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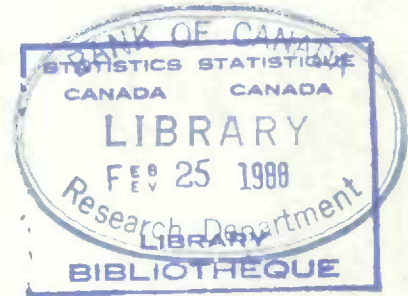
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# MANUFACTURERS OF MIXED FERTILIZERS

## 1960

First Issue — Statistics formerly included in 46-206 — Fertilizers Industry which has been discontinued.

ANNUAL CENSUS  
OF MANUFACTURES



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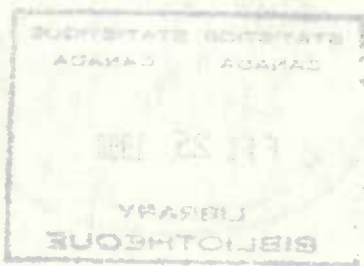
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### SYMBOLS

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

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.



## EXPLANATORY NOTES

This report is one in a series of about 140 publications which present the results of the 1960 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. Adoption of the revised Standard Industrial Classification for 1960 compilations has necessitated changes in titles of many reports in this annual series. The content of many industries has also been affected (see following note on Industrial Classification).

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 1960 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, ware-

housing 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 or 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.<sup>1</sup>

### **Standard Industrial Classification**

The revised Standard Industrial Classification which has been introduced with the 1960 Census of Manufactures provides for a breakdown of the universe into 140 industries arranged in 20 major groups compared with 135 industries in 17 major groups in the old classification which was used in the compilations for the years 1949 to 1959 inclusive. It incorporates changes considered desirable on the basis of experience in using the earlier classification as well as those which take account of changes in the structure of Canadian industries associated with the rapid developments of the past decade. Full details are contained in the Standard Industrial Classification Manual, Catalogue No. 12-501, which is available from either the Queen's Printer or the Dominion Bureau of Statistics. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Many industries remain unchanged in the new classification but in many instances there have been substantial changes in content because of the shifting of establishments from one industry to another or in re-grouping of establishments. Where

<sup>1</sup> 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*.

changes have occurred the principal statistics for 1957, 1958 and 1959 have been re-compiled to provide data on a basis comparable with those for 1960.

### **Short Forms**

Between 1949 and 1957, in an effort to ease the reporting burden for smaller firms, a short form was used asking for the total value of shipments only or, in a few cases where losses of detail were significant, for quantities and values of principal products. For purposes of publication, missing data were estimated on the basis of appropriate ratios. In general the cut-off point for these short forms was set at \$50,000 value of shipments. About 40% of the total number of establishments reported on the short form and accounted for less than 3 per cent of the total value of shipments.

In 1958, in order to establish a new base year, the small firms were asked to report all items of principal statistics together with some detail on materials and products.

For the 1959 Census, the short form was used again, but further steps were taken to ease the respondents' burden. First, the general limit for short forms was raised to \$100,000 value of shipments. In addition, a new intermediate form was developed. This form is a shortened version of the long form in that most of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between \$100,000-\$500,000 value of shipments, but in the case of both the short and intermediate forms there were lower cut-offs for a number of industries in which the smaller firms accounted for a larger share of total shipments. On the other hand, limits were raised where this could be done without a significant loss of coverage. On most of the short forms for 1959, in addition to total value of shipments, data on principal products were requested. In a few industries, where loss of employment and earnings data were considered too large because of higher cut-offs, a question on total payroll was placed on the short form. This practice was followed again in 1960.

The intermediate and long forms provide complete data for the compilation of all elements of principal industry statistics and the details of materials and products. The one-page short form, although containing data on principal products and total value of shipments, does not request information on other elements of principal statistics such as value of inventories, materials, fuel and electricity and, in most cases, employment and salaries and wages, nor does it contain detailed data on volume and value of materials used. For purposes of compiling aggregates of principal statistics by industry and by geographic location, the missing data for each establishment were estimated for 1959 by using, in general, ratios based on the change in the value of shipments between 1958 and 1959. The proportion of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

# MANUFACTURERS OF MIXED FERTILIZERS

1960

Data presented in this report under the heading of Manufacturers of Mixed Fertilizers reflect implementation of the revised Standard Industrial Classification (SIC) which is being used by the Dominion Bureau of Statistics in its compilation of 1960 industry statistics—see item "Standard Industrial Classification" in the Explanatory Notes section of this report. For statistical purposes the industry titled Manufacturers of Mixed Fertilizers in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing superphosphate and mixed fertilizers. Establishments primarily engaged in manufacturing chemicals which in addition to their use as fertilizer materials also have other important industrial uses, e.g. ammonium nitrate, are classified in the Manufacturers of Industrial Chemicals industry.

