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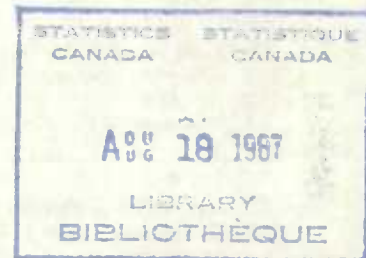
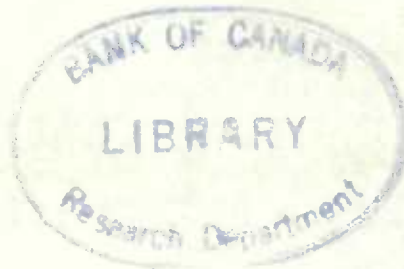
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CANADA

THE FERTILIZERS INDUSTRY

1958



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PUBLICATIONS

The results of the annual Census of Industry are published by the Dominion Bureau of Statistics in a series of industry reports which are released each year as the compilations are completed. Reports for industries classified to the **Chemicals and Allied Products Major Group** are listed below, along with current and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is available on request from the Information Services Division, Dominion Bureau of Statistics, Ottawa, or from the Queen's Printer, Ottawa.

A — Annual B — Biennial M — Monthly S.C. — Special Compilation

Catalogue number	Title	Price
46-201	Chemicals and Allied Products — General Review (A)50
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Remittances should be in the form of cheque or money order, made payable to the Receiver General of Canada and forwarded to the Information Services Division, Dominion Bureau of Statistics, or to the Queen's Printer, Ottawa, Canada.

EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1958 Census of Manufactures. Most reports in this series refer to specific industries, but there are summary reports for Canada and the provinces and for major industry groups. An annual Census of Manufactures has been carried out by the Dominion Bureau of Statistics since 1916.

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Details of materials used and products shipped are also given. Descriptions of the principal industry statistics, with special reference to 1958, are as follows:

Period Covered

Firms are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

Establishment

Data for the annual census is collected on an establishment basis. A firm with more than one plant is required to file a report for each plant. In most cases an establishment is a complete factory. Sometimes, however, a plant is divided into two or more establishments when it carries out operations classifiable to different industries and when separate accounting records are available. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retail activities carried on at the plant location, etc., are not included. Plants engaged solely in repair work (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) are not included but plants occupied in assembling parts into complete units are included.

Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level and clerical employees. Working owners and partners are also included in this category.

Production and related workers include all other factory workmen whether paid on a monthly, weekly, hourly or piece-work basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new construction work, in retail or wholesale operations, on outside piece work etc., are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether or not some establishments reported other data on a financial year basis.

Salaries and Wages

Salaries and wages refer to gross earnings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included.

Salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners or partners for normal living expenses for self and family are included but not their withdrawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

Cost of Fuel and Electricity

Figures for fuel refer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantities are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

Materials and Supplies Used

Figures represent quantities and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers or any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants of reporting companies

for resale without further processing are not included. Maintenance and repair supplies not chargeable to capital account are included.

Factory Shipments

Factory shipments refer to shipments of goods made from own materials either in the reporting plant or by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-products shipped from the establishment are included whether for domestic use, export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reporting firm are included. Goods bought or received as transfers and resold without further processing are not included. Values are computed on f.o.b. plant or plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shipbuilding, aircraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on finished units delivered in the year under review.

Inventories

Values represent the book values of manufacturing inventories owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

Value Added by Manufacturing

Figures are computed from value of shipments plus or minus changes in inventories of finished

goods and goods in process less cost of materials, fuel and electricity. This figure is sometimes referred to as net production.¹

Standard Industrial Classification

The Standard Industrial Classification Manual, prepared by the Dominion Bureau of Statistics, provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Short Forms

Prior to 1949 all manufacturing firms, regardless of size, were required to complete a standard form annually covering all census details, but for later years an effort was made to ease the reporting burden for smaller firms which usually do not maintain regular records in the required detail. A modified or short form was introduced in 1949 asking for the total value of shipments only, or in industries with a large number of small firms, for total value of shipments and quantities and values of a few principal products. Using the ratio of value of shipments in the current year to value of shipments in the base year, 1948, estimates of other census data were made for each plant for inclusion in the regular compilations. In general, the cut-off point for short forms was set at \$50,000 gross value of shipments annually, but there were lower cut-offs for a number of industries in which the small firms accounted for a larger share of total shipments. About 40 per cent of the total number of establishments reported on the modified or short form. They accounted for less than 3 per cent of the total value. In 1958, to establish a new base year, the small firms were again asked to report data on employees, salaries and wages, and other principal statistics together with some detail on material and products.

¹ To arrive at the National Accounts concept of "gross domestic product at factor cost", it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value added figures for "The primary industries and construction" are published in D.B.S. publication 61-202, *Survey of Production*.

SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follows:

... figures not appropriate or not applicable.

— nil or zero.

THE FERTILIZERS INDUSTRY

1958

Factory shipments by plants in Canada which were engaged principally in the manufacture of fertilizers were valued at \$89,145,796 in 1958 compared with \$83,807,556 in 1957. In addition, there was a production of 211,371 tons of cyanamid (excluding cyanamid for non-agricultural purposes) ammonium sulphate, mixed fertilizers and fish fertilizers valued at \$6,783,902 by establishments which were classified to other industrial groups.

Forty-five plants were occupied chiefly in the manufacture of fertilizers in 1958, there being 24 in Ontario, 7 in Quebec, 4 in British Columbia, 3 in Nova Scotia, 3 in New Brunswick, 2 in Prince Edward Island and 2 in Alberta. Workers in these establishments declined from 3,011 in 1957 to 2,993 in 1958; however, salaries and wages increased from \$12,899,267 in 1957 to \$13,424,810 in 1958.

