Appendix 1

Mining Industry Activity in Nova Scotia, 2001

Mining Industry Exploration, Development, Capital and Repair Expenditures

Investment by the mining industry in Nova Scotia is monitored by means of annual surveys of all mining companies having operations or activity in the province. The surveys are carried out by the Nova Scotia Department of Natural Resources (DNR) jointly with Natural Resources Canada (Minerals and Metals Sector - Minerals and Mining Statistics Division), and Statistics Canada (Investment and Capital Stock Division). The Mineral Management Division of DNR actively participates in the Annual Survey of Canadian Mineral Exploration Expenditures and the Annual Survey on Exploration, Development, Capital and Repair Expenditures. Aggregate producers are not included in Table 1.1.

Preliminary figures indicate exploration expenditures in 2001 were $3.2 million, up slightly from 2000 (Table 1.1). Diamond-drilling was down appreciably to 5 100 metres. Capital expenditures at existing mines dropped significantly in 2001 to $8.9 million, while repair and maintenance expenditures were down moderately to $16.8 million.

Mining Leases

There was one new Mining Lease issued in the province during the year. In August, C2C Zeolite Corporation was issued a Mining Lease for its zeolite property at Stronach Mountain, Annapolis County.

Mining Permits

The department did not issue any new Mining Permits during the year.

Production Information from Mines, Quarries and Other Operations

In 2001, the estimated value of Nova Scotia's mineral production, including secondary mineral...

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Exploration Expenditures (field plus overhead)</td>
<td>$2,964,575</td>
<td>$3,177,805</td>
</tr>
<tr>
<td>Exploration diamond-drilling²</td>
<td>8 500 m N/A</td>
<td>5 100 m N/A</td>
</tr>
<tr>
<td>Exploration drilling - other¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mine Complex Development Expenditures (field plus overhead)</td>
<td>$4,250,345</td>
<td>$7,945,857</td>
</tr>
<tr>
<td>Capital and Repair Expenditures at Mining Establishments</td>
<td>$43,823,619</td>
<td>$8,907,710</td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>$21,024,157</td>
<td>$16,767,531</td>
</tr>
</tbody>
</table>

¹ preliminary
² includes deposit appraisal

Table 1.1. Mining industry expenditures in 2000 and 2001.
Mineral Resources Branch

processing, totaled $316 million (Fig. 1.1), virtually unchanged from $315 million in 2000. The value of aggregate production increased by $23 million and offset reductions in the value of coal, salt and peat moss production. Employment in Nova Scotia’s mineral industry totaled 1,988 persons (Fig. 1.2), a 7% decrease from the previous year. The drop in employment is primarily a result of reduced employment in gypsum operations, surface coal operations and in the crushed stone industry.

Nova Scotia’s gypsum production was 6.8 million tonnes shipped. This represents a 6% decrease from the 2000 gypsum production. Gypsum is supplied mainly to wallboard plants along the U.S. Eastern Seaboard. Nova Scotia is Canada’s largest gypsum producer, accounting for more than 80% of the country’s total production.

Nova Scotia’s 2001 salt production increased approximately 21% from 2000 to 1.1 million tonnes.

Coal production was up marginally in 2001, to 1.2 million tonnes. These production levels were lower than the historical annual coal production, reflecting the closure of the Phalen underground coal mine in industrial Cape Breton in 1999. A further decrease in coal production is expected in future years due to the loss of the Prince Mine’s production, with its closure in late 2001.

In the years prior to 2000, the value of petroleum production has been included in the overall value of Nova Scotia’s mineral production. However, there has been no production of crude oil since 1999, and the production of offshore natural gas is not included in this appendix. The appendix covers non-petroleum sectors of the mineral industry (Table 1.2), providing a description of each mine site. Tables 1.3 to 1.6 provide more detailed information on the production of different commodities. Site locations are shown on the accompanying maps, Figures 1.4 and 1.5. Production data are for the calendar year 1 January 2001 to 31 December 2001.

Metal and Gold Mines

Metal Mines

There were no producing metal mines in the province in 2001.
Gold Mines

DUFFERIN RESOURCES INCORPORATED

Manager: W. Coles (Envirogold Technologies Inc.)
Address: Dufferin Resources Incorporated
P. O. Box 2020
Windsor, N. S. B0N 2T0
Production: 7,287 ounces (226 kg) of gold
Employees: 33

The Dufferin Mine at Port Dufferin resumed production during 2001. Gold production of 7,287 ounces was achieved during the year. The mine is an underground trackless mine and the ore is treated in a processing plant at the mine site. Envirogold Technologies Inc. operated the mine under an arrangement with the Mining Lease holder, Dufferin Resources Incorporated. Operations were temporarily suspended at the end of 2001 and did not resume during 2002.

