	<b>Rate</b>	<b>Annual Salary</b>
1 – plant operator	\$15.00/hr.	\$ 31,680
1 – quarry face loader operator	\$16.00/hr.	\$ 33,792
2 – quarry rock truck drivers	\$13.50/hr.	\$ 57,024
1 – class A mobile equipment mechanic	\$17.00/hr.	\$ 35,904
2 – ground persons/labour	\$12.50/hr.	\$ 52,800
1 – electrician (back up plant operator)	\$17.00/hr.	\$ 35,904
1 – quality control tech	\$14.00/hr.	\$ 29,568
1 – fuel man/greaser	\$13.50/hr.	\$ 28,512
1 – water truck driver	\$13.00/hr.	\$ 27,456
2 – heavy equipment operators	\$15.00/hr	\$ 63,360
1 – office clerk	\$14.00/hr.	\$ 29,568
2 – welder repair & fabrication	\$15.50/hr.	\$ 65,472
1 – rock driller	17.00/hr.	\$ 35,904
1 – rock driller assistant	\$13.50/hr.	\$ 28,512
1 – environmental tech	\$20.00/hr	\$ 42,240
		\$ 597,696

Operations Manager included in total – Salary excluded from table.

<b>Second Shift (1400 to 2200 hours)</b>		<b>Shift Total 14</b>
<b>#</b>	<b>Rate</b>	<b>Annual Salary</b>
1 – plant operator	\$15.50/hr.	\$ 32,736
1 – electrician (back up plant operator)	\$17.50/hr.	\$ 36,960
2 – ground persons/labour	\$13.00/hr	\$ 54,912
2 – welder repair & fabrication	\$16.00/hr.	\$ 67,584
1 – quality control tech	\$14.50/hr	\$ 30,624
1 – shift foreman	\$18.50/hr.	\$ 39,072
1 – mechanic, fuel, greaser	\$14.00/hr.	\$ 29,568
1 – quarry face loader operator	\$16.50/hr	\$ 34,848
1 – heavy equipment operator	\$15.50/hr.	\$ 32,736
2 – quarry rock truck drivers	\$14.00/hr.	\$ 59,136
1 – water truck driver	\$13.50/hr.	\$ 28,512
		\$ 446,688

### 9.3.5 Economy

#### *Annual Maintenance Employment and Wage Schedule*

Maintenance Shift (0600 to 1400 hours)		Shift Total 16*
#	Rate	Annual Salary
1 – quarry face loader operator	\$16.00/hr.	\$ 6,144
1 – class A mobile equipment mechanic	\$17.00/hr.	\$ 6,528
1 – ground persons/labour	\$12.50/hr.	\$ 4,800
2 – electrician	\$17.00/hr.	\$ 13,056
1 – quality control tech	\$14.00/hr.	\$ 5,376
1 – office admin	\$14.00/hr.	\$ 5,376
4 – welder repair & fabrication	\$15.50/hr.	\$ 23,808
1 – shift foreman	\$18.00/hr.	\$ 6,912
1 – mechanic, fuel greaser	\$13.50/hr.	\$ 5,184
2 – quarry truck drivers	\$13.50/hr.	\$ 10,368
		\$ 87,552
	Total wages	\$ 1,131,936

Operations Manager included in total – Salary excluded from total. It should be noted that benefits are not included in the above wages.

The following table is derived from a Labour Market Information from Human Resources and Social Development. The table outlines wage rate averages for Southwest Nova Scotia for various disciplines applicable to the quarry operation.

**Table WR – 1**  
**Wage Rate Averages – Southwest Nova Scotia**

Occupation	NOC Code	Avg. Wage (\$/hr.)	High Wage (\$/hr.)	Low Range (\$/hr.)	Reference Period
Supervisors, Quarry	8221	19.60	37.85	16.00	2005
Mining Engineers	2143	17.42	28.85	10.25	2005
Heavy Equipment Op.	7421	13.75	20.80	10.70	2004
Crane Operators	7371	22.05	28.50	10.60	2004
Material Handlers	7452	13.15	16.50	7.15	2006
Truck Drivers	7411	16.30	23.65	9.00	2004
Welders	7265	17.15	20.50	11.90	2004
Heavy Equipment Mechanic	7312	16.75	20.00	10.00	2004
Industrial Electricians	7242	19.45	31.55	10.50	2004
Drillers and Blasters	7372	11.90	18.00	9.00	2004
Admin. Officer	1221	16.05	22.15	8.50	2005

Source: Labour Market Information Bulletin from Service Canada

### 9.3.5 Economy

9.3.9.2 Clarify the basis upon which the estimates of taxation revenues to federal and provincial governments are derived.

---

#### RESPONSE

The tax revenues are calculated by using taxation coefficients derived from Statistics Canada and the Canada Revenue Agency publications about federal and provincial tax revenues by province. The taxation coefficients are applied to salaries, profits and are also used to allocate indirect taxes between both senior levels of governments.

At each round of expenditures of the model, tax revenues for the provincial and federal governments are calculated and subtracted from the model before the money is allowed to flow to industries. These tax revenues include: personal income tax, tax on corporate profits, sales taxes and other indirect taxes.

Taxes are collected on wages and salaries and corporate profits through the use of taxation coefficients while indirect taxes are added to the government tax revenues and indirect taxes. The indirect taxes are split between the federal and provincial governments according to the latest data from the National Accounts (Statistics Canada).

The amount of money collected by governments is subtracted from wages and salaries and profits at each round of expenditures. The formulas are:

$$\text{Income tax revenues} = \text{Income tax coefficients} \times \text{Wages and salaries}$$

$$\begin{aligned} \text{Net wages and salaries that are available for households to spend} = \\ \text{Wages and salaries} - \text{Income tax revenues} \end{aligned}$$

$$\text{Tax on corporate profits} = \text{Corporate tax coefficients} \times \text{Profits}$$

$$\text{After-tax profits} = \text{Profits} - \text{Tax on corporate profits}$$

A total of 32 personal income tax coefficients (16 federal and 16 provincial) are in the model for 16 different income brackets. These are effective taxation rates, e.g. they are calculated by dividing federal and provincial income tax revenues by total income of tax filers by income bracket. The workers of the 95 industries in the model that provide employment are submitted to different tax rates depending on the average salary in each industry.

It should be stressed here that tax revenues calculated by the model have very little to do with the profitability of the project which is the subject of an economic impact simulation. By far, the largest source of government tax revenues is personal income tax, followed by indirect taxes such as sales taxes.

### 9.3.5 Economy

*9.3.9.3 Given the level of concern raised in the community over the Project's potential effects on the economy of fishing and tourism, what possible community mitigation measures has the Proponent considered?*

---

#### RESPONSE

While it is recognized that there is concern in the community over the Project's potential effects on the economy of fishing and tourism, Bilcon's position is that there will be no negative effect. Accordingly, Bilcon has not considered mitigation measures.

*9.3.10 Harvesting of sea cucumbers and dulse occurs in the area. Are these fisheries and harvesting activities included in proposed compensation plans?*

---

#### RESPONSE

An active sea cucumber fishery has been observed in nearshore waters off Whites Point. This is an "exploratory" fishery with no additional licenses presently being considered (*pers com.* Ann Sweeney, DFO). Sea cucumbers are fished during the non-lobster fishing season with mobile gear (dragging) in nearshore waters. One boat has been observed fishing off Whites Point. Since this is a mobile gear fishery, shipping schedules from and to the Whites Point Terminal would be made available, upon request, to sea cucumber fishers in the area. No compensation plan is presently being considered by Bilcon for this mobile gear fishery.

Traditional knowledge investigations indicate dulse harvesting can take place in the Bay of Fundy including the waters off Digby Neck and Islands (*pers com.* Wanda VanTassel). Although Bilcon has not observed dulse harvesting at Whites Point, the presence of dulse was identified during intertidal investigations. Dulse harvesting in this area is generally conducted from land, preferably in the vicinity of easy access or from boats only in sheltered areas along the coast. Bilcon has not observed active dulse harvesting along the quarry coastline nor does traditional knowledge indicate the area is a popular harvest area. This is due mainly to the inaccessibility of the shoreline by land and the exposed coastline for boats. As mentioned in the EIS, Bilcon intends to allow fishers access to the coastline and an improved quarry road is planned to provide easier access. This road would be accessible to shore fishers upon gaining permission from the quarry manager. Based on this proposed access to accommodate dulse or periwinkle harvesters, no compensation plan is presently being considered by Bilcon.

In addition to the above fishery and harvesting activities, an active gill net fishery was also observed in nearshore waters off the Whites Point quarry coastline in 2002. This "fixed gear" fishery has not been observed operating along the Whites Point coastline in the past few years. It is our understanding that this fisherman has retired. Therefore, no compensation is presently being considered by Bilcon.

### 9.3.5 Economy

9.3.14 During the scoping sessions, members of the public suggested that the effects on tourism could extend beyond the immediate project area, and might affect a large region of Southwest Nova Scotia. Justify the boundaries chosen.

#### RESPONSE

While it is noted that tourism is an important component of the local economy, the effect is mitigated by the fact that the quarry will not be visible from surrounding land-based tourism attractions and that the majority of tourists from adventure tour boats will experience views of the quarry site from a distance at which the site will no longer dominate the view shed or be visually intrusive. The magnitude of the effect is low, the geographic extent is regional and the overall effect has been determined not significant.

Please refer to Impact Evaluation Table 3-16 – Economy, in Section 8.1 Impact Assessment Methodology in this submission.

9.3.14.2 Describe what is known about the gender and household characteristics of employees in the tourism sector in the region. (For instance, how many households have more than one member employed in the tourism sector?) What proportion of tourism businesses are family-run and owned?

#### RESPONSE

In 2003/2004 Elgin Consulting and Research investigated tourism businesses on Digby Neck and Islands. Following is a list of tourism businesses operating at that time by name, type, location, operational structure, season of operation and employees. The general gender composition of restaurant and accommodation employees is female and well over 90%, while gender composition of adventure tour operator's employees is generally 50% female and 50% male. Nearly all of the tourism businesses operating on the Neck and Islands are family owned and operated. Employees are generally from the local community.