Factory shipments of mixed fertilizers in 1958, from all industries amounted to 751,900 tons worth \$40,001,000 compared with 723,100 tons worth \$37,026,000 in 1957.

Superphosphate was manufactured in 1958 by Canadian Industries Limited with plants at McMasterville, Quebec and Hamilton, Ontario. Green Valley Fertilizer and Chemical Co. Ltd. at North Surrey, British Columbia and Elmira Fertilizers at Elmira, Ontario. Production by the latter two companies was mainly for their own use in the manufacture of mixed fertilizers.

Ammonium nitrate (fertilizer grade) was manufactured in 1958 by Cyanamid of Canada Ltd. (Welland Works) at Niagara Falls in Ontario, by Consolidated Mining and Smelting Company of Canada, Limited at Trail, British Columbia and at Calgary, Alberta, and by Northwest Nitro-Chemicals Ltd. at Medicine Hat, Alberta. The output figures are not published separately since there were only two major producers of ammonium nitrate and one major producer of superphosphate.

Ammonium sulphate was made by Consolidated Mining and Smelting Company of Canada, Limited at Trail, British Columbia and also by the following coke manufacturers: Algoma Steel Corporation at Sault Ste. Marie, Ontario; Dominion Iron and Steel Ltd. at Sydney, N.S.; Quebec Natural Gas Corporation at Montreal, Quebec and The Steel Company of Canada, Limited at Hamilton, Ontario. Another firm Sherritt-Gordon Mines Limited at Fort Saskatchewan, Alberta, recovered ammonium sulphate as a by-product in connection with a special process used for refining nickel. Factory shipments during the calendar year 1958 amounted to 300,049 tons and imports totalled 5,892 tons. Ammonium phosphate was made by the Consolidated Mining and Smelting Company of Canada, Limited at Trail, British Columbia and Kimberley, British Columbia and by Northwest Nitro-Chemicals Ltd. at Medicine Hat, Alberta.

A special survey of the fertilizer trade in Canada during the fertilizer year ended June 30, 1959 has been completed by the Dominion Bureau of Statistics and the results have been published in a special report. Summary figures on the sales of fertilizers have been reprinted in Tables 11-15 of this bulletin. A total of 908,214 tons of mixtures and materials was sold in Canada during the year ended June 30, 1959 compared with 870,539 tons during the preceding twelve-month period.

Note: Due to lack of inventory data, figures for value added by manufacture prior to 1954 were obtained by subtracting the cost of materials used, including fuel and electricity, from the total value of factory shipments. In 1954 and 1955 the "Value added" adjustment incorporated the increase or decrease to shipments values resulting from changes in the value of inventories over the period. For these two years, the adjustments that were made used only the change in finished product inventory owned by manufacturers. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse.

TABLE 1. Principal Statistics of the Fertilizers Industry, Significant Years 1929-58, and by Provinces, 1957 and 1958

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost at plant of materials used	Value added by manufacture ¹	Gross selling value of products ¹
	number				dollars		
1929	12	251	265,650	17,386	1,450,253	791,141	2,258,780
1933	20	667	776,647	322,849	2,796,726	1,166,476	4,286,051
1937	20	1,023	1,447,625	506,965	6,693,841	3,066,147	10,266,953
1939	27	1,211	1,619,612	706,003	8,140,498	4,318,683	13,165,164
1945	26	2,146	4,418,916	1,116,081	18,708,175	14,681,500	34,505,756
1946	29	2,805	5,929,796	3,232,099	22,865,328	23,895,016	49,992,443
1949	32	3,269	9,004,943	1,772,400	31,671,468	33,984,199	67,428,067
1954	38	3,049	11,603,480	2,992,340	41,275,216	39,654,741	78,149,303
1955	39	2,935	11,542,380	2,641,870	41,396,928	45,895,045	92,498,839
1956	45	2,958	11,757,117	2,700,397	43,295,343	37,343,843	83,399,218
1957							
Prince Edward Island	2	95	262,162	23,189	2,731,353	1,017,934	3,559,420
Nova Scotia	3						
New Brunswick	3	122	389,650	74,566	2,978,133	931,614	3,862,744
Quebec	7	361	1,602,192	79,479	5,900,799	3,315,774	8,902,655
Ontario	23	775	3,219,699	1,035,549	17,931,914	11,103,112	30,579,248
Alberta	2	1,658	7,425,564	1,938,554	17,592,251	19,090,966	36,903,489
British Columbia	4						
Canada	44	3,011	12,899,267	3,151,337	47,134,450	35,459,400	83,807,556
1958							
Prince Edward Island	2	109	275,832	20,693	2,563,257	973,815	3,665,450
Nova Scotia	3						
New Brunswick	3	122	426,300	64,160	2,971,709	915,475	4,429,997
Quebec	7	375	1,685,383	82,090	6,021,282	3,624,259	9,815,106
Ontario	24	774	3,472,608	1,061,382	18,243,580	11,442,941	32,225,600
Alberta	2	1,613	7,564,707	2,052,770	18,794,131	20,252,693	38,989,643
British Columbia	4						
Canada	45	2,993	13,424,810	3,281,095	48,593,959	37,209,183	89,145,796

¹ See note to text.

Note: Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Inventories,¹ 1958

Province	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
Opening:				
Prince Edward Island and Nova Scotia	414,703	337,303	636,756	1,388,762
New Brunswick	581,272	635,216	431,661	1,648,149
Quebec	1,177,861	1,291,753	1,317,677	3,787,291
Ontario	2,716,570	4,444,389	1,367,871	8,528,830
Alberta and British Columbia	5,938,531	49,802	5,504,239	11,492,572
Canada	10,828,937	6,758,463	9,258,204	26,845,604
Closing:				
Prince Edward Island and Nova Scotia	294,018	335,283	511,091	1,140,392
New Brunswick	395,574	575,617	12,607	983,798
Quebec	1,455,717	1,038,098	1,483,857	3,977,672
Ontario	2,918,038	3,048,966	1,285,597	7,252,601
Alberta and British Columbia	6,210,003	171,097	7,492,895	13,873,995
Canada	11,273,350	5,169,061	10,786,047	27,228,458

¹ (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.