Coal Mining Operations

During 2001, there was one underground coal mine, four surface coal mines, and a coal recovery project operating in the province. Production information for the mines is summarized in Table 1.3. The summaries below give brief details of the underground and surface coal mines operating in Nova Scotia.

Underground Coal Mine

CAPE BRETON DEVELOPMENT CORPORATION

Manager: T. MacNeil, Mine Manager, Prince Colliery
Address: P. O. Box 2500
Sydney, N. S. B1P 6K9
Raw Coal
Production: 1,030,172 tons (934,566 tonnes) of coal
Employees: 500

The Cape Breton Development Corporation is a federal Crown Corporation that operated the underground Prince Mine at Point Aconi, Cape Breton County. The mine began underground production from the Hub Seam in 1975, initially using room and pillar methods. Mechanized retreat longwall operations began in 1980. The corporation’s coal production was supplied to Nova Scotia Power Inc.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VALUE ($ thousands)</td>
<td>EMPLOYMENT*</td>
</tr>
<tr>
<td>METALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>0</td>
<td>3,088</td>
</tr>
<tr>
<td>Total metals</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>INDUSTRIAL MINERALS (Non-Metals)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anhydrite</td>
<td>2,202</td>
<td>***</td>
</tr>
<tr>
<td>Barite</td>
<td>140</td>
<td>***</td>
</tr>
<tr>
<td>Gypsum</td>
<td>76,340</td>
<td>75,466</td>
</tr>
<tr>
<td>Limestone and Dolomite</td>
<td>5,444</td>
<td>5,030</td>
</tr>
<tr>
<td>Peat</td>
<td>2,559</td>
<td>***</td>
</tr>
<tr>
<td>Salt</td>
<td>54,048</td>
<td>***</td>
</tr>
<tr>
<td>Silica</td>
<td>4,143</td>
<td>***</td>
</tr>
<tr>
<td>Total Non-Metals</td>
<td>144,876</td>
<td>884</td>
</tr>
<tr>
<td>(Structural Materials)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension Stone</td>
<td>300</td>
<td>***</td>
</tr>
<tr>
<td>Cement**</td>
<td>36,750</td>
<td>***</td>
</tr>
<tr>
<td>Clay Products**</td>
<td>6,000</td>
<td>***</td>
</tr>
<tr>
<td>Crushed Stone</td>
<td>41,795</td>
<td>58,811</td>
</tr>
<tr>
<td>Sand &amp; Gravel</td>
<td>8,236</td>
<td>14,096</td>
</tr>
<tr>
<td>Total Structural Materials</td>
<td>93,081</td>
<td>628</td>
</tr>
<tr>
<td>Total Industrial Minerals</td>
<td>237,957</td>
<td>1,512</td>
</tr>
<tr>
<td>FUELS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td>76,880</td>
<td>625</td>
</tr>
<tr>
<td>TOTAL MINERAL PRODUCTION</td>
<td>314,837</td>
<td>2,147</td>
</tr>
<tr>
<td>CHANGE FROM PREVIOUS YEAR</td>
<td>-22%</td>
<td>-26%</td>
</tr>
</tbody>
</table>

1 Estimated from Department of Natural Resources sources
2 Does not include the value of limestone quarried for cement production
* Average number of persons during production period
** Processed or manufactured value
*** Value not shown, but included in total
Note: Production represents shipments; numbers may not add to totals due to rounding
During 2001, the Prince Mine operated until November, when coal production was stopped. Production came primarily from the No. 1 North longwall panel, which was completed at that time. Development work had been suspended during the year, and the mine openings were closed before the end of the year.

