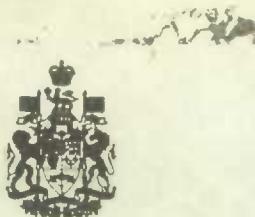


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THE CEMENT MANUFACTURING INDUSTRY

1957

Published by Authority of
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NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: **Volume I** — The Primary Industries, including mining, forestry and fisheries; **Volume II** — Manufacturing; **Volume III** — Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume I consists of the following parts:

- Part I — Mineral Statistics
- Part II — Forestry Statistics — Operations in the Woods
- Part III — Fisheries Statistics

Part I includes the following reports which constitute the complete series on Mineral Statistics of Canada. Individual reports are issued as the information becomes available; they are arranged in a form suitable for binding.

- A — General Review of the Mining Industry, 50¢
- B — The Gold Mining Industry, 50¢
- C — The Silver-Lead-Zinc Mining Industry, 25¢
- D — The Nickel-Copper Mining, Smelting and Refining Industry, 25¢
- E — The Iron Mining Industry, 25¢
- F — The Miscellaneous Metal Mining Industry, 25¢
- G — The Smelting and Refining Industry, 25¢
- H — The Coal Mining Industry, \$1.00
- I — The Crude Petroleum and Natural Gas Industry, 25¢
- J — The Asbestos Mining Industry, 25¢
- K — The Feldspar and Quartz Mining Industry, 25¢
- L — The Gypsum Industry, 25¢
- M — The Peat Industry, 25¢
- N — The Salt Industry, 25¢
- O — The Talc and Soapstone Industry, 25¢
- P — The Miscellaneous Non-metal Mining Industry, 25¢
- Q — The Cement Manufacturing Industry, 25¢
- R — The Clay and Clay Products Industry, 25¢
- S — The Lime Industry, 25¢
- T — The Sand and Gravel Industry, 25¢
- U — The Stone Industry, 25¢
- V — Contract Drilling in the Mining Industry, 25¢

THE CEMENT MANUFACTURING INDUSTRY

1957

During 1957 the Canadian producers of portland cement shipped or used 6,049,098 tons valued at \$93,167,477 compared with 5,021,683 tons worth \$75,233,321 in the preceding year. These data exclude portland cement made from imported clinker. The value of containers has not been included.

The plants in Ontario had an output of 2,286,181 tons and those in Quebec produced 2,072,855 tons. The output for all the plants in Canada amounted to 6,223,359 tons.

At the end of the year there were two new plants on which the construction was nearing completion. One plant, located on Lulu Island near Vancouver, British Columbia, was being built by the Lafarge Cement of North America Ltd. and another plant was under construction at Picton, Ontario. The latter plant will be operated by the Lake Ontario Portland Cement Company Limited.

The cement manufacturing industry consumed 8,741,863 tons of limestone, 287,786 tons of gypsum, 397,907 tons of shale, 990,526 tons of clay, 101,442 tons of sand, 71,023 tons of iron oxides and varying amounts of other additives. There were 3,465 persons employed at the plants or quarries. Salaries and wages amounted to \$13,042,470. Purchased materials, process supplies and containers cost \$16,193,942; fuel cost \$15,277,416 and 699,492,416 kwh. of purchased electricity cost \$4,415,242.

The apparent consumption of portland cement amounted to 5,803,163 tons in 1957 compared with 5,574,738 tons in 1956. This is computed by adding the producers shipments to the imports and deducting the exports. For statistical purposes the imported grey clinker was measured in the clinker form and was included in the computation.

TABLE 1. Principal Statistics for the Cement Manufacturing Industry, Significant Years, 1921-1957