(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Fertilizers Industry for the year under review are shown in the above table.

(c) The opening inventory for the current year may not necessarily agree with the closing inventory published the previous year because of changes in the composition of the industry, such as: the addition of new establishments, the disappearance of old ones, or the transfer of establishments to other industries for statistical purposes. The figure for value added by manufacture for the previous year does not need to be altered because of such changes in the composition of the industry.

TABLE 3. Products of the Fertilizers Industry, Calendar Years, 1957 and 1958

Product	1957		1958	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
	tons	\$	tons	\$
Mixed fertilizers	716,387	36,573,644	747,067	39,656,970
Superphosphate, ammonium nitrate (fertilizer grade), ammonium phosphate, ammonium sulphate and ammonium nitrate phosphate (completely manufactured) ¹	930,124	42,375,066	943,496	43,870,770
Superphosphate, milled and screened only	11,467	447,746	14,853	617,584
Ammonium sulphate, milled and screened only	363	21,464	468	29,708
Muriate of potash, milled and screened only	2,946	158,604	3,393	196,176
All other products .....	...	4,231,032	...	4,774,588
Total for fertilizers industry .....	...	83,807,556	...	89,145,796
Fertilizers made in other industries (cyanamid, ammonium sulphate, mixtures, etc.) .....	...	6,774,479	...	6,783,902
Total value of all fertilizers produced² .....	...	90,582,035	...	95,929,698

¹ Production of these items was accounted for mainly by only one or two firms in this industry, hence the production figures cannot be shown separately.

² Excludes value of calcium cyanamid produced for non-agricultural purposes.

Note: The Fertilizers Industry includes only the concerns which are engaged chiefly in the manufacture of fertilizers. Some fertilizers are made also in the other industries; for example, ammonium sulphate is produced as a by-product in coke plants; cyanamid is made by a firm which is classified to the heavy chemicals industry and a small amount of mixed fertilizer is made in the slaughtering and meat-packing industry. For the total production of mixed fertilizers, see Table 5.

TABLE 4. Materials Used in the Fertilizers Industry, 1957 and 1958

Material	1957		1958	
	Quantity	Cost at works	Quantity	Cost at works
	short tons	\$	short tons	\$
Ammonia, anhydrous	94,666	3,926,371	74,298	3,289,354
Ammonium nitrate	3,245	239,063	1,922	147,542
Ammonium phosphate:				
11-48-0	5,715	536,915	8,741	794,245
16-20-0	871	56,639	2,821	184,502
Ammonium sulphate (sulphate of ammonia)	33,763	1,338,369	30,809	1,255,258
Borax	187	16,305	159	15,267
Calcium cyanamide (cyanamid)	701	45,947	789	51,415
Coke (except for fuel)	32,388	842,588	74,342	1,461,300
Diatomaceous earth	6,068	314,425	11,313	623,650
Limestone	17,224	70,747	18,698	80,736
Lime or land plaster	676	10,731	310	8,181
Magnesium oxide (all forms, including brucite, mag 70, etc.)	1,591	62,986	1,617	66,371
Magnesium sulphate	49	3,834	100	9,206
Nitrogen solutions	41,624	2,573,223	37,195	2,408,403
Phosphate rock	584,216	7,742,349	583,584	7,900,373
Potassium chloride (muriate of potash)	124,115	4,586,773	120,474	4,342,279
Potassium nitrate (nitrate of potash)	51	8,725	60	9,744
Potassium sulphate (sulphate of potash)	13,906	679,254	17,124	801,139
Potassium magnesium sulphate (sulphate of potash magnesia)	1,845	56,128	2,552	79,292
Sand	43,708	114,729	44,324	127,957
Sodium nitrate (nitrate of soda)	254	16,506	224	14,759
Sulphuric acid, 100%	668,929	4,385,909	673,045	4,487,526
Superphosphate:				
16-18% P ₂ O ₅	32,297	716,135	45,991	1,051,041
20% P ₂ O ₅	257,579	6,348,746	268,694	6,407,911
38-48% P ₂ O ₅	40,055	2,365,024	42,910	2,570,410
Ammoniated -3-18-0	3,008	132,251	367	12,853
Urea	679	58,653	1,320	157,066
All other materials	—	4,409,120	—	4,598,293
Containers and shipping materials	—	5,476,005	—	5,637,886
Total	—	47,134,450	—	48,593,959

TABLE 5. Total Production¹ of Mixed Fertilizers, from All Industrial Groups, Calendar Years, 1949 - 58

Year	Quantity	Selling value at works	Year	Quantity	Selling value at works
	tons	\$		tons	\$
1949	661, 100	24, 794, 000	1954	668, 200	32, 120, 000
1950	669, 900	26, 519, 000	1955	685, 700	33, 112, 000
1951	696, 600	29, 193, 000	1956	703, 200	34, 408, 000
1952	648, 800	30, 364, 000	1957	723, 100	37, 026, 000
1953	694, 600	32, 751, 000	1958	751, 900	40, 001, 000

¹ Factory shipments since 1952.

Note: Figures in this table represent the total Canadian Production of mixed fertilizers regardless of the industries in which produced.