**Surface Coal Mines**

**PIONEER COAL LIMITED**

Manager: C. Chisholm
Address: P. O. Box 1328
Antigonish, N. S. B2G 2L7
Production: 178,202 tons (161,664 tonnes) of coal
Employees: 34

Pioneer Coal mines coal from two seams at the Stellarton surface mine, Pictou County. The company has been mining on the Foord Seam since 1996 and began mining on the Cage Seam in 2001. The Foord Seam is approximately 12 metres thick and the Cage Seam is about 5 metres thick. Two mining methods were used at Stellarton in 2001, conventional surface mining and highwall mining. Conventional surface mining employs mechanical equipment to break the coal and overlying rock. The material is excavated using hydraulic excavators, conveyors and off-road haul trucks. The operator successfully implemented use of its highwall mining system on the Foord Seam at Stellarton in 2001. The highwall miner is a remotely controlled system that extracts coal in a series of headings driven from the coal seam face in a surface cut.

The company conducted mining operations at the site from February through June and September through December. Production was suspended for
Table 1.3. Coal production for the calendar year 2001.

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>MINE NAME</th>
<th>LOCATION</th>
<th>TONS</th>
<th>TONNES</th>
<th>TOTAL NUMBER EMPLOYED</th>
<th>APPROX. VALUE($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNDERGROUND MINING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cape Breton Development Corp. (CBDC)</td>
<td>Prince Mine</td>
<td>Point Aconi, Cape Breton County</td>
<td>1,030,172</td>
<td>934 566</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Total (underground)</td>
<td></td>
<td></td>
<td>1,030,172</td>
<td>934 566</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td><strong>SURFACE MINING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brogan Mining Company Limited</td>
<td>Little Pond Mine</td>
<td>Alder Point, Cape Breton County</td>
<td>53,991</td>
<td>48 980</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Cape Crushing Company Limited</td>
<td>Merritt Point Mine</td>
<td>Alder Point, Cape Breton County</td>
<td>23,354</td>
<td>21 187</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Hill Reclamation Limited</td>
<td></td>
<td>Springhill, Cumberland County</td>
<td>8,547</td>
<td>7 754</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Pioneer Coal Limited</td>
<td>Stellarton Mine</td>
<td>Stellarton, Pictou County</td>
<td>178,202</td>
<td>161 664</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Thorburn Mining Limited</td>
<td>Coalburn Mine</td>
<td>Coalburn, Pictou County</td>
<td>68,012</td>
<td>61 700</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Total (surface)</td>
<td></td>
<td></td>
<td>332,106</td>
<td>301 285</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL FOR ALL COAL PRODUCERS</strong></td>
<td></td>
<td></td>
<td>1,362,278</td>
<td>1 235 851</td>
<td>588</td>
<td>65,000,000</td>
</tr>
</tbody>
</table>

1: personnel employed in clerical, supervisory, etc. positions as well as mining personnel.
2: estimated from Nova Scotia Department of Natural Resources sources

NOTE: Production represents shipments; numbers may not add to totals due to rounding.
Anhydrite
1. Fundy Gypsum Co.
2. Little Narrows Gypsum Co.

Barite
3. E-Z-EM Canada Inc.

Clay and Shale
4-7. Shaw Brick, a member of the Shaw Group Limited

Gypsum
10. National Gypsum (Canada) Ltd.
11-12. Georgia-Pacific Corp.
13-14. Little Narrows Gypsum Co.
15. Tusket Mining Incorporated

Limestone & Dolomite
16. Lafarge Canada Inc.
17. Nova Scotia Power Incorporated
18. Mosher Limestone Co. Ltd.
19. Ridge Brokers Ltd.
20. Scotia Limestone Ltd.

Salt
21. Sifto Canada Inc.
22. The Canadian Salt Company Limited

Silica Sand
23. Shaw Resources, a member of the Shaw Group Limited
24. Lafarge Canada Inc.

Dimension Stone
25. Scotia Slate Products Ltd.
26. Wallace Quarries Ltd.

Peat Moss
27. Annapolis Valley Peat Moss Co.
28. MacDonald Peat Moss Limited

Gold
29. Dufferin Resources Inc.

Figure 1.5. Location of industrial mineral and gold operations in Nova Scotia, 2001.
### Table 1.4. Industrial minerals production for the calendar year 2001.