Year	Establishments	Employees	Earnings	Cost of fuel and electricity at works	Cost ¹ of process supplies, material and containers, at works	Gross selling value of products (f.o.b. works)	Net ² value of production
	No.	No.	\$	\$	\$	\$	\$
1921	14	2,751	3,443,884	2,788,820	N.A.	14,195,143	N.A.
1929	11	2,546	3,523,595	4,347,219	"	19,337,235	"
1931	12	1,820	2,432,950	3,280,870	"	15,826,243	"
1933	12	740	781,746	982,087	"	4,536,935	"
1937	9	1,083	1,373,444	1,904,419	540,915	9,095,867	6,650,534
1939	8	1,001	1,297,542	1,705,981	1,372,238	8,511,211	6,273,172
1941	8	1,235	1,860,931	2,897,383	2,146,825	14,323,372	9,279,164
1944	8	1,207	2,254,775	3,197,955	2,566,432	12,646,741	6,882,354
1946	8	1,524	2,929,020	4,487,496	4,306,467	21,724,021	12,930,058
1949	8	1,721	4,754,611	8,038,190	5,949,640	35,065,152	21,077,322
1951	10	1,931	6,242,900	9,068,296	7,324,048	43,023,845	26,631,501
1953	11	2,391	8,873,694	11,327,001	10,472,651	62,227,924	40,428,272
1954	12	2,575	9,802,707	11,576,516	10,667,304	62,196,947	39,953,127
1955	12	2,801	10,962,895	12,970,470	11,505,305	68,812,666	44,336,891
1956	17	3,186	12,856,855	15,763,605	12,784,027	78,605,846	50,058,214
1957	17	3,465	15,317,388	19,692,658	16,193,942	97,079,041	61,192,441

1. Includes process supplies, containers and raw materials.

2. Gross value less cost of materials, fuel and electricity.

TABLE 2. Producers' Shipments¹ of Cement, by Provinces, 1955-1957

Province	1955		1956		1957	
	Tons	Value	Tons	Value	Tons	Value
Newfoundland	81,905	1,492,990	83,902	1,660,300	58,277	1,185,078
New Brunswick	152,715	2,306,065	165,482	2,439,676	163,640	2,646,293
Quebec	1,662,084	24,132,519	1,797,128	25,696,957	2,051,201	30,267,092
Ontario	1,341,276	19,707,042	1,450,437	21,455,019	2,211,887	33,505,994
Manitoba	340,234	5,509,812	523,924	8,324,520	412,998	6,820,383
Saskatchewan	—	—	2,509	59,762	150,664	2,861,615
Alberta	492,209	7,026,722	602,163	9,258,016	556,962	8,802,914
British Columbia	334,057	5,474,875	396,138	6,339,071	443,469	7,078,108
Canada	4,404,480	65,650,025	5,021,683	75,233,321	6,049,098	93,167,477

1. Does not include the value of containers. Includes amounts used by the producers.

TABLE 3. Production, Imports and Exports of Cement, 1956 and 1957

	1956		1957	
	Tons	Value	Tons	Value
Output	5,107,874	—	6,223,359	—
Shipments (sold or used by producers)	5,021,683	75,233,021	6,049,098	93,167,477
Stocks on hand December 31	254,976	—	429,237	—
Imports:				
Portland cement and hydraulic or water-lime	599,624	8,078,334	92,380	1,870,318
Portland cement clinker (white)	14,957	295,733	13,941	292,912
Portland cement clinker, other	77,992	714,878	—	—
Exports:				
Portland cement	124,561	1,984,908	338,315	6,052,491
Apparent consumption ¹	5,574,738	—	5,803,163	—

1. Calculated at 1 barrel = 350 pounds. Exclusive of white clinker imported.

TABLE 4. Producers' Shipments and Apparent Consumption of Cement, 1948-1957

Year	Shipments (sold or used)		Imports	Exports	Apparent consumption ¹
	Tons	Value			
1948	2,472,246	28,264,987	196,117	12,775	2,655,588
1949	2,785,399	32,901,936	399,700	3,362	3,181,737
1950	2,929,820	35,894,124	242,588	4,184	3,168,224
1951	2,976,367	40,446,288	407,300	453	3,383,214
1952	3,241,095	48,059,470	509,947	754	3,750,288
1953	3,891,708	58,842,022	434,487	2,577	4,323,618
1954	3,926,559	59,035,644	401,135	21,638	4,306,056
1955	4,404,480	65,650,025	517,890	168,907	4,753,463
1956	5,021,683	75,233,021	677,616 ²	124,561	5,574,738
1957	6,049,098	93,167,477	92,380	338,315	5,803,163

1. Shipments plus imports less exports.

2. Includes imported clinker, other than white.

TABLE 5. Producers' Shipments of Cement, by Months, 1956 and 1957

Month	1956	1957	Month	1956	1957
	Tons			Tons	
January	195,533	189,694	August	546,851	746,973
February	224,561	210,959	September	442,518	669,256
March	313,844	315,616	October	538,060	682,343
April	428,586	379,383	November	400,035	469,842
May	593,467	628,961	December	198,453	226,675
June	581,905	650,867	Total	5,021,683	6,049,098
July	557,870	878,529			