TABLE 6. Principal Statistics of the Fertilizers Industry in Canada, Classified According to Type of Ownership, 1957 and 1958

Type	Estab-lish-ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number			dollars	
1957					
Individual	2	3, 011	12, 899, 267	47, 134, 450	83, 807, 556
Co-operatives	3				
Incorporated companies	39				
Total	44	3, 011	12, 899, 267	47, 134, 450	83, 807, 556
1958					
Individual	2	2, 993	13, 424, 810	48, 593, 959	89, 145, 796
Co-operatives	3				
Incorporated companies	40				
Total	45	2, 993	13, 424, 810	48, 593, 959	89, 145, 796

TABLE 7. Principal Statistics of the Fertilizers Industry in Canada, Grouped According to Selling Value of Factory Shipments, 1957 and 1958

Establishments having a production of	Estab-lish-ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number			dollars	
1957					
Under \$10,000	1	35	70, 571	351, 662	501, 194
\$25,000 to \$49,000	1				
\$100,000 to \$199,999	3				
\$200,000 to \$499,999	6	61	173, 930	1, 193, 261	1, 741, 925
\$500,000 to \$999,999	16	306	1, 032, 634	8, 284, 273	11, 752, 299
\$1,000,000 to \$4,999,999	13	952	3, 888, 407	20, 585, 474	28, 497, 953
\$5,000,000 and over	4	1, 547	7, 055, 305	16, 719, 780	41, 314, 185
Head offices	—	110	678, 420	—	—
Total	44	3, 011	12, 899, 267	47, 134, 450	83, 807, 556
1958					
\$25,000 to \$49,999	2	31	75, 533	308, 600	329, 727
\$100,000 to \$199,999	2				
\$200,000 to \$499,999	7	76	232, 765	1, 409, 729	2, 382, 365
\$500,000 to \$999,999	15	279	1, 000, 601	7, 915, 068	11, 499, 210
\$1,000,000 to \$4,999,999	16	1, 101	4, 782, 516	23, 293, 161	37, 700, 816
\$5,000,000 and over	3	1, 398	6, 643, 611	15, 667, 401	37, 233, 677
Head offices	—	108	689, 784	—	—
Total	45	2, 993	13, 424, 810	48, 593, 959	89, 145, 796

TABLE 8. Capital and Repair Expenditures in the Fertilizers Industry, 1954 - 58

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery and equipment		Construction	Machinery and equipment		
thousands of dollars							
1954	484	1,201	1,685	284	3,266	3,550	5,235
1955	3,512	1,594	5,106	260	3,183	3,443	8,549
1956	11,847	4,942	16,789	359	3,047	3,406	20,195
1957	858	1,539	2,397	299	3,817	4,116	6,513
1958	938	1,600	2,538	327	3,782	4,109	6,647

Note: Figures for the current year are preliminary.

TABLE 9. Employees and their Earnings, by Provinces, 1957 and 1958

Province	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
number								
1957								
New Brunswick	18	6	97	1	122	84,263	305,387	389,650
Quebec	110	59	192	-	361	937,291	664,901	1,602,192
Ontario	182	48	538	7	775	1,043,337	2,176,362	3,219,699
British Columbia	245	17	839	3	1,104	1,441,668	3,525,583	4,967,251
Other provinces	158	29	460	2	649	908,785	1,811,690	2,720,475
Canada	713	159	2,126	13	3,011	4,415,344	8,483,923	12,899,267
dollars								
1958								
New Brunswick	18	6	98	-	122	128,403	297,897	426,300
Quebec	122	62	191	-	375	1,025,127	660,236	1,685,363
Ontario	181	57	531	5	774	1,221,564	2,251,044	3,472,608
British Columbia	243	22	832	3	1,100	1,500,781	3,643,711	5,144,492
Other provinces	159	26	435	2	622	984,708	1,711,339	2,696,047
Canada	723	173	2,087	10	2,993	4,860,583	8,564,227	13,424,810

TABLE 10. Production Workers, by Months, 1957 and 1958

Month	1957			1958		
	Male	Female	Total	Male	Female	Total
number						
January	2,107	11	2,118	2,066	10	2,076
February	2,228	13	2,241	2,125	10	2,135
March	2,177	15	2,192	2,172	10	2,182
April	2,472	14	2,486	2,471	10	2,481
May	2,597	13	2,610	2,393	10	2,403
June	2,066	13	2,079	2,030	10	2,040
July	1,987	14	2,001	1,919	9	1,928
August	2,004	14	2,018	1,918	9	1,927
September	2,019	12	2,031	2,044	9	2,053
October	1,999	12	2,011	2,021	9	2,030
November	1,984	11	1,995	1,922	9	1,931
December	1,870	11	1,881	1,940	9	1,949
Average	2,126	13	2,139	2,087	10	2,097

TABLE 11. Sales of Fertilizers, Except for Manufacturing Purposes, During the Year Ended June 30, 1959