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>LOCATION</th>
<th>PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TONS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TONNES</td>
</tr>
<tr>
<td>GYPSUM</td>
<td></td>
<td>TOTAL NUMBER EMPLOYED¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>APPROXIMATE VALUE ($)²</td>
</tr>
<tr>
<td>Fundy Gypsum Company</td>
<td>Miller Creek and Wentworth Road, Hants County</td>
<td>1,729,580</td>
</tr>
<tr>
<td>Georgia-Pacific Canada, Inc.</td>
<td>Sugar Camp, Inverness County</td>
<td>1,492,984</td>
</tr>
<tr>
<td>Little Narrows Gypsum Company</td>
<td>Little Narrows, Victoria County</td>
<td>1,039,566</td>
</tr>
<tr>
<td>National Gypsum (Canada) Limited</td>
<td>East Millford, Halifax County</td>
<td>3,281,296</td>
</tr>
<tr>
<td>Total (gypsum)</td>
<td></td>
<td>7,543,426</td>
</tr>
<tr>
<td>ANHYDRITE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundy Gypsum Company</td>
<td>Wentworth Road, Hants County</td>
<td>33,694</td>
</tr>
<tr>
<td>Little Narrows Gypsum Company</td>
<td>Little Narrows, Victoria County</td>
<td>49,809</td>
</tr>
<tr>
<td>Total (anhydrite)</td>
<td></td>
<td>83,503</td>
</tr>
<tr>
<td>SALT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Canadian Salt Company Limited</td>
<td>Pugwash, Cumberland County</td>
<td>1,124,484</td>
</tr>
<tr>
<td>Sifto Canada Inc.</td>
<td>Nappan, Cumberland County</td>
<td>94,446</td>
</tr>
<tr>
<td>Total (salt)</td>
<td></td>
<td>1,218,930</td>
</tr>
<tr>
<td>LIMESTONE AND DOLOMITE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lafarge Canada Inc.</td>
<td>Brookfield, Colchester County</td>
<td>496,823</td>
</tr>
<tr>
<td>Mosher Limestone Company Limited</td>
<td>Upper Musquodoboit, Halifax County</td>
<td>35,374</td>
</tr>
<tr>
<td>Nova Scotia Power Incorporated</td>
<td>Glen Morrison, Cape Breton County</td>
<td>131,950</td>
</tr>
<tr>
<td>Ridge Brokers Limited</td>
<td>Southside Harbour, Antigonish County</td>
<td>11,023</td>
</tr>
<tr>
<td>Scotia Limestone Limited</td>
<td>Kellys Cove, Victoria County</td>
<td>6,614</td>
</tr>
<tr>
<td>Total (limestone and dolomite)</td>
<td></td>
<td>681,784</td>
</tr>
<tr>
<td>BARIITE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Z-EM Canada Inc.</td>
<td>Brookfield, Colchester County</td>
<td>5000</td>
</tr>
<tr>
<td>Total (barite)</td>
<td></td>
<td>5000</td>
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</table>
Table 1.4. Continued.

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>LOCATION</th>
<th>PRODUCTION</th>
<th>TOTAL NUMBER EMPLOYED&lt;sup&gt;1&lt;/sup&gt;</th>
<th>APPROXIMATE VALUE ($)&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLAY AND SHALE</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Shaw Brick (a member of the Shaw Group Limited)</td>
<td>Lantz and Milford, Hants County New Glasgow, Pictou County</td>
<td>35,936 32 601</td>
<td>see clay products Table 1.5</td>
<td>n/a&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>Total (clay and shale)</td>
<td></td>
<td>35,936 32 601</td>
<td>see clay products Table 1.5</td>
<td>n/a&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>SILICA SAND</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaw Resources (a member of the Shaw Group Limited)</td>
<td>Nine Mile River, Hants County</td>
<td>65,787 59 682</td>
<td>7</td>
<td>*</td>
</tr>
<tr>
<td>Total (silica sand)</td>
<td></td>
<td>65,787 59 682</td>
<td>7</td>
<td>*</td>
</tr>
<tr>
<td><strong>DIMENSION STONE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scotia Slate Products Ltd.</td>
<td>Rawdon Hills, Hants County</td>
<td>n/a n/a</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Wallace Quarries Ltd.</td>
<td>Quarry: Wallace, (Sandstone) Cumberland County</td>
<td>541 491</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Total (dimension stone)</td>
<td></td>
<td>541 491</td>
<td>25</td>
<td>*</td>
</tr>
<tr>
<td><strong>PEAT MOSS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annapolis Valley Peat Moss Company&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Berwick, Kings County</td>
<td>1,760 1 597</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>McDonald Peat Moss Limited&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Kennetcook, Hants County</td>
<td>1,294 1 174</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Total (peat moss)</td>
<td></td>
<td>3,054 2 771</td>
<td>59</td>
<td>*</td>
</tr>
<tr>
<td><strong>AGGREGATES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crushed Stone</td>
<td>Various</td>
<td>9,630,618 8 736 839</td>
<td>234</td>
<td>58,811,000</td>
</tr>
<tr>
<td>Sand and Gravel</td>
<td>Various</td>
<td>3,261,706 2 959 000</td>
<td>114</td>
<td>14,096,000</td>
</tr>
<tr>
<td>Total (aggregates)</td>
<td></td>
<td>12,892,324 11 695 839</td>
<td>348</td>
<td>72,907,000</td>
</tr>
<tr>
<td><strong>TOTAL FOR INDUSTRIAL MINERALS&lt;sup&gt;6&lt;/sup&gt;</strong></td>
<td></td>
<td>22,530,285 20,439,340</td>
<td>1267</td>
<td>208,742,000</td>
</tr>
</tbody>
</table>