TABLE 6. Materials Used in Cement Plants, 1948-1957

Year	Cost at works of materials listed in following columns and other	\$	Tons					
			Shale	Limestone	Gypsum	Sand	Clay	Iron oxides ¹
1948	990,577	78,377	3,449,947	119,821	47,749	277,178	9,182	
1949	1,161,010	76,200	3,985,407	137,785	48,124	325,037	11,885	
1950	1,246,520	79,325	4,119,216	137,170	52,509	360,927	12,145	
1951	1,391,842	87,081	4,246,501	146,603	60,015	405,159	10,552	
1952	1,535,420	142,988	4,513,625	161,210	57,906	443,504	11,959	
1953	2,029,172	249,209	5,330,778	199,743	58,548	571,069	20,703	
1954	2,130,976	277,085	5,566,198	210,373	69,870	589,219	17,177	
1955	2,563,496	71,599	6,033,619	219,461	91,407	798,694	23,743	
1956	3,062,921	250,641	7,152,693	234,545	121,616	822,499	33,043	
1957	4,894,511	397,907	8,741,863	287,786	101,442	990,526	71,023	

1. Produced from iron pyrites by the chemical industry.

TABLE 7. Coal Used in Cement Plants, 1948-1957

Year	Canadian		Foreign	
	Tons	Value	Tons	Value
	\$		\$	
1948	328,422	2,965,986	300,191	2,842,549
1949	440,038	1	231,870	1
1950	453,930	1	228,797	1
1951	421,812	1	244,250	1
1952	346,255	1	281,970	1
1953	363,054	3,553,974	353,450	3,485,822
1954	380,317	1	341,299	1
1955	501,588	1	325,352	1
1956	581,885	6,183,015	375,043	3,740,509
1957	606,273	6,824,171	544,158	5,716,043

1. Value is not available.

TABLE 8. Number and Capacity of Kilns in Cement Plants, 1948-1957

Year	Total kilns		Kilns in use during the year	
	Number	Total capacity - tons per 24 hours	Number	Total capacity - tons per 24 hours
1948	20	7,175	19	7,053
1949	21	8,225	19	7,980
1950	19	8,015	19	8,015
1951	21	8,523	21	8,523
1952	24	9,958	22	8,820
1953	27	11,169	26	10,968
1954	28	12,014	28	12,014
1955	29	12,408	29	12,408
1956	37	16,830	35	15,923
1957	39	18,598	39	18,598

TABLE 9. Employees and Their Earnings in the Cement Manufacturing Industry, 1953-1957

Year	Number of employees				Total	Number of man-hours worked (all employees)	Earnings				
	Office and administrative		Workmen				Office and administrative	Earnings			
	Male	Female	Male	Female				Workmen	Total		
							\$	\$	\$		
1953	139	17	2,232	3	2,391	5,342,651	679,279	8,194,415	8,873,694		
1954	211	23	2,338	3	2,575	5,655,005	1,040,518	8,762,189	9,802,707		
1955	245	38	2,515	3	2,801	6,166,593	1,267,575	9,695,320	10,962,895		
1956	317	48	2,819	2	3,186	6,777,682	1,731,424	11,125,431	12,856,855		
1957	350	61	3,049	5	3,465	7,606,238	2,274,918	13,042,470	15,317,388		

TABLE 10. Number of Workmen in the Cement Manufacturing Industry, by Months, 1956-1957

Month	1956				1957			
	Quarry	Mill		Total	Quarry	Mill		Total
		Male	Female			Male	Female	
January	344	2,236	2	2,582	341	2,565	4	2,910
February	331	2,241	2	2,574	331	2,600	4	2,935
March	329	2,267	2	2,598	342	2,619	4	2,965
April	321	2,353	2	2,676	338	2,694	5	3,037
May	371	2,444	2	2,817	348	2,819	5	3,172
June	376	2,516	2	2,894	327	2,876	5	3,208
July	373	2,525	2	2,900	328	3,011	5	3,344
August	405	2,537	2	2,944	334	2,970	5	3,309
September	364	2,578	2	2,944	336	2,896	5	3,237
October	366	2,639	2	3,007	302	2,650	5	2,957
November	346	2,633	2	2,981	310	2,516	5	2,831
December	354	2,596	2	2,952	242	2,490	5	2,737
Average	356	2,463	2	2,821	325	2,724	5	3,054
Number of man-hours worked during year	6,080,623				6,722,935			