#### *Crafts/Gifts/Galleries*

Spruce Grove Arts & Crafts – Centreville	Family operated with 2 full-time employees
Brambles & Roses Gifts – Freeport	Family operated with 2 full-time employees
Gallery by the Sea – Tiverton	Family operated with 2 full time employees
Ice House Gift Shop – Westport	Family operated with 2 full-time employees
Well House Curios – Central Grove	Family operated with one artist
Small Ideas Crafts & Gifts – Freeport	Family operated with 2 full-time employees
The Olde Lamplighter Gift Shop – Westport	Family operated with 2 full-time employees

9.3.5 Economy

*Accommodations and Restaurants*

Graham's Pioneer Retreat – Centreville	Open May to September Operated by 2 family members
Olde Village Inn – Sandy Cove	Open June to September Operated by 2 family members Has 6 restaurant employees
Rambling Rowes – East Ferry	Open May to September Operated by 2 family members <i>(closed 2005)</i>
Direct Descendants Guest House – Tiverton	Open May to September Operated by 2 family members
Fisherman's Needle – Bear Cove	Open May to September Operated by 2 family members
Seacliff Bed & Breakfast – Tiverton	Open May to September Operated by 2 family members
Ruggles Guest House – Central Grove	Open May to September Operated by 2 family members <i>(This establishment was closed for the majority of the previous season)</i>
Tiny tattler – Central Grove	Open April to October Operated by 2 family members Has 6 restaurant employees
Freeport House Bed & Breakfast – Freeport	Open April to October Operated by 2 family members <i>(This establishment closed at the end of the 2004 season)</i>
Sunset Over the Bay – Freeport	Open May to September Operated by 2 family members
Brier Island Lodge – Westport	Open April to October Has 37 employees
Dock & Doze – Westport	Operated by 2 family members <i>(This establishment did not open for the 2004 season)</i>
Mariner Restaurant – Sandy Cove	Open April to October Operated by 2 family members Has 3 restaurant employees <i>(closed 2005)</i>



**9.3.5 Economy**

Petite Passage – East Ferry	Open April to October Operated by 2 employees Has 4 restaurant employees
Ferry Take-Out Seaside Lunch – Tiverton	Open April to October Operated by 2 family members Has 2 restaurant employees
Lavinia’s Catch – Freeport	Open April to October Has 7 restaurant employees

**Campgrounds**

Whale Cove – Whale Cove	Open June to September Operated by 2 employees Has 1 restaurant employee
Freeport Campground – Freeport	Open June to September Operated by 2.5 family members ( <i>1 part-time</i> ) ( <i>closed 2005</i> )
Moby Dick – Central Grove	Open June to September Operated by 2 family members

**Adventure Tour Operators**

Brier Island Whale and Seabird – Westport	Open June to September
Freeport Whale and Seabird – Freeport	Open June to September Operated by 1 family member with 3 employees This is a lobster fisherman who uses his boat for tours in the off-season
Mariner Cruises – Westport	Open June to September
Basin Charters – Digby	Open June to September Family operated with 4 employees
Bay to Bay Adventures – Little River	Open June to September Operated by 1 family member with 4 employees This is a lobster fisherman who uses his boat for tours in the off-season
Cetacean Boat Tours – Westport	Open June to September

### 9.3.5 Economy

Digby Neck Whale Watch – East Ferry	Open June to September Operated by 2 family members with 3 employees This is a lobster fisherman who uses his boat for tours in the off-season
Ocean Explorations – Tiverton	Open June to September Operated by 1 family member with 6 employees This is a lobster fisherman who uses his boat for tours in the off-season
Petite Passage Whale Watch – East Ferry	Open June to September Operated by family members with 5 employees This is a lobster fisherman who uses his boat for tours in the off-season
Pirates Cove – Tiverton	Open June to September Operated by family members with 5 employees This is a lobster fisherman who uses his boat for tours in the off-season

*9.3.14.3 Mitigation – The paragraph does not describe mitigation measures. Public consultations revealed several issues of concern to the community –for example, a heritage centre and recreational facilities – that might suggest possible mitigation measures.)*

#### RESPONSE

As noted in the answer to 9.3.9.3 above, Bilcon maintains that there is no evidence of a negative effect by the Project on the tourism industry and no mitigation measures have therefore been proposed. Notwithstanding this finding, Bilcon is certainly prepared to meet with local community groups to discuss how it can assist these groups. It should be pointed out that Bilcon has offered to provide assistance to the Discovery Centre but the offer was declined. It should also be noted that Bilcon has sponsored the October 21<sup>st</sup>, 2006 local trade mission to Scotland, part of whose mandate is the tourism sector. Bilcon also recently sponsored the October 14<sup>th</sup>, 2006 Centre for Women in Business Discovery Expo held in Digby.

#### 9.3.15 Economy – Land Use and Value

*9.3.15.3 Clarify the process by which residents may redress concerns about their wells being affected by the Project. Consider a “no fault” mitigation process.*

#### RESPONSE

The response to the panel’s question under 9.1.3.3, Bilcon has set out the criteria Bilcon will apply in adjudicating claims that quarrying operations have affected water supply or quality.

### 9.3.5 Economy

Bilcon has made it clear that claimants will not be expected to litigate and that a no fault mitigation process will be established.

*In some situations, septic systems could be affected by blasting activities. Provide evidence to substantiate the comment that "These systems will not be affected by the project" (pg 108)*

---

#### RESPONSE

On-site sewage disposal systems are installed in surface materials or occasionally above ground if the water table is high. Both field systems and contour systems are completed in the top three feet of the soil layer and the effluent distribution pipes are laid in clean crushed rock which provides a poor transmissivity to ground vibration. Ground vibration at the foundation of the nearest structure to blasting operations will be monitored to ensure compliance with the Pit and Quarry Guidelines or the conditions established in the permit for the project.

The Nova Scotia Department of Environment and Labour, which is the authority issuing permits for the installation or repair of on-site sewage disposal systems, advise that they have no record of an on-site sewage disposal system being damaged by blasting activities. This would include blasting from mines, quarries and infrastructure (e.g. roads) construction. *(Personal Communication: D. Bruce Arthur)*

*9.3.15.6 Property Values – Provide proper data on the property values or properties that may be affected by the Project to determine baseline conditions and to verify the accuracy of the predicted effects, should the Project proceed. Include comparative data from other coastal areas and from the province as a whole. Include a historic component on assessment records to capture relative values prior to the announcement of the Project.*

---

#### RESPONSE

Properties in Nova Scotia are assessed by the market value valuation method. Residential properties are valued by adding the value of the land, building and things such as decks, garages, etc. together, and then comparing the total value to actual property sales that occurred in that area in recent years. Provincial assessors determine the assessment based on the market value of the property as of a specific date set every year. Market value is the approximate price most people would be willing to pay for a property and the price at which the owner would be willing to sell. This value is determined through market analysis and building costs. The most common reason for change is that the market value of the property has increased or decreased due to changes in property values in the local community. The 2006 market value assessment reflects the physical state of the property as of December 1, 2005 and is based on market value as of January 1, 2004.

### 9.3.5 Economy

The following table, Table PV-1, reflects the annual percent change and average over time in residential values for all counties that make up the Southern Statistical Region of Nova Scotia and for the Province from 2001 to 2006. Digby County has had by far the lowest average increase in value in comparison to the other counties in the region and the average lags well behind that of the Province. However, it is not believed that this statistic adequately reflects the pattern of change that has occurred on Digby Neck and Islands.

**Table PV-1 Annual Percent Increase – Residential Property Values**

	2001	2002	2003	2004	2005	2006	Avg.
Digby	0.46	1.50	2.92	3.15	1.96	3.9	2.32
Yarmouth	0.86	3.14	3.40	7.01	5.40	5.60	4.24
Shelburne	-0.14	2.12	2.15	5.40	14.19	8.80	5.42
Queens	0.03	1.57	1.76	3.68	8.93	13.10	4.85
Lunenburg	1.84	5.80	3.61	10.05	8.73	10.21	6.71
Nova Scotia	1.42	2.54	5.51	6.12	6.88	9.90	5.40

Source: Service Nova Scotia/special tabulation

A review of property assessment data maintained by Service Nova Scotia and Municipal Relations [www.nsassessment.ca](http://www.nsassessment.ca) was conducted for the Little River area in order to establish baseline property value data. Property values of 50 residences within an approximate radius of two kilometres of the proposed Whites Point quarry project were investigated. The data gathered includes values prior to the announcement of the proposed quarry (2001) through to proposed values for 2007 – refer to Table PV-2.

Table PV-2 illustrates the percentage change in assessed values over time for individual properties, the aggregate change and average annual change in value. The percentage change in value for individual properties from 2001-2006 varied significantly from a low of 11.81% to 247.66%. The overall average change in value of the 50 properties investigated was approximately 35.52% and the average annual increase in value was roughly 6.30%. The proposed assessment values for 2007 reflect a relatively significant increase (13.47%) over 2006 assessments. Incorporating the proposed increase raises the average annual change in value to approximately 7.5%. It should be noted that the changes in value for the 15 residences within the primary zone of influence (800 metres of the active quarry area) of the proposed Whites Point quarry were very similar. The percentage change between 2001 and 2006 was 34.69% with an annual average percent change of 6.19%. The increase in value of these properties based from the proposed assessment value for 2007 would be 13.91% raising the average annual percent change to 7.48% from 2001-2007.

### 9.3.5 Economy

Comparative residential property assessment data was also analyzed for residences within the Digby Neck and Islands region as well as other coastal communities in Nova Scotia. A random sample of 15 properties in Whale Cove, Sandy Cove, Freeport, and Westport were compiled in order to establish a baseline within the primary region of focus. Residential property assessment data was also compiled for Parkers Cove, a small fishing village on the Bay of Fundy in Annapolis County; Hantsport, an industrial area including residences in close proximity to the Fundy Gypsum quarry ship loading facility and Chester, a coastal community on the South Shore of Nova Scotia experiencing moderate real-estate growth. Property assessment data for these seven coastal communities is presented in Tables PV – 3 through PV-9.