* value not shown, but included in total
<sup>1</sup> total employees: mining, production, clerical, supervisory, etc.
<sup>2</sup> estimate from Nova Scotia Department of Natural Resources sources
<sup>3</sup> processed or manufactured value
<sup>4</sup> does not include the value of Lafarge Canada Inc. production, which value is included in the higher manufactured value (cement)
<sup>5</sup> value included in the higher manufactured valuation (bricks)
<sup>6</sup> excluding secondary mineral manufacturing (Table 1.5)

Note: production represents shipments; numbers may not add to totals due to rounding.
a short period in January and part of February, during which time the company’s coal sales contract was negotiated and renewed, and during a summer shutdown period in July and August.

The coal mined from the Stellarton operation is blended on-site with coal trucked from the Coalburn Mine before being shipped to Nova Scotia Power Inc. (NSPI) generating stations.

THORBURN MINING LIMITED
Manager: C. Chisholm
Address: P. O. Box 1328
Antigonish, N. S. B2G 2L7
Production: 68,012 tons (61,700 tonnes) of coal
Employees: 18

The Coalburn surface coal mine is located in Coalburn, Pictou County. The mine began operations in June 1999, and extracts coal from both the Upper and Lower MacKay seams. The seams are approximately 0.9 metres in thickness. In 2000, the operator obtained revised permits to employ blasting and to use a highwall miner at the property. The highwall miner is a remotely controlled system that extracts coal in a series of headings driven from the coal seam face in a surface cut.

The company used the highwall mining method to extract coal from both seams during 2001. Conventional surface mining methods were used to mine additional coal and establish coal faces for the highwall miner. Conventional surface mining at Coalburn employs blasting to break the overlying rock and the material is loaded and hauled using hydraulic excavators and off road haul trucks.

Production from the Coalburn Mine is trucked to Pioneer Coal’s facility in Stellarton for blending with other coals, and subsequently supplied to NSPI.

CAPE CRUSHING COMPANY LIMITED
Manager: E. Brogan
Address: P. O. Box 265
North Sydney, N. S. B2A 3M3
Production: 23,354 tons (21,187 tonnes) of coal
Employees: 10

The company operates a small surface coal mine at Alder Point, Cape Breton County, to supply the local domestic market and NSPI. The mine extracts coal from the Lloyd Cove (Bonar) Seam. Mining is carried out using mechanical equipment to break the coal and overlying rock.

BROGAN MINING COMPANY LIMITED
Manager: R. Brogan
Address: 638 Bras d’Or Road
Florence, N. S. B1Y 1E4
Production: 53,991 tons (48,980 tonnes) of coal
Employees: 20

During the year, Brogan Mining Company Limited operated a surface coal mine at Little Pond, Cape Breton County. Coal is recovered from the Lloyd Cove (Bonar) coal seam. The overlying waste rock and coal are broken mechanically and mining is carried out using bulldozers, hydraulic excavators and dump trucks. The coal production is marketed to NSPI.

The company also continued reclamation work at its mine site at Toronto Road, Cape Breton County, during 2001.