TABLE 11. Fuel and Electricity Used in the Cement Manufacturing Industry, 1957

Kind	Unit of measure	Quantity	Cost at plant
Bituminous coal (a) From Canadian mines	short ton	605,774	6,816,650
(b) Imported.....	"	544,158	5,716,043
Sub-bituminous coal (from Alberta mines only).....	"	—	—
Anthracite coal	"	—	—
Lignite coal	"	499	7,521
Coke (for fuel only).....	"	57	2,292
Gasoline, (includes gasoline used in cars and trucks).....	Imp. gal.	306,901	95,136
Kerosene or coal oil	"	25,589	6,810
Fuel oil.....	"	20,832,665	1,943,452
Wood (cords of 128 cubic feet of piled wood).....	cord	—	—
Gas (a) Liquefied petroleum gases (propane, etc.)	Imp. gal.	531	270
(b) Other manufactured gas	M cu. ft.	—	—
(c) Natural gas.....	"	4,396,154	689,242
Other fuel	—	---	—
Electricity purchased for power and lighting	k.w.h.	699,492,416	4,415,242
Electricity purchased for other purposes.....	"	—	—
Total (cost only)		—	19,692,658
Electricity generated (a) For own use	k.w.h.	1,549,930	---
(b) For sale	"	—	—

TABLE 12. World Production of Hydraulic Cement, by Countries, 1952-1956
(From the annual review published by the United States Bureau of Mines)¹

Country	1952	1953	1954	1955	1956
Thousand barrels					
North America:					
Canada (sold or used by producers)	17,238	20,697	20,885	23,430	27,663
Cuba	2,463	2,386	2,468	2,644	3,794
Dominican Republic	803	762	938	1,372	1,542
Guatemala.....	358	334	364	463	469
Jamaica.....	440	592	575	639	780
Mexico.....	9,757	9,774	10,261	11,815	13,351
Nicaragua	111	141	141	170	246
Panama	545	469	451	428	410
Salvador	—	211	287	334	405
Trinidad and Tobago.....	—	—	141	709	815
United States	252,658	267,669	275,857	314,913	333,472
Total	284,373	303,035	312,368	356,917	382,947
South America:					
Argentina	9,076	9,710	9,850	10,835	11,897
Bolivia	217	199	193	223	188
Brazil	9,493	11,902	14,523	15,948	19,132
Chile	4,796	4,468	4,544	4,714	4,521
Colombia.....	4,104	5,119	5,640	6,133	7,153

See footnotes page 9.

TABLE 12. World Production of Hydraulic Cement, by Countries, 1952-1956 — Continued

Country	1952	1953	1954	1955	1956
Thousand barrels					
South America — Concluded:					
Ecuador	522	534	557	856	891
Paraguay	23	18	41	70	82
Peru	2,175	2,633	2,832	3,195	3,254
Uruguay	1,759	1,741	1,741	1,560	1,988
Venezuela	4,925	5,758	7,112	7,517	8,508
Total	37,090	42,082	47,033	51,051	57,614
Europe:					
Albania ²	100	117	235	340	440
Austria	8,150	8,173	9,510	10,900	11,351
Belgium	24,104	27,124	25,652	27,493	27,346
Bulgaria	3,952	4,163	4,632	4,808	5,037
Czechoslovakia	12,958	13,603	14,658	16,564	18,458
Denmark	7,106	7,388	7,165	7,382	7,112
Finland	4,556	5,494	6,098	5,928	6,086
France	50,688	53,063	57,144	61,999	65,581
Germany:					
East	11,609	14,072	15,245	17,420	20,164
West	75,554	90,160	95,443	110,048	115,267
Greece	3,495	4,116	5,007	6,620	7,212
Hungary	6,198	6,215	5,553	6,889	5,863
Ireland	2,697	2,767	3,471	4,005	3,682
Italy	39,003	45,910	51,368	62,075	63,259
Luxembourg	668	862	885	921	956
Netherlands	4,767	5,048	5,699	6,455	7,364
Norway	4,139	4,427	4,515	4,867	5,371
Poland	15,661	19,314	19,953	22,357	23,658
Portugal	4,263	4,509	4,591	4,568	6,004
Rumania	8,795	12,313	9,381	11,727	12,899
Saar	1,395	1,671	1,618	1,659	1,929
Spain	17,367	19,091	22,351	25,400	25,828
Sweden	12,407	13,790	14,453	14,916	14,951
Switzerland	8,115	9,270	10,654	12,413	13,955
U.S.S.R.	82,673	93,813	111,403	131,924	145,996
United Kingdom	66,355	66,824	71,274	74,511	76,059
Yugoslavia	7,699	7,511	8,168	9,164	9,117
Total	484,474	540,808	586,126	663,353	700,945
Asia:					
Burma	240	240	358	352	350 ²
Ceylon	358	375	493	446	498
China	16,769	22,750	26,971	26,385	36,939
Hong Kong	399	375	586	686	709
India	21,073	22,515	26,203	26,309	29,358
Indochina (Viet-Nam)	1,319	1,706	1,489	1,524	1,320 ²
Indonesia	809	874	862	880 ²	616
Iran	311	381	364	469	1,180 ^{2,3}