The communities of Whale Cove, Sandy Cove and Freeport experienced slightly lower increases in assessed property value from 2001-2006 as compared to the Little River area. The percentage increase for each community was 28.77%, 32.81% and 28.85% respectively with average annual increases of 5.22%, 5.88% and 5.25%. The percent change based from the proposed values for 2007 are in line with that of the Little River area with the exception of Freeport. The proposed property values for Freeport indicate only a modest increase in value (0.95%) as compared to that of Little River (13.47%), Sandy Cove (14.61%), Whale Cove (13.95%). Of note, assessed values for 10 of the 15 properties, or two-thirds, investigated in Freeport are expected to decline in value based from the proposed values for 2007.

The community of Westport on Brier Island had the greatest level of increase of the communities investigated within the Digby Neck and Islands region. Property assessments for the 15 properties chosen increased 47.25% from 2001 to 2006 or an increase of a little over 8% on average per year. The proposed increase for 2007 is 14.36%, which would increase the average annual percent change experienced from 2001 to 9.13%, the highest level of increase of the communities studied.

The community of Parkers Cove, Annapolis County was identified as a comparable area to Little River due to the community's size, geographic and industry base similarities (fishing village with fishery related infrastructure, modest retail and tourism base and a small active quarry within 2km's). Similarly, assessment values for Hantsport, Kings County were compiled in order to gauge what effects a similar type project (quarry load-out infrastructure and marine terminal) has had on property values for properties adjacent to a comparable industrial base.

Parker's Cove experienced the lowest level of property value increase of the communities studied. Property assessments increased 18.71% from 2001-2006 with an annual average increase of only 3.53%. However, the annual change in value for the properties selected is expected to increase by 11.10% over 2006 values based from the proposed property value

### *9.3.5 Economy*

increase for 2007. Property assessments in Hantsport increased 28.5% from 2001 to 2006 with an annual average increase of 5.21%. This level of increase is similar to that of Whale Cove and Freeport.

A random sample of properties from the community of Chester, Lunenburg County was also investigated as a comparison of property value change within a coastal region with a relatively high real-estate demand and property speculation. It was not surprising that the community of Chester had the highest relative increase in property assessment values (58.35% from 2001-2006 and an annual average increase of 9.66%) of the communities investigated. However, what is noteworthy, is that the community of Westport on Brier Island appears to be experiencing a similar level of property value increase.

The intent of the analysis on property values was to provide better baseline information or empirical data from which to gain a truer understanding of the change in property values that have occurred within the region of focus and how these compare with other regions within Nova Scotia. It is reasonable to postulate from the information that property values within Digby Neck and Islands could continue to increase annually by five to seven percent on average if the current trend were to continue. However, aside from that general observation, there is nothing that can be definitively concluded and one must caution that there are numerous exogenous factors that may negatively affect property values within the region over time.

9.3.5 Economy

Table PV - 2  
Property Assessment Values  
LITTLE RIVER & SURROUNDING AREA

YEAR	Proposed							% Change 01-'06	% Change 01-'07	
	2001	2002	2003	2004	2005	2006	2007			
	\$74,200	\$77,600	\$81,200	\$88,100	\$88,000	\$93,000	\$105,900	25.34%	42.72%	
	\$45,300	\$47,700	\$50,100	\$54,400	\$51,300	\$54,400	\$62,400	20.09%	37.75%	
	\$42,800	\$45,200	\$47,800	\$52,300	\$53,000	\$56,300	\$64,600	31.54%	50.93%	
	\$30,200	\$31,800	\$33,500	\$36,500	\$37,000	\$39,300	\$44,500	30.13%	47.35%	
	\$29,400	\$31,000	\$32,600	\$35,500	\$36,000	\$38,600	\$43,800	31.29%	48.98%	
	\$57,600	\$82,400	\$86,100	\$89,300	\$89,900	\$94,100	\$107,900	63.37%	87.33%	
	\$38,400	\$40,100	\$42,100	\$45,800	\$46,300	\$49,100	\$56,000	27.86%	45.83%	
	\$93,100	\$97,200	\$101,700	\$110,200	\$110,100	\$115,400	\$131,300	23.95%	41.03%	
	\$27,500	\$29,100	\$33,400	\$36,700	\$37,200	\$40,100	\$45,900	45.82%	66.91%	
	\$83,800	\$92,300	\$95,700	\$103,900	\$104,000	\$139,000	\$158,000	65.87%	88.54%	
	\$45,200	\$47,600	\$50,300	\$54,900	\$55,600	\$59,000	\$67,500	30.53%	49.34%	
	\$61,800	\$64,200	\$66,800	\$72,300	\$72,400	\$75,900	\$86,300	22.82%	39.64%	
	\$44,100	\$45,900	\$47,900	\$51,700	\$51,900	\$53,600	\$60,300	21.54%	36.73%	
	\$87,300	\$91,500	\$96,000	\$104,200	\$104,400	\$110,500	\$126,100	26.58%	44.44%	
	\$66,200	\$70,100	\$73,000	\$79,700	\$79,300	\$84,200	\$95,400	27.19%	44.11%	
	\$39,100	\$46,400	\$50,500	\$55,100	\$65,300	\$69,000	\$79,200	76.47%	102.56%	
	\$93,900	\$98,600	\$103,300	\$111,300	\$111,300	\$116,200	\$133,100	23.75%	41.75%	
	\$71,100	\$74,200	\$77,500	\$76,000	\$76,000	\$79,500	\$91,400	11.81%	28.55%	
	\$44,800	\$47,000	\$49,300	\$53,400	\$54,000	\$57,000	\$64,500	27.23%	43.97%	
	\$50,100	\$52,100	\$54,900	\$59,100	\$59,700	\$62,000	\$71,000	23.75%	41.72%	
	\$42,800	\$45,200	\$47,600	\$52,000	\$52,600	\$56,000	\$64,100	30.84%	49.77%	
	\$57,200	\$60,100	\$63,300	\$69,100	\$70,200	\$72,300	\$82,300	26.40%	43.88%	
	\$28,800	\$30,200	\$31,800	\$34,700	\$35,100	\$37,200	\$42,300	29.17%	46.88%	
	\$57,500	\$59,400	\$62,300	\$66,700	\$67,100	\$67,300	\$76,600	17.04%	33.22%	
	\$40,600	\$42,900	\$45,300	\$49,600	\$64,600	\$68,400	\$76,900	68.47%	89.41%	
	\$53,600	\$56,600	\$59,800	\$65,400	\$66,300	\$70,400	\$80,800	31.34%	50.75%	
	\$32,800	\$34,700	\$36,800	\$40,400	\$41,000	\$44,200	\$50,900	34.76%	55.18%	
	\$35,300	\$37,300	\$39,500	\$43,300	\$43,800	\$47,100	\$46,500	33.43%	31.73%	
	\$26,500	\$27,900	\$29,400	\$32,100	\$32,400	\$35,100	\$40,000	32.45%	50.94%	
	\$21,600	\$22,600	\$23,900	\$25,800	\$26,200	\$28,600	\$32,700	32.41%	51.39%	
	\$33,600	\$35,100	\$36,800	\$39,900	\$39,900	\$42,700	\$48,500	27.08%	44.35%	
	\$42,800	\$78,900	\$106,200	\$141,500	\$141,900	\$148,800	\$169,700	247.66%	296.50%	
	\$77,800	\$81,400	\$85,200	\$92,300	\$92,400	\$97,100	\$110,500	24.81%	42.03%	
	\$38,300	\$40,000	\$41,900	\$45,300	\$45,800	\$57,600	\$65,300	50.39%	70.50%	
	\$34,500	\$36,400	\$38,400	\$41,800	\$42,400	\$45,000	\$51,400	30.43%	48.99%	
	\$38,400	\$40,500	\$42,800	\$49,200	\$49,800	\$52,100	\$59,700	35.68%	55.47%	
	\$34,500	\$36,500	\$38,100	\$41,800	\$41,700	\$45,000	\$50,400	30.43%	46.09%	
	\$32,000	\$33,400	\$35,300	\$38,200	\$38,700	\$41,400	\$47,500	29.38%	48.44%	
	\$34,500	\$36,000	\$37,500	\$40,500	\$40,600	\$42,200	\$47,300	22.32%	37.10%	
	\$33,200	\$35,000	\$36,600	\$40,100	\$40,100	\$42,900	\$48,200	29.22%	45.18%	
	\$112,100	\$117,000	\$122,300	\$132,100	\$132,300	\$151,500	\$171,800	35.15%	53.26%	
	\$29,000	\$30,500	\$32,000	\$34,800	\$35,200	\$37,300	\$42,400	28.62%	46.21%	
	\$25,600	\$27,000	\$47,300	\$51,200	\$50,900	\$53,100	\$59,600	107.42%	132.81%	
	\$23,600	\$47,500	\$49,900	\$53,700	\$53,500	\$56,100	\$63,800	137.71%	170.34%	
	\$41,900	\$43,800	\$42,400	\$46,200	\$46,700	\$49,500	\$56,300	18.14%	34.37%	
	\$71,000	\$74,600	\$77,700	\$84,600	\$84,300	\$88,800	\$100,300	25.07%	41.27%	
	\$163,700	\$169,700	\$175,300	\$187,200	\$187,600	\$197,200	\$222,300	20.46%	35.80%	
	\$40,700	\$41,900	\$43,100	\$45,200	\$45,500	\$48,900	\$52,800	20.15%	29.73%	
	\$38,300	\$40,000	\$41,800	\$45,300	\$45,400	\$48,400	\$54,800	26.37%	43.08%	
	\$70,100	\$73,000	\$76,100	\$81,900	\$81,900	\$81,400	\$92,300	16.12%	31.67%	
<b>TOTAL VALUE</b>	\$2,538,200	\$2,747,100	\$2,920,100	\$3,182,300	\$3,218,600	\$3,439,800	\$3,903,100	35.52%	53.77%	
<b>ANNUAL CHANGE</b>		8.23%	6.30%	8.98%	1.14%	6.87%	13.47%	<b>Avg. % Change</b>	6.30%	7.50%