HILL RECLAMATION LTD.
Manager: M. McCormick
Address: R. R. #1
Springhill, N. S. B0M 1X0
Production: 8,547 tons (7,754 tonnes) of coal
Employees: 6

Hill Reclamation operates a rail bed coal recovery project near Springhill, Cumberland County. The company recovers coal from an abandoned railway bed and markets the coal to NSPI.
Industrial Minerals Mining

Gypsum and Anhydrite

FUNDY GYPSUM COMPANY
Manager: K. Hillman
Address: P. O. Box 400
Windsor, N. S. B0N 2T0
Production: 33,694 tons (30 567 tonnes) of anhydrite
1,729,580 tons (1 569 065 tonnes) of gypsum
Employees: 188

The Fundy Gypsum Company operates quarries and crushing plants in the Wentworth Road and Miller Creek areas near Windsor, Hants County. In 2001, the company produced gypsum from its Miller Creek quarry and both gypsum and anhydrite from the Wentworth quarry. The Wentworth ore is processed in the company’s heavy media plant to separate the anhydrite and the gypsum.

The gypsum and anhydrite are transported by unit train to ship-loading facilities at Hantsport, a distance of 19 km. These products are shipped to wallboard and cement plants in the United States and Canada.

GEORGIA-PACIFIC CANADA, INC.
Manager: J. T. Kennedy
Address: P. O. Box 400
Port Hawkesbury, N. S. B0E 2V0
Production: 1,492,984 tons (1 354 426 tonnes) of gypsum
Employees: 114

Georgia-Pacific Corporation operates a gypsum quarry at Sugar Camp, Inverness County and continued development of its gypsum quarry at Melford, Inverness County during 2001.

Overburden at Sugar Camp is removed using trucks and shovels. The gypsum is drilled, blasted and transported to the crusher by trucks. Most of the quarry’s production is transported by highway trucks to ship loading facilities at Point Tupper, Richmond County, a distance of 19 km. Georgia-Pacific also supplies gypsum to the wallboard plant at Point Tupper.

LITTLE NARROWS GYPSUM COMPANY
Manager: M. W. Bishop
Address: R. R. #1
Little Narrows, N. S. B0E 1T0
Production: 49,809 tons (45 186 tonnes) of anhydrite
1,039,566 tons (943 088 tonnes) of gypsum
Employees: 87

Little Narrows Gypsum Company operates a gypsum quarry and an anhydrite quarry near Little Narrows, Victoria County. The gypsum and anhydrite are drilled, blasted and loaded onto trucks with loaders and hydraulic excavators. All the gypsum and anhydrite produced is shipped from the company’s dock on the Bras d’Or Lakes to destinations in Canada and the United States.

NATIONAL GYPSUM (CANADA) LTD.
Manager: P. C. Mills
Address: P. O. Box 57
Milford Station, N. S. B0N 1Y0
Production: 3,281,296 tons (2 976 772 tonnes) of gypsum
Employees: 100

National Gypsum (Canada) Ltd. operates the largest gypsum quarry in the province at East Milford, Halifax County. The gypsum is drilled, blasted and loaded onto trucks with loaders and hydraulic excavators. The gypsum is crushed, screened, and transported by unit train from Milford to Wright’s Cove, Dartmouth, a distance of 45 km, where it is loaded onto ships for points in Canada and the United States.

TUSKET MINING INC.
Manager: C. E. Bain
Address: P. O. Box 48100
Bedford, N. S. B4A 3Z2
Production: 0 tons (0 tonnes)
Table 1.5. Secondary mineral manufacturing for the calendar year 2001.

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>LOCATION</th>
<th>PRODUCTION</th>
<th>TOTAL NUMBER EMPLOYED¹</th>
<th>APPROX. VALUE ($)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAY PRODUCTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaw Brick (a member of</td>
<td>Lantz, Hants County</td>
<td>35,936</td>
<td>48</td>
<td>*</td>
</tr>
<tr>
<td>the Shaw Group Limited)</td>
<td></td>
<td>32 601</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PORTLAND CEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lafarge Canada Inc.</td>
<td>Brookfield, Colchester</td>
<td>322,434</td>
<td>52</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>County</td>
<td>292 510</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL FOR SECONDARY MINERAL</td>
<td></td>
<td></td>
<td>100</td>
<td>39,306,000</td>
</tr>
<tr>
<td>MANUFACTURING</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ total number of employees including office, clerical, supervisory, mining and production
² estimated from Nova Scotia Department of Natural Resources sources

NOTE: Production represents shipments; numbers may not add to totals due to rounding

There was no activity at the Murchyville Mine, Halifax County, during the year. The site remains on a care and maintenance basis while markets for the gypsum are found.