Kind	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total sold in Canada
Fertilizer materials											
Animal manure	—	—	54	35	632	983	—	—	—	73	1,777
Anhydrous ammonia (for direct application only)	—	—	—	—	—	1,750	92	16	426	25	2,309
Ammonium nitrate	107	280	937	276	1,008	22,546	824	1,062	7,929	3,325	38,294
Ammonium nitrate phosphate—23-23-0	—	—	—	—	—	—	1	1	1	1	1
24-20-0	—	—	—	—	—	—	1	1	1	1	1
27-14-0	—	—	—	—	—	—	—	—	—	—	—
Ammonium phosphate—11-48-0	—	—	—	—	24	3,020	12,368	21,559	32,487	1,751	71,209
13-39-0	—	—	—	—	—	—	—	—	—	—	—
16-20-0	—	—	—	—	—	111	5,012	3,188	16,953	3,558	28,820
Basic slag	—	—	—	—	658	—	—	—	—	—	658
Bone meal, bone flour and bone-phosphate	7	2	70	14	57	823	28	3	75	588	1,667
Cyanamide (fertilizer grade only)	—	—	37	4	52	2,082	—	—	—	88	2,263
Muriate of potash	3	10	88	19	339	5,674	6	—	4	511	6,654
Natural phosphate rock	—	—	—	—	2,056	44	—	—	—	5	2,105
Nitrogen solution	—	—	—	—	70	2,345	—	—	—	—	2,415
Nitrate of soda	363	1	11	6	70	418	—	—	—	8	877
Sewage sludge	5	—	59	17	350	5,301	—	—	—	600	6,332
Sulphate of ammonia	6	17	72	30	117	2,069	75	149	2,933	1,766	7,234
Sulphate of potash	—	—	2	—	28	415	1	1	4	294	745
Sulphate of potash magnesia	—	—	—	—	4	256	1	—	—	—	261
Superphosphate—20% (P ₂ O ₅)	22	96	867	236	8,936	21,555	—	—	10	1,020	32,742
Superphosphate (triple)—45% (P ₂ O ₅)	—	—	1	—	218	1,121	—	—	—	289	1,629
Tankage	—	—	—	—	28	50	—	—	—	232	310
Urea (for fertilizer use only)	—	—	42	15	48	27	—	—	—	—	132
Other fertilizer materials ¹	—	—	50	24	204	1,854	1,797	1,497	3,889	913	10,228
Total materials	513	406	2,290	676	14,899	72,444	20,204	27,473	64,710	15,046	218,661
Mixed fertilizers (see Table 12)	5,017	48,225	25,500	60,943	135,525	395,173	890	159	475	17,646	689,553
Total—1958-59	5,530	48,631	27,790	61,619	150,424	467,617	21,094	27,632	64,185	32,692	908,214
Total—1957-58	4,934	53,430	27,846	62,418	154,785	451,316	16,289	21,436	47,952	30,133	870,539

¹ Included with "Other fertilizer materials".² Does not include lime.

TABLE 12. Mixed Fertilizers Sold During the Year Ended June 30, 1959

Analysis	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan and Alberta	British Columbia	Total sold in Canada	Exported from Canada	
											short tons
N P₂O₅ K₂O											
0 5 15	—	—	—	—	610	20	—	—	630	—	
0 12 12	—	—	—	—	—	21	—	—	21	—	
0 12 20	—	—	—	—	146	1,426	—	2	1,574	—	
0 12 24	—	—	—	—	—	3,445	—	—	3,445	—	
0 14 14	—	—	—	—	881	1,313	—	—	2,194	—	
0 15 15	—	—	—	—	—	1,004	—	77	1,081	—	
0 15 30	—	—	—	—	25	—	—	—	25	459	
0 20 0	—	—	—	—	—	115	—	—	115	—	
0 20 10	—	—	—	—	1,390	2,653	—	—	4,043	25	
0 20 20	73	74	1,195	317	2,682	9,121	—	—	13,462	673	
2 10 15	—	—	—	—	—	182	—	—	182	—	
2 10 20	—	—	—	—	1,805	30	—	—	1,835	—	
2 12 10	—	—	—	20	29,720	65,318	—	—	95,058	—	
2 12 12	—	—	—	—	488	21,842	—	—	22,330	—	
2 12 14	—	—	—	—	489	14,137	—	—	14,626	—	
2 12 16	—	—	—	—	651	13,113	—	—	13,764	—	
2 12 20	—	—	—	—	—	5,614	—	—	5,614	—	
2 14 8	—	—	—	—	3,434	752	—	—	4,186	—	
2 14 14	—	—	—	—	—	1,452	—	—	1,452	—	
2 15 15	—	—	—	—	20	16	—	1,374	1,410	—	
2 16 6	—	—	—	—	14,911	3,604	—	—	18,515	—	
2 16 16	—	—	—	—	664	2	—	—	666	—	
2 18 18	—	8	—	—	83	7,896	—	—	7,987	—	
2 20 18	—	—	—	—	—	175	—	—	175	—	
2 20 20	—	—	—	—	—	224	—	—	224	—	
3 12 12	—	—	—	—	1,492	4,108	—	—	5,600	—	
3 12 16	—	—	—	—	—	779	—	—	779	—	
3 14 3	—	—	—	—	136	—	—	—	136	—	
3 15 6	718	4,152	7,591	6,393	217	—	—	—	19,071	13	