Source: Service Nova Scotia

9.3.5 Economy

Table PV - 3  
Property Assessment Values  
WHALE COVE

YEAR	Proposed							% Change 01-'06	% Change 01-'07	
	2001	2002	2003	2004	2005	2006	2007			
	\$52,400	\$54,800	\$57,300	\$62,100	\$62,900	\$66,800	\$77,100	27.48%	47.14%	
	\$29,900	\$31,600	\$33,500	\$36,700	\$37,200	\$40,300	\$46,300	34.78%	54.85%	
	\$34,200	\$36,000	\$38,000	\$41,500	\$42,000	\$44,700	\$51,100	30.70%	49.42%	
	\$24,400	\$25,800	\$29,500	\$32,300	\$32,800	\$35,500	\$40,600	45.49%	66.39%	
	\$24,300	\$25,500	\$26,400	\$28,700	\$28,700	\$30,400	\$33,900	25.10%	39.51%	
	\$62,500	\$65,200	\$76,800	\$83,200	\$83,000	\$86,800	\$99,400	38.88%	59.04%	
	\$36,200	\$37,700	\$39,300	\$42,400	\$42,600	\$44,400	\$50,000	22.65%	38.12%	
	\$31,600	\$32,700	\$34,300	\$36,800	\$37,100	\$38,600	\$43,900	22.15%	38.92%	
	\$30,100	\$31,400	\$32,700	\$35,300	\$35,400	\$37,200	\$42,400	23.59%	40.86%	
	\$33,600	\$35,100	\$36,600	\$39,400	\$39,400	\$41,400	\$46,700	23.21%	38.99%	
	\$39,000	\$41,000	\$43,100	\$46,800	\$47,400	\$50,200	\$57,100	28.72%	46.41%	
	\$45,300	\$47,800	\$50,400	\$55,100	\$55,800	\$58,900	\$67,500	30.02%	49.01%	
	\$42,600	\$44,700	\$47,000	\$51,400	\$52,100	\$56,100	\$64,500	31.69%	51.41%	
	\$72,000	\$75,300	\$78,400	\$85,000	\$84,500	\$88,800	\$100,500	23.33%	39.58%	
	\$50,500	\$52,600	\$54,800	\$60,000	\$59,900	\$63,600	\$72,000	25.94%	42.57%	
<b>TOTAL VALUE</b>	\$608,600	\$637,200	\$678,100	\$736,700	\$740,800	\$783,700	\$893,000	28.77%	46.73%	
<b>ANNUAL CHANGE</b>		4.70%	6.42%	8.64%	0.56%	5.79%	13.95%	<b>Avg. % Change</b>	5.22%	6.68%

Source: Service Nova Scotia

Table PV - 4  
Property Assessment Values  
SANDY COVE

YEAR	Proposed							% Change 01-'06	% Change 01-'07	
	2001	2002	2003	2004	2005	2006	2007			
	\$44,500	\$47,100	\$49,900	\$54,800	\$55,600	\$59,800	\$69,600	34.4%	56.40%	
	\$45,000	\$46,900	\$72,800	\$78,800	\$79,800	\$83,600	\$96,300	85.8%	114.00%	
	\$38,300	\$40,000	\$41,800	\$45,300	\$45,400	\$48,400	\$54,800	26.4%	43.08%	
	\$33,900	\$35,900	\$38,000	\$41,700	\$42,200	\$45,700	\$52,500	34.8%	54.87%	
	\$96,400	\$102,000	\$107,900	\$118,400	\$120,000	\$127,400	\$146,700	32.2%	52.18%	
	\$47,500	\$50,200	\$53,100	\$58,300	\$59,000	\$62,500	\$72,000	31.6%	51.58%	
	\$40,100	\$42,000	\$43,900	\$47,600	\$47,600	\$50,700	\$58,300	26.4%	45.39%	
	\$37,500	\$39,600	\$42,000	\$45,600	\$46,200	\$49,800	\$57,300	32.8%	52.80%	
	\$47,600	\$50,100	\$52,900	\$57,700	\$58,400	\$61,700	\$70,700	29.6%	48.53%	
	\$138,900	\$144,300	\$150,500	\$162,500	\$162,000	\$169,400	\$192,000	22.0%	38.23%	
	\$47,500	\$50,100	\$53,000	\$58,000	\$58,800	\$62,500	\$71,800	31.6%	51.16%	
	\$58,000	\$61,200	\$64,600	\$70,500	\$71,300	\$75,600	\$86,900	30.3%	49.83%	
	\$38,300	\$40,300	\$42,400	\$46,200	\$46,800	\$50,700	\$57,600	32.4%	50.39%	
	\$43,700	\$46,200	\$48,800	\$53,500	\$54,200	\$59,500	\$68,000	36.2%	55.61%	
	\$50,800	\$53,500	\$56,400	\$61,600	\$62,300	\$65,800	\$75,400	29.5%	48.43%	
<b>TOTAL VALUE</b>	\$808,000	\$849,400	\$918,000	\$1,000,500	\$1,009,600	\$1,073,100	\$1,229,900	32.81%	52.22%	
<b>ANNUAL CHANGE</b>		5.12%	8.08%	8.99%	0.91%	6.29%	14.61%	<b>Avg. % Change</b>	5.88%	7.33%

Source: Service Nova Scotia



9.3.5 Economy

Table PV - 5  
Property Assessment Values  
FREEPORT

YEAR	Proposed							% Change 01-'06	% Change 01-'07
	2001	2002	2003	2004	2005	2006	2007		
	\$58,400	\$60,900	\$63,600	\$68,800	\$68,700	\$71,300	\$80,800	22.09%	38.36%
	\$49,800	\$50,100	\$50,500	\$50,500	\$51,000	\$53,100	\$54,400	6.63%	9.24%
	\$33,900	\$35,700	\$37,700	\$41,300	\$41,900	\$44,000	\$40,500	29.79%	19.47%
	\$31,500	\$33,300	\$35,200	\$38,500	\$39,000	\$42,200	\$39,100	33.97%	24.13%
	\$55,400	\$57,800	\$60,400	\$83,700	\$83,600	\$87,300	\$79,400	57.58%	43.32%
	\$28,200	\$29,400	\$34,900	\$37,900	\$37,600	\$39,600	\$35,900	40.43%	27.30%
	\$33,200	\$34,800	\$36,400	\$39,700	\$40,000	\$42,200	\$38,800	27.11%	16.87%
	\$16,800	\$18,700	\$19,600	\$21,300	\$21,500	\$22,700	\$21,100	35.12%	25.60%
	\$26,100	\$27,500	\$29,000	\$31,700	\$32,100	\$33,900	\$31,400	29.89%	20.31%
	\$40,700	\$42,300	\$44,000	\$47,400	\$47,300	\$50,300	\$45,900	23.59%	12.78%
	\$27,700	\$29,200	\$30,800	\$33,700	\$34,100	\$37,000	\$34,300	33.57%	23.83%
	\$31,000	\$32,700	\$34,600	\$37,900	\$38,400	\$44,100	\$40,800	42.26%	31.61%
	\$59,200	\$61,500	\$63,900	\$69,100	\$69,200	\$72,500	\$88,700	22.47%	49.83%
	\$57,300	\$59,700	\$62,300	\$67,300	\$67,200	\$70,200	\$80,500	22.51%	40.49%
	\$39,000	\$40,700	\$42,400	\$45,700	\$45,700	\$47,500	\$53,500	21.79%	37.18%
<b>TOTAL VALUE</b>	<b>\$588,200</b>	<b>\$614,300</b>	<b>\$645,300</b>	<b>\$714,500</b>	<b>\$717,300</b>	<b>\$757,900</b>	<b>\$765,100</b>	<b>28.85%</b>	<b>30.07%</b>
<b>ANNUAL CHANGE</b>		4.44%	5.05%	10.72%	0.39%	5.66%	0.95% Avg. % Change	5.25%	4.53%

Source: Service Nova Scotia

Table PV - 6  
Property Assessment Values  
WESTPORT

YEAR	Proposed							% Change 01-'06	% Change 01-'07
	2001	2002	2003	2004	2005	2006	2007		
	\$81,500	\$95,800	\$100,800	\$110,100	\$110,900	\$116,900	\$134,400	43.44%	64.91%
	\$43,700	\$46,200	\$48,900	\$53,700	\$54,400	\$57,700	\$66,500	32.04%	52.17%
	\$38,800	\$42,100	\$43,900	\$48,200	\$48,200	\$51,000	\$57,900	31.44%	49.23%
	\$38,200	\$39,600	\$41,700	\$44,700	\$45,100	\$46,900	\$53,900	22.77%	41.10%
	\$66,700	\$69,600	\$86,100	\$93,400	\$94,000	\$98,300	\$112,900	47.38%	69.27%
	\$56,200	\$59,200	\$62,300	\$79,500	\$97,900	\$102,500	\$118,700	82.38%	111.21%
	\$34,300	\$36,300	\$38,400	\$42,100	\$42,700	\$45,300	\$52,100	32.07%	51.90%
	\$30,600	\$32,300	\$34,200	\$30,900	\$31,300	\$33,200	\$38,100	8.50%	24.51%
	\$33,500	\$34,800	\$36,600	\$39,300	\$39,600	\$41,300	\$47,500	23.28%	41.79%
	\$63,200	\$66,900	\$70,900	\$77,900	\$79,000	\$83,400	\$96,200	31.96%	52.22%
	\$24,100	\$41,000	\$43,400	\$47,400	\$47,700	\$50,200	\$57,600	108.30%	139.00%
	\$31,300	\$32,900	\$34,800	\$38,200	\$38,700	\$40,900	\$47,100	30.67%	50.48%
	\$36,700	\$38,600	\$40,600	\$44,200	\$44,700	\$82,300	\$89,000	124.25%	142.51%
	\$35,300	\$37,000	\$38,700	\$43,700	\$43,900	\$46,200	\$52,900	30.88%	49.86%
	\$36,500	\$38,200	\$40,200	\$58,100	\$58,900	\$61,900	\$70,800	69.59%	93.97%
<b>TOTAL VALUE</b>	<b>\$650,600</b>	<b>\$710,500</b>	<b>\$761,500</b>	<b>\$851,400</b>	<b>\$877,000</b>	<b>\$958,000</b>	<b>\$1,095,600</b>	<b>47.25%</b>	<b>68.40%</b>
<b>ANNUAL CHANGE</b>		9.21%	7.18%	11.81%	3.01%	9.24%	14.36% Avg. % Change	8.09%	9.13%