Salt

THE CANADIAN SALT COMPANY LIMITED

Manager: A. W. Davidson
Address: P. O. Box 160
        Pugwash, N. S. B0K 1L0
Production: 1,124,484 tons (1 020 125 tonnes) of salt
Employees: 218

The Canadian Salt Company Limited operates an underground salt mine at Pugwash, Cumberland County. The salt is mined by a room and pillar system of extraction, using diesel/electric drills, undercutters, loaders and trucks. Production during the year was from the 1000 and 830 levels.

The processing plant at the site produces a wide range of salt products, including industrial grades of salt, salt blocks for farm use, and refined salt for domestic consumption. Transportation is by road, rail or from the company owned ship-loading facility at Pugwash.

SIFTO CANADA INCORPORATED

Manager: D. E. Dickie
Address: P. O. Box 550
        Amherst, N. S. B4H 4A1
Production: 94,446 tons (85 681 tonnes) of salt
Employees: 49

Salt has been produced from the solution salt mine at Nappan, Cumberland County, since 1947. Salt is mined by solution mining where water is pumped in underground wells and the salt is dissolved. The resulting brine solution is then returned to the surface. The salt is recovered from the brine in a processing plant, using a ‘mechanical vapour recompression evaporating process’ system. The plant produces a wide range of refined salt products.

During the year, two new brine wells were drilled and placed under development, the Nos. 9 and 10 wells. Salt was produced from the Nos. 6, 7, 8, 9, and 10 brine wells.

Barite

E-Z-EM CANADA, INC., NYSTONE DIVISION

Manager: V. J. Prostak
Address: P. O. Box 69
        Debert, N. S. B0M 1G0
Production: 5,000 tons (4 536 tonnes) of barite
Employees: 16

E-Z-EM Canada’s barite deposit is located 1.6 km northeast of Brookfield, Colchester County. During 2001, approximately 4536 tonnes of ore were produced from the surface mine. The ore was trucked to the company’s plant at Debert where it
was upgraded to a pharmaceutical quality product. The refined product is shipped to the parent company, E-Z-EM Corporation, New York, USA, for further processing and packaging.

**Limestone and Dolomite**

**LAFARGE CANADA INC.**

Manager: L. MacArthur  
Address: P. O. Box 5  
Brookfield, N. S. B0N 1C0  
Production: 496,823 tons (450 715 tonnes) of limestone  
Employees: 20 (quarry) 52 (cement plant)

Lafarge Canada Inc. operates a limestone quarry near its Brookfield cement plant, 5 km west of Brookfield, Colchester County. The total production from the quarry is used at the cement plant.

**MOSHER LIMESTONE COMPANY LIMITED**

Manager: D. M. Mosher  
Address: P. O. Box 28  
Upper Musquodoboit, N. S. B0N 2M0  
Production: 35,374 tons (32 091 tonnes) of dolomite/limestone  
Employees: 23

Mosher Limestone operates a number of quarries near Upper Musquodoboit, Halifax County. The company produces agricultural grade dolomite/limestone in its grinding plant at Upper Musquodoboit. The product is bagged or supplied in bulk for distribution throughout the Atlantic Provinces. The company also produces a pelletized limestone product for the domestic garden market.

**NOVA SCOTIA POWER INCORPORATED**  
(OPERATED BY KELLY ROCK LIMITED)

Manager: D. W. MacKenna (Kelly Rock Limited)  
Address: P. O. Box 1206  
Sydney, N. S. B1P 6J9  
Production: 131,950 tons (119 704 tonnes) of limestone  
Employees: 10

The limestone quarry at Glen Morrison, Cape Breton County, began production in 1993. The company produces several products at the on-site milling facility. During 2001, most of the production from this site was shipped to Point Aconi for use in the fluidized bed power generating station. Kelly Rock Limited operates the quarry on behalf of Nova Scotia Power.

**RIDGE BROKERS LIMITED**

Manager: E. Alward  
Address: P. O. Box 2001  
Havelock, N. B. E4Z 6H3  
Production: 11,023 tons (10 000 tonnes) of limestone  
Employees: 1

The company operates a small quarry at Southside Antigonish Harbour, Antigonish County, producing limestone for the agricultural market.

**SCOTIA LIMESTONE LIMITED**

Manager: D. M. Mosher  
Address: P. O. Box 28  
Upper Musquodoboit, N. S. B0N 2M0  
Production: 6,614 tons (6 000 tonnes) of dolomite  
Employees: 2

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Table 1.6. Metallic mineral production for the calendar year 2001.