TABLE 12. Mixed Fertilizers Sold During the Year Ended June 30, 1959 - Concluded

Analysis	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan and Alberta	British Columbia	Total sold in Canada	Exported from Canada
N P ₂ O ₅ K ₂ O										
3 15 10	-	-	-	-	-	9,343	-	-	9,343	-
3 15 30	-	-	-	-	114	-	-	-	114	-
3 16 16	-	-	306	-	-	-	-	-	306	-
3 18 9	-	-	-	-	-	18,220	-	-	18,220	-
3 18 15	-	-	-	-	10	1,743	-	-	1,753	-
3 18 18	-	-	-	-	-	436	-	-	436	-
4 9 5	-	-	-	-	-	214	-	-	214	-
4 10 10	-	-	-	-	-	21	-	3,630	3,651	-
4 12 8	-	-1	-	-	-	259	-	82	342	-
4 12 10	-	25	-	-	17	20,920	-	-	20,962	-
4 12 16	-	-	-	-	56	2,895	-	-	2,951	-
4 16 16	-	-	-	-	274	1,202	-	-	1,476	-
4 24 12	-	-	-	5	81	21,595	-	-	21,681	7
4 24 20	-	-	-	-	10,321	40,827	-	-	51,148	-
5 8 11	-	-	-	-	2,506	4	-	-	2,510	-
5 10 5	-	-	-	-	39	55	-	2	96	209
5 10 10	2,278	395	1,140	14,276	15,314	1,219	-	-	34,622	1,739
5 10 13	180	22,728	1,340	3,366	33,970	4,055	-	-	65,639	-
5 10 15	-	-	-	-	497	26,145	16	-	26,658	-
5 10 30	-	-	-	-	-	479	-	-	479	-
5 15 10	-	-	-	-	-	35	-	-	35	134
5 20 0	-	-	-	-	-	1,656	-	-	1,656	-
5 20 10	-	-	-	-	6	10,743	-	-	10,749	-
5 20 20	-	-	-	-	-	7,833	-	-	7,833	4
6 8 6	-	-	-	-	-	-	-	2,145	2,145	-
6 9 6	29	-	48	13	967	979	-	-	2,036	-
6 9 9	-	-	-	1,028	-	-	-	-	1,028	153
6 9 12	-	41	-	5,684	-	-	-	-	5,725	1,276
6 10 4	29	-	43	165	1,186	3,220	448	82	5,173	-
6 10 10	-	-	-	-	-	-	-	356	356	-
6 12 6	551	70	1,603	1,141	1	24	-	-	3,390	147
6 12 8	1	285	645	10,243	-	-	-	-	11,174	-
6 12 12	1,157	20,282	10,644	18,888	4,392	7,710	-	-	61,073	18
6 24 24	-	-	-	-	-	-	-	-	-	220
6 27 25	-	-	-	-	-	-	-	142	142	-
6 30 15	-	-	-	-	-	-	-	1,360	1,360	-
7 7 7	-	-	-	15	286	4,173	-	-	4,474	-
7 8 6	-	-	-	-	-	-	-	1,680	1,680	-
8 9 10	-	40	10	410	-	-	-	-	460	2,034
8 9 12	-	-	-	-	-	-	-	-	-	407
8 10 5	-	-	-	-	-	-	-	658	656	-
8 10 6	-	-	-	-	-	-	-	411	411	-
8 12 12	-	57	-	292	-	-	-	92	441	8,464
8 12 16	-	-	-	-	-	-	-	-	-	1,259
8 16 16	-	-	-	25	1,113	1,504	-	-	2,642	3,030
8 24 20	-	-	-	-	-	358	-	-	358	-
8 32 16	-	-	-	-	-	-	-	-	-	3,381
9 5 7	-	-	-	111	18	-	-	-	129	-
9 5 10	-	-	120	-	-	-	-	-	120	-
9 9 7	-	26	784	116	-	138	-	-	1,064	4
10 5 5	-	-	-	-	42	63	-	-	105	-
10 5 10	-	-	-	-	778	1,270	-	-	2,048	10
10 6 4	-	3	12	78	622	1,947	-	238	2,900	125
10 10 10	-	20	1	142	1,588	34,647	-	-	36,398	8,184
10 15 15	-	-	-	25	-	45	-	-	70	943
10 20 0	-	-	-	-	-	104	-	-	104	-
10 20 10	-	-	-	-	1	450	-	2,227	2,678	14
10 20 20	-	-	-	-	-	410	-	-	410	-
10 24 12	-	-	-	-	-	851	-	-	851	-
10 30 10	-	-	-	-	-	5	728	559	1,292	4,429
10 32 10	-	-	-	-	-	-	239	65	304	-
10 52 17	1	-	6	2	15	138	-	2	164	-
12 12 12	-	-	-	-	-	661	-	-	661	779
13 13 13	-	-	-	-	-	-	-	-	-	1,010
13 16 10	-	-	-	-	-	-	26	1,732	1,758	-
14 14 7	-	-	-	-	-	-	-	-	-	1,035
Other mixes	-	18	12	188	1,467	8,215	67	732	10,699	174
Total 1959	5,017	48,225	25,500	60,943	135,525	395,173	1,524	17,646	689,553	40,358
Total 1958	4,523	52,995	25,603	61,519	140,300	385,626	1,200	16,800	688,566	42,706

Note: Figures in this table include tobacco fertilizers containing boron and magnesium oxide.

**TOTAL SALES IN CANADA OF FERTILIZER MATERIALS
AND
MIXED FERTILIZER FOR THE YEARS ENDED JUNE 30, 1949-59
(THOUSAND NET TONS)**