Source: Service Nova Scotia

9.3.5 Economy

Table PV - 7  
Property Assessment Values  
PARKER'S COVE

YEAR	Proposed							% Change 01-'06	% Change 01-'07	
	2001	2002	2003	2004	2005	2006	2007			
	106,100	106,700	121,300	121,400	123,400	128,000	141,400	20.64%	33.27%	
	102,000	102,300	103,700	104,800	106,200	111,300	124,300	9.12%	21.86%	
	46,600	47,400	48,800	50,000	51,500	54,500	60,800	16.95%	30.47%	
	46,600	47,200	53,200	54,300	55,700	57,800	64,100	24.03%	37.55%	
	47,900	47,900	53,100	54,400	56,000	58,400	64,700	21.92%	35.07%	
	47,000	47,300	48,000	48,700	50,100	52,200	58,000	11.06%	23.40%	
	61,200	62,300	88,400	89,700	92,600	97,200	109,200	58.82%	78.43%	
	70,800	71,200	73,900	65,900	71,000	74,100	81,800	4.66%	15.54%	
	60,400	61,300	57,600	59,100	60,300	64,100	70,600	6.13%	16.89%	
	75,800	76,200	84,900	86,000	87,400	92,200	102,800	21.64%	35.62%	
	50,100	50,200	60,200	60,800	62,600	67,100	74,800	33.93%	49.30%	
	63,000	63,400	70,400	71,500	73,000	76,200	85,200	20.95%	35.24%	
	106,500	107,100	109,000	110,700	113,000	118,500	131,200	11.27%	23.19%	
	64,400	65,300	74,100	75,200	76,700	80,500	89,000	25.00%	38.20%	
	99,000	99,700	101,600	103,300	105,600	111,300	123,500	12.42%	24.75%	
<b>TOTAL VALUE</b>	<b>\$1,047,400</b>	<b>\$1,055,500</b>	<b>\$1,148,200</b>	<b>\$1,155,800</b>	<b>\$1,185,100</b>	<b>\$1,243,400</b>	<b>\$1,381,400</b>	<b>18.71%</b>	<b>31.89%</b>	
<b>ANNUAL CHANGE</b>		<b>0.77%</b>	<b>8.78%</b>	<b>0.66%</b>	<b>2.54%</b>	<b>4.92%</b>	<b>11.10%</b>	<b>Avg. % Change</b>	<b>3.53%</b>	<b>4.80%</b>

Source: Service Nova Scotia

Table PV - 8  
Property Assessment Values  
HANTSPORT

YEAR	Proposed							% Change 01-'06	% Change 01-'07	
	2001	2002	2003	2004	2005	2006	2007			
	\$90,700	\$92,700	\$105,300	\$106,100	\$109,100	\$113,900	\$118,200	25.58%	30.32%	
	\$66,100	\$68,000	\$73,100	\$73,800	\$74,800	\$79,000	\$82,900	19.52%	25.42%	
	\$34,200	\$35,000	\$38,600	\$38,900	\$39,600	\$41,500	\$42,700	21.35%	24.85%	
	\$77,700	\$78,900	\$85,600	\$85,500	\$87,500	\$91,100	\$94,200	17.25%	21.24%	
	\$123,400	\$126,300	\$140,400	\$141,300	\$145,600	\$152,400	\$158,500	23.50%	28.44%	
	\$71,600	\$73,500	\$79,500	\$79,900	\$81,300	\$85,300	\$87,500	19.13%	22.21%	
	\$59,000	\$60,500	\$65,700	\$66,200	\$67,500	\$70,900	\$73,000	20.17%	23.73%	
	\$78,500	\$80,800	\$96,600	\$97,900	\$101,600	\$107,300	\$112,500	36.69%	43.31%	
	\$70,100	\$71,700	\$90,100	\$90,800	\$92,500	\$96,800	\$99,600	38.09%	42.08%	
	\$77,100	\$79,000	\$88,500	\$89,200	\$92,000	\$96,400	\$100,300	25.03%	30.09%	
	\$75,300	\$77,300	\$84,800	\$85,600	\$95,400	\$99,200	\$103,900	31.74%	37.98%	
	\$97,700	\$99,700	\$109,400	\$110,300	\$114,200	\$120,300	\$125,900	23.13%	28.86%	
	\$85,500	\$99,600	\$134,400	\$133,800	\$135,500	\$150,100	\$152,300	75.56%	78.13%	
	\$108,400	\$117,200	\$117,400	\$118,300	\$120,200	\$128,400	\$130,600	18.45%	20.48%	
	\$57,500	\$57,800	\$58,300	\$69,000	\$69,600	\$74,400	\$76,300	29.39%	32.70%	
<b>TOTAL VALUE</b>	<b>\$1,172,800</b>	<b>\$1,218,000</b>	<b>\$1,367,700</b>	<b>\$1,386,600</b>	<b>\$1,426,400</b>	<b>\$1,507,000</b>	<b>\$1,558,400</b>	<b>28.50%</b>	<b>32.88%</b>	
<b>ANNUAL CHANGE</b>		<b>3.85%</b>	<b>12.29%</b>	<b>1.38%</b>	<b>2.87%</b>	<b>5.65%</b>	<b>3.41%</b>	<b>Avg. % Change</b>	<b>5.21%</b>	<b>4.91%</b>

Source: Service Nova Scotia

9.3.5 Economy

Table PV - 9  
Property Assessment Values  
CHESTER

YEAR	2001	2002	2003	2004	2005	Proposed		% Change 01-'06	% Change 01-'07	
						2006	2007			
	\$99,300	\$111,500	\$122,100	\$149,900	\$161,900	\$177,700	\$188,700	78.95%	90.03%	
	\$64,600	\$70,100	\$75,300	\$96,800	\$97,900	\$101,500	\$114,400	57.12%	77.09%	
	\$110,500	\$121,700	\$131,800	\$188,500	\$190,700	\$196,100	\$220,400	77.47%	99.46%	
	\$72,800	\$80,200	\$86,500	\$116,900	\$128,500	\$140,800	\$149,700	93.41%	105.63%	
	\$86,700	\$96,700	\$105,200	\$127,800	\$140,000	\$153,000	\$163,100	76.47%	88.12%	
	\$102,000	\$112,300	\$130,600	\$150,700	\$163,900	\$178,300	\$190,700	74.80%	86.96%	
	\$110,800	\$122,100	\$132,200	\$143,300	\$152,500	\$187,200	\$192,100	68.95%	73.38%	
	\$85,600	\$94,300	\$103,800	\$114,800	\$123,500	\$128,000	\$131,400	49.53%	53.50%	
	\$120,100	\$134,200	\$147,600	\$141,400	\$150,600	\$155,500	\$160,600	29.48%	33.72%	
	\$73,300	\$82,200	\$89,900	\$107,200	\$127,700	\$132,600	\$134,900	80.90%	84.04%	
	\$77,500	\$87,400	\$97,400	\$117,800	\$125,900	\$122,500	\$125,900	58.06%	62.45%	
	\$99,300	\$108,900	\$117,000	\$113,600	\$122,200	\$126,600	\$129,900	27.49%	30.82%	
	\$138,000	\$152,900	\$167,000	\$165,400	\$178,200	\$183,100	\$189,500	32.68%	37.32%	
	\$126,700	\$140,000	\$152,900	\$164,200	\$177,900	\$193,300	\$207,000	52.57%	63.38%	
	\$96,300	\$106,300	\$115,200	\$127,900	\$136,900	\$141,300	\$146,200	46.73%	51.82%	
<b>TOTAL VALUE</b>	\$1,463,500	\$1,620,800	\$1,774,500	\$2,026,200	\$2,178,300	\$2,317,500	\$2,444,500	58.35%	67.03%	
<b>ANNUAL CHANGE</b>		10.75%	9.48%	14.18%	7.51%	6.39%	5.48%	<b>Avg. % Change</b>	9.66%	8.97%

Source: Service Nova Scotia

### 9.3.5 Economy

*9.3.15.9 The consultant's report recommended forming a property value monitoring committee. Will the CLC be involved in this monitoring? Describe the role of affected property owners in the monitoring program. How will property evaluators determine whether losses in value are attributed to the project?*

---

#### **RESPONSE**

While the consultant's report recommended forming a Property Value Monitoring Committee, Bilcon did not adopt this recommendation. However, it is Bilcon's intent to have a person with knowledge of the local real estate market (probably a local realtor) as a member of the CLC. Property owners who feel that the value of their property has been affected by Bilcon's activities would bring their concerns to the specific CLC member, or to the CLC itself. The CLC will bring the matter to the attention of Bilcon who will engage a qualified property appraiser to carry out an evaluation.

Property appraisers faced with an apparent decline in property values would have to evaluate all local economic factors; for example, drop in tourism numbers, continued decline in fishery, continued population loss, as well as more national issues such as the state of the Canadian economy and interest rates.

By comparing the results of these extraneous factors, for example, on values at a significant distance from the project, a qualified property evaluator will be able to determine the residual effect of the quarry itself.

**WP-1498 – Nova Scotia Department of Environment and Labour  
Comments from the Environmental Monitoring and Compliance Division  
Yarmouth District Office  
Bruce Arthur - Acting District Manager  
Scott Lister – Hydrogeologist**

*4. Chapter 7.7.1 discusses utilities and states that "electrical energy would be provided from upgraded services on Highway 217 to the quarry compound area." What is meant by "upgraded services on Highway 217? How much electrical energy is the project expecting to use on an annual basis? Is the present grid capable of providing this energy or will this main line on Highway 217 need to be increased in capacity? If upgrade is required what will be negative or positive effects on area residents? Who would be responsible for constructing and financing the upgrades?*

---

#### **RESPONSE**

Bilcon has identified a power requirement to feed approximately 7,000 horse power of electric motors. NSPI has identified a requirement for line work and sub-station upgrades to supply this demand. Bilcon also recognizes the requirement to provide flicker control to

### 9.3.5 Economy

minimize flicker on the NSPI electrical system. Bilcon is responsible for financing the upgrades which would be carried out by NSPI. Bilcon is of the opinion that the upgrading of the line from Digby to Whites Point will have a positive affect on the power supply for area residents.