See footnotes page 9.

TABLE 12. World Production of Hydraulic Cement, by Countries, 1952-1956 — Concluded

Country	1952	1953	1954	1955	1956
Thousand barrels					
Asia — Concluded:					
Iraq	610	1,038	1,161	1,859	2,870 ²
Israel	2,615	2,726	3,301	4,104	3,594
Japan	41,729	51,409	62,591	61,846	76,364
Jordan	—	—	369	500 ²	528
Korea:					
North	4	4	4	4	3,520 ²
Republic of	211	258	317	328	270
Lebanon	1,671	1,788	1,964	2,463	2,861
Malaya	—	188	504	639	610
Pakistan	3,160	3,553	3,969	4,052	4,609
Philippines	1,818	1,706	1,818	2,345	2,562
Syria	885	1,313	1,460	1,548	1,911
Taiwan (Formosa)	2,615	3,049	3,143	3,459	3,459
Thailand (Siam)	1,448	1,689	2,252	2,263	2,293
Turkey	2,691	2,832	3,981	4,814	5,687
Total²	101,610	122,520	147,090	149,380	182,100
Africa:					
Algeria	2,844	2,896	3,706	3,840	3,923
Angola	—	170	246	410	410 ²
Belgian Congo	1,407	1,454	2,029	2,375	2,640 ²
Egypt	5,553	6,432	7,828	8,039	7,921
Ethiopia ²	35	59	164	164	164
French Morocco	2,551	3,577	3,835	4,016	3,436
French West Africa	469	352	487	756	803
Kenya	193	211	416	768	756
Madagascar	—	—	—	—	—
Mozambique	487	510	598	616	885
Rhodesia and Nyasaland, Federation of:					
Northern Rhodesia	334	375	393	534	530 ²
Southern Rhodesia	1,120	1,519	1,935	2,363	2,345 ²
Spanish Morocco	—	—	29	246	290 ²
Tunisia	1,220	1,325	1,665	2,246	2,111
Uganda	—	117	246	293	358
Union of South Africa	11,850	12,448	12,676	13,697	14,482
Total	28,063	31,445	36,253	40,363	41,100²
Oceania:					
Australia	7,956	9,370	11,222	11,662	12,530
New Zealand	1,542	1,642	1,894	2,398	2,644
Total	9,498	11,012	13,116	14,060	15,174
World Total (estimate)	945,100	1,050,900	1,142,000	1,275,100	1,379,900

1. This table incorporates a number of revisions of data published in previous cement chapters. Data do not add to totals shown due to rounding where estimated figures are included in the detail.