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<tr>
<td></td>
<td></td>
<td>TROY OZ.</td>
<td>g</td>
<td></td>
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<tr>
<td>Dufferin Resources Inc.¹</td>
<td>Port Dufferin, Halifax County</td>
<td>7,287</td>
<td>226 600</td>
<td>33</td>
</tr>
<tr>
<td><strong>TOTAL FOR METALLIC MINERAL PRODUCTION</strong></td>
<td></td>
<td></td>
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¹operated for part of year only  
²value based on average annual metal price

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²value based on average annual metal price
The Kelly’s Cove dolomite quarry and plant operation is located near New Campbellton, Victoria County. The plant produces an agricultural grade dolomite for domestic sale, a ground dolomite product for coal mine stone dust, and dolomite products for the offshore steel industry. All 2001 production came from the existing ore inventory and no mining took place at the site during 2001.

**Clay**

SHAW BRICK, A MEMBER OF THE SHAW GROUP LIMITED

Manager: B. Frizzell  
Address: P. O. Box 2130  
Lantz, N. S. B0N 1R0  
Production: 35,936 tons (32,601 tonnes) of clay & shale

Shaw Brick extracts clay from pits at Lantz, Milford and Shubenacadie, all in Hants County, and shale from quarries located in Hardwood Lands, Hants County, and New Glasgow, Pictou County. These materials are used in the company’s plant in Lantz for the manufacture of bricks and other structural clay products.

**Silica Sand**

SHAW RESOURCES, A MEMBER OF THE SHAW GROUP LIMITED

Manager: G. Dickie  
Address: P. O. Box 60  
Shubenacadie, N. S. B0N 2H0  
Production: 65,787 tons (59,682 tonnes) of silica sand  
Employees: 7

Shaw Resources produces silica sand from a deposit at West Indian Road, Hants County. This sand is processed into several silica sand products including glass-grade sand.

**Dimension Stone**

WALLACE QUARRIES LIMITED

Manager: S. Flynn

Address: P. O. Box 203  
Wallace, N. S. B0K 1Y0  
Production: 541 tons (491 tonnes) of building stone  
Employees: 5

The Wallace Quarries, located near Wallace, Cumberland County, continued to supply building stone for major building rehabilitation work in Halifax and central Canada. Blocks of stone are sent for cutting to processing facilities in Nova Scotia, New Brunswick and Quebec to supply local markets.

**Slate**

SCOTIA SLATE PRODUCTS LTD.

President: D. Donovan  
Address: Box 12, Comp 3,  
Kennetcook, N. S. B0N 1P0  
Employees: 17

The company produces a range of slate products from its quarry at Rawdon Hills, Hants County.

**Peat Moss**

ANNAPOLIS VALLEY PEAT MOSS COMPANY LIMITED

President: H. Endres  
Address: Berwick, N. S. B0P 1E0  
Production: 1,760 tons (1,597 tonnes) of peat moss  
Employees: 29

The company uses vacuum harvesters to recover agricultural peat from a 200 ha bog located near Berwick, Kings County. Baled peat products are shipped to markets in Canada, the United States and Japan.

MACDONALD PEAT MOSS LIMITED

Owner: Lameque Quality Group Ltd.  
Address: 86 Tourbe Street  
Lameque, N. B. E8T 1A3
Production: 1,294 tons (1 174 tonnes) of peat moss
Employees: 30

MacDonald Peat Moss Limited, a wholly-owned subsidiary of New Brunswick’s Lameque Quality Group Ltd., has lease rights to a 688 ha peat bog located on Crown land, approximately 12 km west of Kennetcook, Hants County. The company began operations in 1999, exporting baled peat to international markets.

**Aggregate Resources**

Approximately 11.7 million tonnes of construction aggregates were produced in Nova Scotia in 2001.

Twenty companies reported crushed stone production totaling 8.7 million tonnes while 30 producers reported sand and gravel production totaling 3 million tonnes. The majority of the aggregates were consumed within the province.

Two companies eclipsed the 1 million tonne mark for crushed stone production in 2001. Rocky Lake Quarry Limited of Bedford, Nova Scotia, reported shipments of 1.5 million tonnes and Martin Marietta Materials Canada Ltd. reported over 2.5 million tonnes shipped.