#### **WP-1541 Fisheries and Oceans Canada EIS Volume I – Plain Language Summary**

*Page 28, Section 7.5 Fishing – The list of potential effects in this section deals primarily with environmental effects on fish and habitat, rather than conflicts with or potential effects on fishing activities. For example, Section 9 goes into some detail on these issues (e.g. good communication with fishers and compensation for gear damage) yet no mention of this is made in the summary.*

---

#### **RESPONSE**

Comment noted. In hindsight it would have been useful to provide some background with respect to communication with lobster fishers and compensation for gear damage in the Plain Language Summary.

*Section 7.9 Employment and the Economy – There is only one statement on the fishery, “There is no evidence that the operation of the quarry will affect either the fishery or the tourism industry.” Yet it seems fairly clear that the marine terminal and shipping will interact with and impact fishing activities. This statement should be supported by further information/documentation particularly when the first paragraph on this page states that the lobster industry has increased significantly in this area. If it can not be supported then statement “there is no evidence that the operation of the quarry will affect the fisher” should be retracted.*

---

#### **RESPONSE**

Traditional fishing activity may be affected in Bay of Fundy waters by shipping. This has been determined to be a long term, insignificant effect of local scale due primarily to the proposed shipping route. Discussion with traditional fishermen who use these waters is ongoing. Bilcon is proposing a lobster trap fund to compensate lobstermen and others for any loss of gear due to quarry shipping activities. The statement “there is no evidence that the operation of the quarry will affect the fishery” is retracted.

#### **EIS Volume III – Maps**

*Map 6B – Business and Services – This map depicts aquaculture sites, wharves and processing plants but no maps showing fishing areas were produced. Source material from interviews, meetings, socio-economic profiles, field observations and traditional community ecological knowledge could have been mapped to illustrate the text descriptions. (e.g.,*

### 9.3.5 Economy

*herring nets, customary lobster grounds, other trap and logline areas). Mapping these uses would help lend visual support to the conclusions of “insignificant negative impact”.*

---

#### RESPONSE

**Map 39** – Marine Resources – Bay of Fundy has been prepared indicating the relation of quarry activities to traditional fishing areas and stocks. Map 39 has been included as part of this comment and response submittal.

#### Volume IV – Chapter 1

*Table C1 – Commitments Table – Page 7 – This table only includes the lobster fishery. Is there the potential for damage to other gear types? Can the “lobster trap fund” be used to compensate for other gear losses? Commitment 11.3 makes the very specific commitment that carriers will enter and leave on “the same predetermined bearing” Will this final route be determined with input from local fishers?*

---

#### RESPONSE

Bilcon has been advised in discussions with local fishers that no other fishing gear is currently being used in the Whites Cove area other than sea cucumber rakes. Bilcon was specifically advised that gill nets have not been set for four years.

The predetermined bearing for the ship to approach and depart the Whites Point Terminal will be set following discussions and input from local fishers.

#### EIS Volume VII – Chapter 9.3 Human Environment and Impact Analysis

##### Comment

*Page 81 – 9.3.9.1.3 The proponent states that the gear impact compensation plan has been agreed to by lobster fishers. What agreement was reached? Was this agreement signed by all potentially affected fishers? Did this include potentially affected fishers from other sectors? The proponent should provide more details. Was displacement of fishers from fishing areas from physical components, shipping routes and any exclusion zones also included in the agreement?*

*In Section 9.3, page 95 the proponent states that, “Discussions are presently in progress concerning a lobster trap fund to be established by Bilcon of Nova Scotia Corporation, and administered by the local lobster fishermen, to provide compensation for lost traps and related gear due to shipping activities.” While Section 11, page 46 states, “The fish habitat compensation plan will be implemented upon the Proponent receiving approval for the project, while other compensation agreements will be honoured on an annual basis in the case of the Whites Cove fishers and on an as-required basis in the case of well problems. The Proponent is the subsidiary of a well established New Jersey family-held company which will provide funding for the construction of the Whites Point project (\$40.6 CAD million)*

### 9.3.5 Economy

*from its own resources. No specific mechanism is proposed to finance the proposed compensation agreements, other than from on-hand resources". The proponent should clarify how the fisheries compensation agreement will be established and administered.*

---

#### RESPONSE

Three meetings were held with licensed lobster fishers who traditionally fish in the nearshore Whites Cove area. Agreement was reached on the establishment in consultation with lobster fishers of a designated inbound and outbound route, the increase in turning radius of the ship immediately adjacent to the Whites Point terminal and the establishment of a compensation fund to be administered by a committee of lobster fishers. No specific details of the compensation plan have been established pending a meeting with the Lobster Fishing Area #34 Management Board.

A letter requesting a meeting to clarify details was sent on September 20<sup>th</sup>, 2006 but to date no response has been received.

*Section 9.3.13 Economy – Fishery/Near shore – This section emphasizes the lobster fishery but the treatment of other fisheries and the spatial extent of the adjacent fishing grounds appear to be somewhat limited.*

---

#### RESPONSE

The marine resources in the Bay of Fundy adjacent to the proposed Whites Point Quarry and Marine Terminal are shown on Map 39 in relation to shipping activities. This information on this area of the Bay of Fundy and Saint Mary's Bay was compiled by Fisheries and Oceans Canada and the Western Valley Development Authority in 1997. Traditional Knowledge, supplied by the fishing industry was used during compilation of this information. Various species of ground fish, pelagic fish and shellfish and their spatial extent are shown. Also, areas of specific fishing activity are outlined.

*Page 85 – With regard to the commercial periwinkle harvesting the Whites Cove area, DFO does not have any data on this fishery as it is currently not a licensed fishery. Therefore, DFO does not know how many harvesters may be affected. However, this should not be a significant issue if the proponent maintains their commitment to allowing for continued access for harvesters.*

---

#### RESPONSE

Comment noted.

*Section 9.3.13.1 Economy – Fishery/ Near shore Research – This section presents license statistic by species (18) and type (14) which indicates that fishers are legally entitled to fish for more than what are described as active fisheries (i.e. lobster, herring, mackerel and sea*

### 9.3.5 Economy

*cucumber). The statement on page 92, "These waters have also attracted fishers partaking in a recently established experimental sea cucumber fishery." signifies the likelihood of interest in new and expanding fisheries. Therefore, the proponent should indicate the potential for future fisheries to develop in the area of the project.*

---

#### RESPONSE

At the present time there is one exploratory licence for a sea cucumber fishery in Southwest Nova Scotia and Bilcon has been advised (per. com. Bobbie Childs – DFO Yarmouth) that discussions have taken place for a potential exploratory green crab fishery. In discussions with local fishermen, Bilcon has been advised that harvesting for sea cucumbers in the Whites Cove area would take place for approximately one week in a year.

*Detail on specific fishing patterns in the waters adjacent to the proposed quarry and terminal appears to have been informed largely by on-site observations in 2002 and 2003. How thorough, frequent and seasonal were those observations? Were traditional users consulted to supplement observations? Were any other new or traditional fisheries conducted in 2004, 2005 or 2006?*

---

#### RESPONSE

Observations of fishing and other boating activities were conducted by David W. Kern in 2002 and 2003. Observations in 2002 were conducted weekly from May to October. Observations in 2003 were conducted weekly from April to December. The duration of these observations averaged four hours per week. Observations were aided with 7 x 35 binoculars. Photographic documentation was also conducted when warranted. Traditional users were consulted including Wanda Van Tassel (periwinkles and dulse), and Dwayne Theriault (sea urchins and lobster).

*Sea urchin harvest should be given more consideration. The section states that no diving for urchins was observed in this area of the Bay, but it is not stated whether there has been effort there in the past or if there is interest amongst harvesters.*

---

#### RESPONSE

An active sea urchin fishery exists in waters surrounding Digby Neck and Islands. It is a "limited entry" fishery with no new licenses presently being considered. This fishery has no designated fishing areas (pers. com. Anne Sweeney, DFO 2006). The urchin fishery began in 1997-1998 and in 2005-2006 had three or four active, licensed participants who fish in the Bay of Fundy and Saint Mary's Bay area (There are a total of 6 licenses in the Digby/Annapolis/Kings area – pers. Com. Bobbie Childs – DFO). Each licensed boat may employ up to four divers. The fishing season is generally during October to March. Although urchin diving may occur in both Saint Mary's Bay and the Bay of Fundy, the most



### 9.3.5 Economy

lucrative harvest areas occur in and around Grand and Petite Passages (pers com. Bob Miller, DFO, 2006) – see Map 39.

Consultation with a former sea urchin captain indicates there are no urchins of commercial numbers in the area of Whites Cove. Further this captain commented that, to his knowledge, no urchin boat ever had a day's fishing from Sandy Cove to Whale Cove and the only good urchin producing areas below Sandy Cove are Petite Passage, Grand Passage, and the North West Ledge. Also, in his opinion, the marine terminal may even help the sea urchin fishery by serving as a spat collector (pers. com. Dwayne Theriault 2006).

*Section 9.3.13.2 – Economy – Fishery Near Shore Analysis – While it seems reasonable to use regional landings to characterize the overall economic impact as localized and insignificant, there may be adverse impact for individuals and small groups of fishers. On page 95 it is stated that “Construction of the marine terminal and shipping activities may inconvenience the traditional lobster fishery adjacent to Whites Point.” For greater certainty and clarity, the exact nature of that “inconvenience” for area fishers could be elaborated.*

---

#### RESPONSE

As noted in other responses, the attendees at the three meetings held with licensed lobster fishers who traditionally fish in the nearshore Whites Cove area were of the view that the inconvenience from shipping activities was not an issue. Since a decision has now been made to construct the terminal from drilling barges which can only operate during the summer months, the lobster fishery will not be inconvenienced since no construction activities at the terminal will take place during the lobster season.

*For example, the section states that the terminal location in depths of 16 metres “...is not expected to disrupt lobster trap setting areas.” Next is suggested that vessel traffic will occur through depths where lobster is fished. What are those depths, how was this information derived and from what source? How important are grounds in the proposed shipping route or within the half mile radius of near shore surface waters that will be influenced by vessel and loading operations: How much fishable bottom or how many lobster traps are likely to be affected? As mentioned earlier, a map would be helpful to illustrate grounds.*

---

#### RESPONSE

Discussions with local lobster fishers has provided Bilcon with background on the fishery in the Whites Cove area. The season commences in LFA 34 on the last Monday in November and continues to the end of May. Lobster fishers traditionally set their traps for the first two weeks of the season in Saint Mary's Bay and then move across to the Bay of Fundy. In the Bay of Fundy as the water cools lobsters move further offshore and hence traps are set further away from the Whites Cove area as winter progresses. Bilcon is advised that two or

### 9.3.5 Economy

three lobster fishers have traditionally fished inshore at Whites Cove and do not move their traps west into deeper water during the winter. Bilcon is advised that towards the end of January traps are set in the fishing lanes but interference by ships is not seen as a major concern.