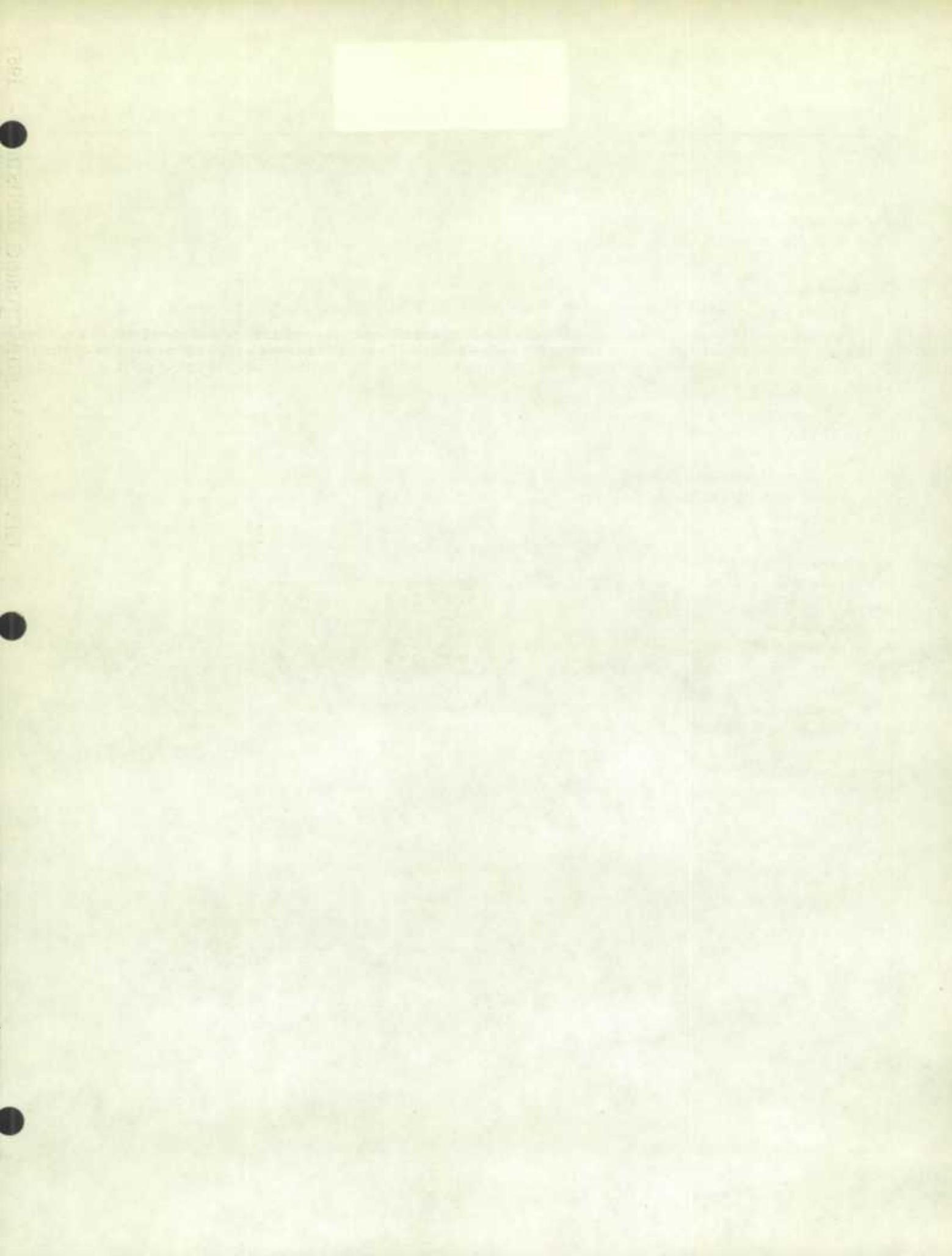
2. Estimate.

3. Year ended March 20 of year following that stated.

4. Data not available; estimate included in total.

Directory of Cement Producers, 1957

Name of firm	Head office address	Location of plant
Newfoundland: North Star Cement Co. Ltd.	Corner Brook	Corner Brook East
New Brunswick: Canada Cement Company Limited	Box 490, Station B, Montreal, Quebec	Havelock
Quebec: Canada Cement Company Limited	Box 490, Station B, Montreal, Quebec	Hull
Ciment Québec Inc.	St-Basile, Coté Portneuf, Québec	Montréal Est
St. Lawrence Cement Co.	Blvd. Ste. Anne, Villeneuve, Quebec	St-Basile
		Villeneuve
Ontario: Canada Cement Company Limited	Box 490, Station B, Montreal, Quebec	Woodstock
St. Lawrence Cement Co.	Box 1156, Quebec, Quebec	Belleville
St. Mary's Cement Co. Limited	2221 Yonge St., Toronto, Ontario	Port Colborne
		Clarkson
		St. Mary's
Manitoba: Canada Cement Company Limited	Box 490, Station B, Montreal, Quebec	Fort Whyte
Saskatchewan: Saskatchewan Cement Corp. Ltd.	Box 767, Regina	Victoria Plains
Alberta: Canada Cement Company Limited	Box 490, Station B, Montreal, Quebec	Clover Bar
Inland Cement Company Limited	Box 555, Edmonton	Exshaw
		Edmonton
British Columbia: British Columbia Cement Co. Limited	500 Fort St., Victoria, British Columbia	Bamberton



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