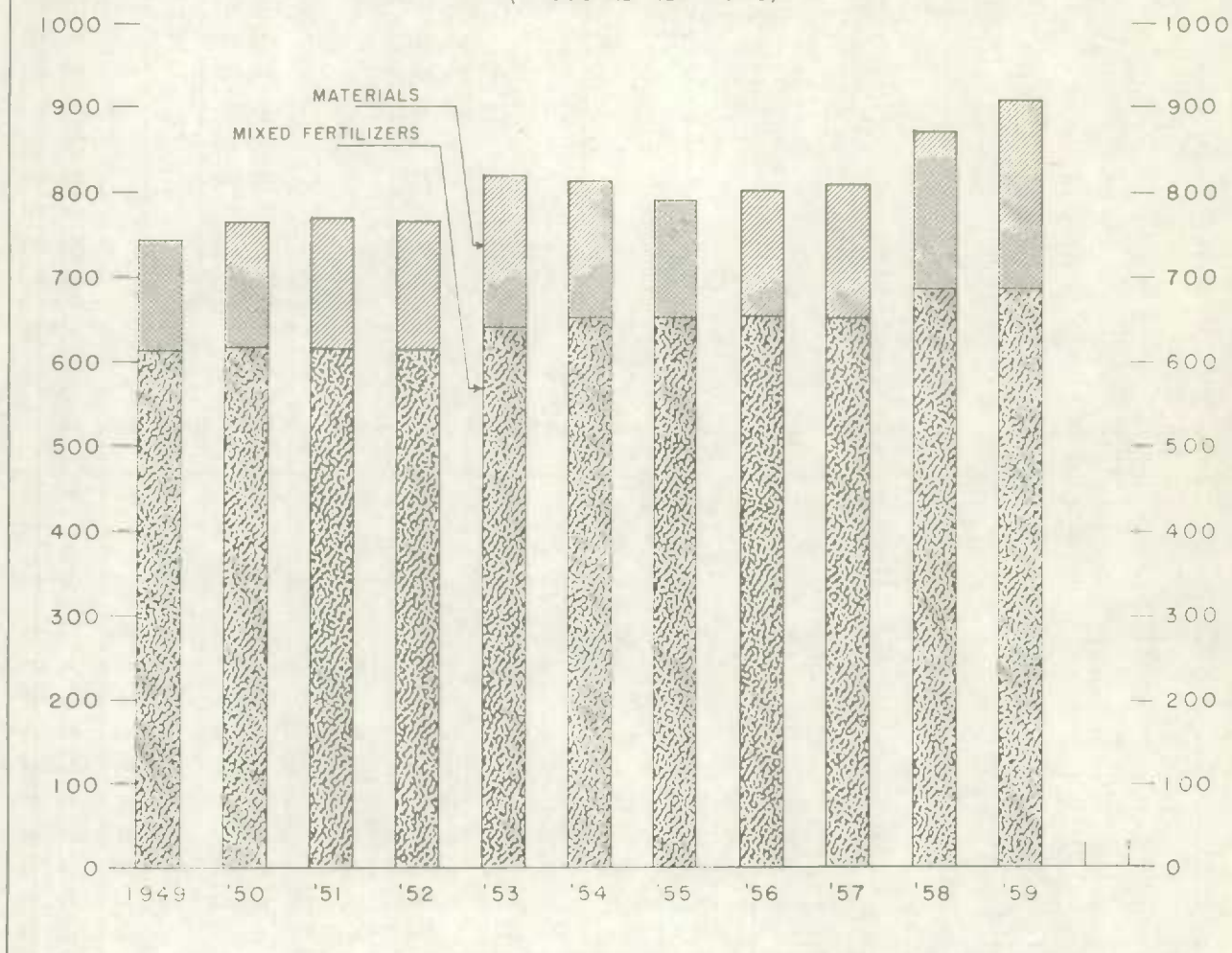


TABLE 13. Nitrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold in Canada During the Year Ended June 30, 1959

Province	In materials			In mixtures			Total		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
	short tons								
Newfoundland	94	6	2	251	580	484	345	586	486
Prince Edward Island	95	19	6	2,535	5,451	5,745	2,630	5,470	5,751
Nova Scotia	357	191	55	1,229	3,312	2,532	1,586	3,503	2,587
New Brunswick	106	50	12	3,306	6,938	6,146	3,412	6,988	6,158
Quebec	472	2,628	230	5,093	17,232	15,697	5,565	19,860	15,927
Ontario	11,621	7,096	3,680	15,611	58,397	51,188	27,232	65,493	54,866
Manitoba	3,005	7,096	4	75	200	70	3,080	7,406	74
Saskatchewan	3,673	11,207	—	11	23	9	3,684	11,230	9
Alberta	10,873	19,591	4	47	130	48	10,920	19,721	51
British Columbia	2,425	2,108	450	1,243	2,511	1,712	3,668	4,619	2,102
Total Canada	32,721	50,102	4,443	29,401	94,774	83,631	62,122	144,876	88,074

TABLE 14. Total Sales¹ in Canada of Fertilizer Materials and Mixed Fertilizers, for the Years Ended June 30, 1950-59

Year ended June 30	Fertilizer materials	Mixed fertilizers	Total sold in Canada
1950	145,972	618,609	764,581
1951	153,933	616,574	770,507
1952	156,049	612,496	768,545
1953	179,600	640,203	819,803
1954	160,481	651,160	811,641
1955	139,301	651,473	790,774
1956	148,037	652,643	800,680
1957	156,497	651,754	808,251
1958	181,973	688,566	870,539
1959	218,661	689,553	908,214

¹ Except for manufacturing purposes.

TABLE 15. Nitrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold During the Years Ended June 30, 1950-59

Year ended June 30	In materials			In mixtures			Total		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
	short tons								
1950	14,533	47,151	1,924	18,820	70,840	54,063	33,353	117,991	55,987
1951	16,167	48,745	2,181	18,328	73,142	53,949	34,495	121,887	56,130
1952	17,357	46,413	2,594	19,213	72,951	55,423	36,570	119,364	58,017
1953	20,956	52,829	2,838	22,933	79,873	64,749	43,889	132,702	67,587
1954	18,213	42,108	3,327	23,812	80,239	66,641	42,025	122,347	69,968
1955	17,422	32,672	3,120	25,410	82,032	71,219	42,832	114,704	74,339
1956	19,687	33,229	3,472	25,324	84,702	73,472	45,011	117,931	76,944
1957	23,062	35,384	3,290	26,611	85,806	75,084	49,673	121,190	78,374
1958	26,947	39,945	4,282	28,393	91,793 ¹	80,393	55,340	131,738 ¹	84,675
1959	32,721	50,102	4,443	29,401	94,774	83,631	62,122	144,876	88,074

¹ Revised.

TABLE 16. Production,¹ Imports and Exports of Ammonium Sulphate, 1949-58

Year	Production	Imports	Exports
1949	225,949	140	167,147
1950	211,534	103	209,106
1951	209,159	314	145,724
1952	226,664	845	199,681
1953	186,540	21,254	147,371
1954	174,967	14,101	154,760
1955	311,371	7,029	N.A.
1956	339,510	3,144	N.A.
1957	318,634	3,286	N.A.
1958	300,049	5,892	N.A.

¹ Factory shipments since 1952.