As the water warms in March, the lobsters begin to move inshore again and Bilcon is advised that all but two or three lobster fishers move back into Saint Mary's Bay for the months of April and May.

*Fishers can request shipment schedules but it is not made clear whether traps and other gear can be set inside the designated shipping lanes or alternatively, moved in and out to avoid vessel-gear interactions. Will the proposed lobster habitat compensation area be open and accessible for fishing (out of the shipping route etc)?*

---

#### RESPONSE

In the immediate area of the Whites Point terminal, the ship will move in a circular route shown on Map SR-1 in Section 7.0 – Revised Project Description. This turning circle has been increased in size to a radius of 1.6 kilometres at the request of lobster fishers. The intent is that lobster fishers can set traps at any time within the turning circle without inconvenience.

With respect to the designated route between the shipping lane and the Whites Point terminal, it should be noted that the same bearing will be used for both inbound and outbound vessels. This designated route will be established in consultation with lobster fishers. It is anticipated that the shipping frequency will be approximately one vessel per week and the timing of the vessel's transit will be made known to interested parties by means of a designated telephone line. It is anticipated that lobster fishers setting traps outside of the turning circle will do so respecting the designated route or remove traps from the designated route before a vessel's transit.

*Page 95 – With regard to the impact of vessel traffic and loss of fishing gear, compensation may also be required for loss of income (in addition to loss of gear).*

---

#### RESPONSE

Since the inbound and outbound lane will be specifically designated and will be the same for each vessel transit and the timing of each transit will be made known to fishers, there would appear to be no basis for compensation for loss of income.

*In addition, the proposed shipping routes appear to be fully contained within Lobster Fishing Area 34; however, if shipping will occur within LFA38, there may be some loss of gear experienced in that fishing area as well.*

### 9.3.5 Economy

---

#### RESPONSE

There will be no shipping connected to the quarry operation within LFA 38.

*Section 9.3.13.3– Economy – Fishery/Near shore Mitigation – Lobster fishermen requested a wider ship approach/departure area in the vicinity of the marine terminal to “allow traps to be set in an area presently being fished”. It is not clear how a wider area will secure customary fishing access. Would it not expand or increase the likelihood of vessel-gear interactions? A map would help to explain this proposal. Also the proponent should explain how fishers will be compensated if they are displaced or prevented from fishing due to exclusion zones.*

---

#### RESPONSE

Please refer to Map SR-1 in Section 7.0 – Revised Project Description. The wider turning circle is to enable the lobster fishers to fish without disturbance inside the circle. There are no exclusion zones but clearly it would be imprudent to set traps in a designated shipping lane at the time of a known vessel transit.

#### WP-1542 Health Canada Public Information and Consultation Process

*Health Canada notes that primary public concerns identified were related to the preservation of the environment, and indirect effects of the project on income sources (fishing, lobster, tourism etc.) and quality of life of local residents.*

---

#### RESPONSE

Comment noted.

#### *Socio-Economic Impact of Potential Environmental Effects on Local Industries*

*The main industries that may be affected by the environmental effects of the proposed quarry are the fishing (aquaculture, intertidal, and nearshore) and tourism industries.*

*According to Section 9.3.10 of the report, the Bay of Fundy in the area of the proposed quarry supports a fixed and mobile gear commercial fishery for groundfish (the most common species include cod, haddock, and Pollock); pelagic species such as herring and mackerel; crustaceans (primarily lobster); molluscs (primarily scallops); and local harvesting of sea plants. In addition, localized harvesting of periwinkles, sea urchins, and more recently an experimental sea cucumber fishery has also been carried out in this area of the Bay. On Digby Neck/Islands, based on the last census of 2001, approximately 36% of the labour force was involved in the fishery (Section 9.3.9.1, Table E-1). Therefore, fishing is very important for the local economy. According to the EIS, the most lucrative sector is the lobster fishery,*

---

### 9.3.5 Economy

*and lobster fishing and herring gill netting are the two main fishing activities occurring in the project area, including the near shore area adjacent to the Whites Point Quarry property (Section 9.3.13.1).*

*Concerns were that fishing could be impacted by the project activities (including, blasting and the construction and operation of the marine terminal) on economically valued marine species. Providing that the Department of Fisheries and Oceans (DFO) agrees with the marine species assessment conducted and the local fishermen agree on the mitigation measures to be implemented, Health Canada agrees that the socio-economic impact of the project on fishing is not expected to result in adverse effects. More specifically:*

- *For the existing nearby aquaculture facilities, setback distances from the proposed quarry are greater than those outlined in applicable guidelines, and additional mitigative measures have been recommended, including minimizing potential blasting effects through the use of time-delays and smaller individual charges.*
- *For fishing in the intertidal zone, Bilcon indicates that access to the shoreline will remain. However, for the safety of these individuals, a check-in procedure will be required.*
- *For nearshore fishing, Bilcon indicates that herring nets are set closer to the shoreline than the course of the vessel, and would not likely be affected, however, lobster trap gear may become entangled during vessel arrival and departure. Specific mitigation measures were proposed for herring and lobster fishermen, including the development of designated shipping lanes, sharing of shipping schedule information with fishermen, and the potential development of a fund to compensate in the event of tangled gear.*

*In addition to fishing, tourism is also a major industry on Digby Neck. Based on the Attitude Survey (AMEC, October 2005) and the public registry, concern was expressed that tourism, particularly people visiting the area for its scenic beauty and/or its natural attractions including bird watching and marine mammal watching, could decrease as a result of the project. Section 9.3.14.2 (Analysis) of the EIS states that the proposed Whites Point quarry is not visible from the Digby Neck and Islands Scenic Drive (Hwy #217), from any tourist accommodations (fixed roof or campgrounds), adventure tour ports, designated heritage buildings or any of the proposed sites for the Discovery Centre. As a result of its proposed layout, including the proposed environmental preservation zone, the site (including marine terminal) would only be visible by water. With respect to the whale watching, the EIS states that "the greatest concentration of whales and whale watching effort does not occur along the Digby Neck coast of the Bay of Fundy", and "whale watching tours, recreational boating or adventure boating in the Bay of Fundy presently do not frequent the nearshore*

### 9.3.5 Economy

*waters of the Whites Point Area”, thus “views of the quarry and marine terminal from tour boats will not be common”. (Section 9.3.14.2 and 9.3.14.5).*

*No specific mention is made of how noise from quarrying operations will impact tourism, tourist accommodations, designated heritage buildings or other buildings of potential interest to tourists. In general the report indicates that noise will not result in adverse effects to humans due to adherence to the Nova Scotia Pit and Quarry Regulations for noise levels, however, the specific issue of noise and tourism is not addressed in the report.*

*As a mitigative measure, Bilcon mentioned that a representative of the tourism industry will be invited to sit on the CLC. Although no significant adverse effects have been predicted by Bilcon, Health Canada recommends that a formal follow-up process be implemented to assess the potential change in volume of tourism and its potential causes. This follow-up should include an annual review of tourism statistics (and possibly a tourist survey) during the construction phase and the first few years of operation.*

---

#### **RESPONSE**

Bilcon will develop a follow-up process to assess the potential change in volume of tourism and its potential causes. Consultation with the tourism industry representative on the CLC and an annual review of tourism statistics during the construction phase and the first few years of operation will be conducted.

#### **Mitigation Measures and Monitoring and Follow-up Program**

*Provided there is participation by the relevant stakeholders, the proposed mitigation appears to be appropriate in order to reduce the potential social and economic impacts that could be derived from the potential environmental effects of the project. Openness, transparency and ready access to information is essential in ensuring an informed public and will assist in decreasing the distance between reality and perception.*

---

#### **RESPONSE**

Comment noted. Please refer to Section 8.2 – Public Consultation in this submission.

#### **WP 1625 – Partnership for Sustainable Development**

##### **Deficiency Statement 60**

##### **EIS Guidelines**

*9.3.3- Economy - ‘Describe the local and regional economies and their performance.’”*

*8.1 - Methods - ‘Document all models and studies so that, to the extent possible, the analyses are transparent and reproducible; support analyses and conclusions with reference to appropriate literature and provide all relevant references.’”*

### 9.3.5 Economy

#### **EIS**

*The EIA states that ‘Under a new policy directive from the provincial government, the Towns and Counties of Annapolis and Digby (including Clare) combined to create the Western Valley Development Authority (WVDA) and in 1995, the WVDA produced a Development Plan for the Western Valley (title)...However, new business failed to materialize and the various municipal units removed their support for the WVDA in 2005, and collapsed the organization.’ Missing is evidence to support the argument that “new business failed to materialize”. The WVDA’s 2005 Business Plan, approved by its Board of Directors, states that more than 300 new businesses opened in Annapolis and Digby counties between 2001 and 2004. The Investor’s Business Case, states ‘The number of net job creation since 2001 in the Western Valley is almost 2,500... During this time period, the unemployment rate in the Western Valley has dropped by an estimated 2.5%, while the participation rate increased by 6.6%. This estimated growth in employment is 14.9% over the past three years.’*

*If “new businesses failed to materialize”, as the EIS claims, then existing businesses must have expanded. Either way, the data suggests a positive, not negative, change in the business environment between 2001 and 2005. The Proponent should revise the EIS, making use of all relevant information and substantiating all conclusions.*

---

#### **RESPONSE**

Bilcon notes the statistics provided by the Western Valley Development Authority but does not accept that there has been a positive change in the business environment in the Western Valley area between 2001 and 2005. Bilcon would point out the following recent negative changes to the business environment in recent years.