TABLE 17. Imports and Exports of Fertilizers, 1957 and 1958

Item	1957		1958	
	Quantity	Value \$	Quantity	Value \$
Imports				
Ammonia, sulphate of	3,288	129,827	5,892	218,599
Potash, muriate of	136,641	3,406,175	132,305	3,089,714
Potash, sulphate of	17,721	610,337	15,539	556,227
Nitrate of soda or cubic nitre	25,598	1,085,471	22,728	1,011,175
Nitrogen solution	33,142	1,872,852	25,846	1,429,435
Nitrogen fertilizer, n.o.p.	32	1,155	40	3,270
Triple superphosphate	45,380	2,004,031	48,269	2,019,957
Superphosphate, n.o.p.	163,746	3,131,318	173,457	3,292,119
Phosphate fertilizer, n.o.p.	2,830	205,471	3,325	235,208
Sulphate of potash magnesia	3,456	67,023	3,128	61,118
Mixed fertilizers	9,366	755,446	3,053	471,282
Fertilizer materials, n.o.p.	6,509	343,677	9,417	565,054
Exports				
Ammonium sulphate	—	9,300,315	—	8,223,655
Nitrogen fertilizer	—	18,114,493	—	17,106,496
Phosphate (fertilizer)	—	12,994,804	—	12,370,470
Fertilizers, manufactured, n.o.p.	128,012	8,468,614	130,001	8,668,935
Fertilizer materials, n.o.p.	3,444	80,226	5,055	106,203

Note: In each case, the period covered in the above table refers to the "calendar" year.

TABLE 18. Fuel and Electricity Used in the Fertilizers Industry, 1957 and 1958

Kind	1957		1958	
	Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal—Canadian	6,578	58,733	6,732	61,889
Imported	50,120	501,804	50,197	503,062
Anthracite coal	71	1,437	49	1,022
Coke (for fuel only)	110	2,437	160	3,481
Gasoline (including gasoline used in cars and trucks) .. Imp. gal.	230,231	74,334	284,522	94,633
Fuel oil	624,015	91,777	790,645	109,269
Gas—Liquefied petroleum gases	300	142	3,667	1,406
Other manufactured	370	299	—	—
Natural	1,441,590	183,186	1,511,217	207,320
Other fuel	—	4,829	—	2,298
Electricity purchased ¹	1,170,510,202	2,232,359	1,221,603,003	2,396,715
Total	—	3,151,337	—	3,281,095

¹ The bulk of the electricity shown here was generated by one of the reporting companies but was generated by off-plant equipment and therefore, for statistical purposes, this has been treated as purchased electricity.

TABLE 19. Total Horsepower Rating of Power Equipment in Use or Available for Use at the end of 1958

Type of equipment	Driving generators	Not driving generators
	horsepower	
A. Prime movers:		
Steam turbines	1,050	1,254
Gasoline, gas and oil engines, other than diesel engines	—	7,211
Hydraulic turbines or water wheels	—	120
Total	1,050	8,585
B. Electric motors (one-quarter horsepower and over)	—	97,389

Note: Generating equipment owned by one of the firms which had plants classified to this industry has not been included in above table as the actual location of this equipment is outside the fertilizer plants.

List of Firms in the Fertilizers Industry, 1958

Name of firm	Location of plant
Prince Edward Island:	
Island Fertilizer Inc.	Charlottetown
Canada Packers Limited	Summerside
Nova Scotia:	
Canadian Industries Limited	Pier 9, Halifax
Canada Packers Limited	Port Williams
Colonial Fertilizer Co. Ltd.	Nesbit St., Windsor
New Brunswick:	
Canada Packers Limited (Fertilizer Division)	Bayside Drive, East Saint John
International Fertilizers Limited	East Saint John
Summers Fertilizers Co. Inc.	Prince William St., St. Stephen
Quebec:	
Agricultural Chemicals Ltd.	Chambly Canton
Canada Packers Limited	6000 St. Patrick St., Montreal
Canada Packers Limited	Ste. Foy
Canadian Industries Limited	1490 Marlborough St., Montreal
Canadian Industries Limited	McMasterville
Houde, William, Limited	La Prairie
International Fertilizers Limited	Wolfe's Cove, Quebec
Ontario:	
Agricultural Chemicals Ltd.	Marsh St., Port Hope
Agricultural Chemicals Ltd.	London
Biorganic Fertilizers Ltd.	R.R. 1, Kingsville
Bradford Fertilizer & Chemical Co.	Aurora
Canada Packers Limited	Chatham
Canada Packers Limited	2200 St. Clair Ave. W., Toronto
Canada Packers Limited	Welland
Canadian Industries Limited	King St. E., Chatham
Canadian Industries Limited	Burlington St. E., Hamilton
Canadian Industries Limited	Ingersoll
Canadian Industries Limited	Norwich
Cyanamid of Canada Limited	Niagara Falls
Elmira Fertilizers Ltd.	Elmira
Grand Valley Fertilizers Ltd.	Orangeville
Hy-Trous Co. of Canada Ltd.	Box 1296, Cornwall
Manchester Products	Galt
Misner Fertilizer Limited	Port Dover
"Na-Churs" Plant Food Co. (Canada) Ltd.	2 Langarth St. W., London
Ontario Plant Foods Ltd.	Delhi
Rainbow Chemicals Ltd.	Tilbury
Swift Canadian Co. Limited	1400 The Queensway, Etobicoke
United Co-operatives of Ontario	4004 Dundas St. W., Toronto
United Co-operatives of Ontario	Stratford
United Co-operatives of Ontario	Thamesville
Alberta:	
Consolidated Mining and Smelting Co. of Canada Limited	Calgary
North-West Nitro Chemicals Ltd.	Medicine Hat
British Columbia:	
Consolidated Mining and Smelting Co. of Canada Limited	Kimberly
Consolidated Mining and Smelting Co. of Canada Limited	Trail
Globe Fertilizer Co. Ltd.	Foot Crompton Road, Vancouver
Green Valley Fertilizer & Chemical Co. Ltd.	North Surrey

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