- The closure of Britex (130 jobs lost)
- The closure of Weymouth Sawmill (75 jobs lost)
- The closure of Shaw Wood (230 jobs lost)
- The downturn, generally, in the soft wood lumber industry caused by the dramatic downturn in new housing construction in the US (unknown number of jobs lost)
- The significant downturn in the ground fish industry (unknown number of jobs lost)
- The significant downturn in the scallop fishing industry (unknown number of jobs lost)
- The significant downturn in the tourism industry (unknown number of jobs lost)
- The threat of closure of the Digby / Saint John Ferry (threat to 130 jobs)

It is clear that the municipalities understand the magnitude of recent population declines in the Western Valley, as it sought to replace the Western Valley Development Authority with a more proactive job creating development agency.

### 9.3.5 Economy

The recent revival of the local Boards of Trade is also another prime indicator of the concern local businesses have with the state of the local economy. The Digby Board of Trade has recently completed a trade mission to Scotland in an attempt to attract new business to the area. It should be noted that Bilcon was a significant sponsor of this trade mission.

#### **Deficiency Statement 61**

##### EIS Guidelines

9.3.3- *Economy - 'Discuss local and regional economic development goals and objectives as identified in public consultations, and community, regional and territorial economic development plans and strategies.'*

##### EIS

*In its consideration of local and regional economic development plans, the EIS fails to consider Vision 2000-Building Tomorrow: A multi-year action plan for Annapolis and Digby counties. The document was developed through an extensive community consultation process involving hundreds of individuals and detailed surveys of more than 500 businesses. The strategy was named the best community-based economic development plan in Canada in 2000 by the Economic Developers Association of Canada and the Royal Bank. The document contains numerous sections that are relevant to the Project, including: Business Development, Environment, Natural Resources, and Tourism, Heritage and Culture.*

*Section 9.3.9 of the EIS quotes heavily from the provincial government's Opportunities for Prosperity issued in 2001. It is curious to note that the Province's updated strategy document, entitled Opportunities for Sustainable Prosperity<sup>131</sup>, was not addressed. Likewise, the EIS fails to incorporate input from the province's Green Plan Towards a Sustainable Environment.*

*The EIS is deficient in its consideration of local, regional and provincial economic development strategies. The Proponent should revise the document to include these documents.*

---

#### **RESPONSE**

Bilcon is of the opinion that economic development plans and strategies developed in 2001 do not address the reality of the present economic situation in the local area. As noted above, there has been a dramatic downturn in the local economy in the past two years with resulting major job losses and a significant out-migration of the local population. The plans referenced which were developed in 2000 simply do not address the reality.

#### **Deficiency Statement 75**

##### EIS Guidelines

10.3.3- *Economy - 'Describe the consistency of the Project with goals and objectives identified in provincial, regional and community economic development plans and strategies.'*

### 9.3.5 Economy

#### EIS

9.3.9.1.2 - *Consistency of the Project with Goals and Objectives Identified in Economic Plans and Strategies - It is interesting that the Proponent does not refer to even one of the 13 economic plans and strategies that were published by the Regional Development Authority between 1994 and 2005. This is odd, given that the Authority had a mandate sanctioned by the Minister of Economic Development to lead economic development in Annapolis and Digby counties. The Board of the RDA was comprised of representatives from the seven participating municipalities (including elected officials and CAOs), the provincial Office of Economic Development and other provincial agencies, ACOA and other federal agencies, and individual citizens appointed by the municipalities.*

*The EIS does reference a 2000 evaluation report of the WVDA, prepared by PRAXIS Research. Only one section from that document is referenced in the EIS: "Appendix A: WVDA Sector Goals and Examples of Activities." It is noted that under the category of Natural Resources, the activities and accomplishments that PRAXIS chose to highlight are in the forestry, fisheries, and agriculture sectors. 'Forestry, fisheries, and agriculture are noted but there is no mention of any mineral resource extraction'<sup>162</sup>, states the EIS. From this one piece of "evidence", the Proponent concludes that 'In fact, it is clear that the staff of the WVDA did not support the project and refused to consult with the Proponent on any of the issues raised by the community.'*

*The EIS concludes that the reason there were no projects listed in the mining sector was not because the sector does not comprise as large a portion of the regional economy as the forestry, fisheries and agriculture sectors, but rather as evidence that the "staff of the WVDA did not support the project". No mention is made of the fact that the Bilcon of Nova Scotia Corporation never contacted the RDA for assistance in any way. The agency was, however, approached by numerous individuals, organizations, and businesses from the Digby Neck and Islands region with respect to the quarry proposal.*

*The EIS goes on to claim that "... the approach to community economic development adopted by the staff of the WVDA did not reflect the community's approach as expressed by the various councils in the area and the organization has been disbanded."<sup>164</sup>*

*It is noteworthy that the EIS does not mention that the WVDA Board, which was responsible to setting its strategic agenda, was comprised of "the various councils". The EIS also chooses not mention the fact that the council responsible for the geographic area in which the proposed activity is to take place, the Municipality of the District of Digby, passed a motion against the Whites Point quarry proposal. It is also curious that the only excerpt from the PRAXIS document that is quoted in the EIS is the statement above. Omitted are the statements throughout the document that suggest that the "...approach to community economic development adopted by the staff" did indeed "reflect the community's approach". The EIS is deficient in its analysis of local and regional economic development strategies. The document makes a number of statements which are misleading, unsubstantiated or not referenced. The Proponent should revise the EIS to fully address the Guidelines.*



### 9.3.5 Economy

---

#### RESPONSE

In the text of the question the following statement was made “No mention is made of the fact that Bilcon of Nova Scotia Corporation never contacted the RDA for assistance in any way.” The reality is that the RDA was asked to sit on the Community Liaison Committee but refused the opportunity. It is clear that the Executive Director of the RDA was opposed to the Whites Point project and, indeed, has provided a research report annexed to the submission from the Partnership for the Sustainable Development of Digby Neck and Island Society. The reality of the economic situation in the local area has been dealt with in answers to previous questions.

#### Deficiency Statement 76

##### EIS Guidelines

*10.3.5 – Land Use and Value - ‘Assess effects of the Project on site, local and regional land values during operation and after decommissioning.’ 8.1 – Methods – ‘Identify and justify any assumptions made. Indicate the degree of certainty in the impact predictions and determination of significance (identify measures used).’*

##### EIS

*The EIS presents a summary of property sale statistics for the periods of 1999 to 2002 and 2002 to mid 2005. In summarizing these statistics, the EIS concluded: ‘Due to the variable nature of the individual properties sold, it is not possible to compare values in the two time periods....’ The EIS later states that ‘It would appear from the real estate statistics for Digby Neck and the Islands referenced above, there is no general perception among buyers that the proposed quarry and marine terminal at Whites Point is likely to negatively affect property values on Digby Neck and the Islands.’ The EIS makes reference to three case studies contained in the Gardner Pinfold Report, concerning impacts of quarry activity on property values. Of the three case studies, the Auld’s Cove (Canso) example does not mention property values; the Hantsport example identified no adverse effect on property values, while the Sechelt case cited clear impacts on real estate values. In consulting with Sechelt real estate agents, the Gardner Pinfold study found ‘proximity to the mine site does have a negative impact on property value. Given a choice, people will prefer to neither see nor hear the Sechelt operation.’ It is interesting to note that the adverse effects noted in the Reference volume are not reflected in the text of the main EIS.*

*The EIS also cites the example of Parker Mountain Aggregates near Annapolis Royal, NS as a comparative quarry. In its analysis of property development the EIS fails to identify that the Parker Mountain quarry is in fact quite different from the proposed quarry at Whites Point. The Parker Mountain quarry is much smaller and is not permitted to use blasting for aggregate removal. Based in part on complaints from neighbours, Parker Mountain Aggregates was subject to prosecution by the Department of Environment and Labour in 2005 over alleged illegal blasting.*

### 9.3.5 Economy

*By its own conclusion, the EIS identifies that the property sale are of limited use given the small and variable dataset. Of the three case studies cited in the Gardner Pinfold report, only two address impacts on property values, one positively, one negatively. The comparability of the Parker Mountain quarry is limited, given its differences in scale and lack of regular blasting. Based on the above evidence, the EIS concludes, 'While property values in general on Digby Neck and Islands are unlikely to be affected, those properties within 800 m of the active quarry could be marginally affected resulting in an insignificant negative effect in the local area.'*

*The methodology employed to assess the impacts on property values is clearly insufficient to support the conclusions made. Assumptions made within the methodology are not documented and no estimation of certainty is provided for the final conclusion. The Proponent should revise the EIS, incorporating a more comprehensive and transparent methodology to assess the impacts on local and regional property values.*

---

#### RESPONSE

Please refer to responses to the Panel and Agencies in this document.

#### Deficiency Statement 92

##### EIS Guidelines

*12.8 - Compensation, 'Describe plans to compensate resource users, property owners, and communities for losses or damage that may occur as a result of the effects of the Project.' 'Describe mechanisms to be put in place to finance proposed compensation plans.'*

##### EIS

*9.3.13.3 - Mitigation - No further information is provided on how compensation for damage to lobster traps and fishing gear will be administered, financed and guaranteed for the life span of the Project.*

*From my professional and therefore limited perspective, the incremental environmental effect of building and operating the terminal will be minimal. The compensation program for destroyed lobster traps and other fishing gear will require some mechanism for keeping the companies feet to the fire... an independent fisheries effects monitoring committee for example. These details need to be more precisely stated, or specified in the permits.*

---

#### RESPONSE

Please refer to Bilcon's responses to the Panel and Agencies in this section and also, please refer to Section 9.2.3 – Aquatic Ecology- Marine and Section 9.2.4 – Transportation in this document.

### 9.3.5 Economy

#### **Deficiency Statement 93**

##### EIS Guidelines

*12.8 – Compensation – “Describe any plans for compensation that would be part of proposed mitigation to address negative or adverse impacts from the Project.”*

##### **EIS**

*11.8 – Compensation – The EIS does not appear to consider the need for compensation where an unanticipated negative adverse impact may occur. For example, the EIS indicates that there is little risk of a ship strike with a Right whale. Where there is any risk of irreversible damage the EIS should include a compensation plan to address that damage.*

---

#### **RESPONSE**

Bilcon has not contemplated a compensation plan to address a ship strike with a Right Whale or, indeed, any other marine mammal. Bilcon is not aware of any mechanism for addressing this issue.