In many instances, adoption of the new Standard Industrial Classification effected a radical shifting of manufacturing establishments as between industry groupings. A significant element in the shift in the case of the industry reviewed in this report was the transfer to the Manufacturers of Industrial Chemicals industry of establishments manufacturing ammonium nitrate, ammonium phosphate, ammonium sulphate and ammonium nitrate phosphate. The effect of this transfer is reflected in the comparative series of statistics presented in Tables 1A and 1B. Table 1A shows data for these establishments according to the "old" concept while Table 1B carries figures recompiled on the "new" or revised Standard Industrial Classification basis.

There were 42 establishments classified as Manufacturers of Mixed Fertilizers in 1960; there

being 2 in Prince Edward Island, 2 in Nova Scotia, 3 in New Brunswick, 7 in Quebec, 25 in Ontario, 1 in Manitoba and 2 in British Columbia. Employees in the industry numbered 1,194; salaries and wages totalled \$5,615,995; fuel and electricity cost \$497,055; materials used in manufacturing processes cost \$32,550,234; and factory shipments were valued at \$45,859,990.

The establishments in this industry make mixed fertilizers and superphosphate as their main product; on the other hand, some companies which have been classified to other industrial groups make some mixed fertilizers as minor products. Factory shipments of mixed fertilizers in 1960, from all industries, amounted to 791,000 tons worth \$42,739,000 compared with 757,000 tons worth \$41,498,000 in 1959.

**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 1A. Principal Statistics of the Fertilizers Industry, Significant Years 1929 - 59**  
Basis Standard Industrial Classification in use prior to 1960

Year	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture <sup>1</sup>	Value of factory shipments <sup>2</sup>
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	1,819,612	706,003	8,140,498	4,318,663	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
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 .....	44	3,011	12,899,267	3,151,337	47,134,450	35,459,400	83,807,556
1958 .....	45	2,993	13,424,810	3,281,095	48,593,959	37,209,183	89,145,796
1959 .....	45	3,001	13,804,715	3,355,005	50,470,120	40,732,905	96,278,304

<sup>1</sup> See note to text.

<sup>2</sup> Value of production prior to 1952.



**TABLE 1 B. Principal Statistics, Manufacturers of Mixed Fertilizers, by Provinces, 1957 - 60**  
Basis: Standard Industrial Classification revised 1960

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture <sup>1</sup>	Value of factory shipments
	number		dollars				
<b>1957</b>							
New Brunswick .....	3	122	389,650	74,566	2,978,133		3,862,744
Quebec .....	7	361	1,602,192	79,479	5,900,799	2	8,902,655
Ontario .....	22	484	1,819,699	135,549	15,158,785		22,873,866
Other provinces .....	7	108	283,951	26,686	2,856,713		3,715,595
<b>Totals .....</b>	<b>39</b>	<b>1,075</b>	<b>4,095,492</b>	<b>316,280</b>	<b>26,894,430</b>		<b>39,354,860</b>
<b>1958</b>							
New Brunswick .....	3	122	426,300	64,160	2,971,709		4,429,997
Quebec .....	7	375	1,685,363	82,090	6,021,282	2	9,815,106
Ontario .....	22	487	2,057,981	210,176	15,852,435		24,535,793
Other provinces .....	7	151	407,111	30,873	3,232,394		4,569,228
<b>Totals .....</b>	<b>39</b>	<b>1,135</b>	<b>4,576,755</b>	<b>387,299</b>	<b>28,077,820</b>		<b>43,350,124</b>
<b>1959</b>							
New Brunswick .....	3	120	413,857	53,295	2,829,249		4,252,004
Quebec .....	7	384	1,775,436	92,086	6,698,066	2	10,880,170
Ontario .....	23	573	2,509,634	266,837	18,079,023		25,237,708
Other provinces .....	7	121	382,038	30,644	3,155,358		4,265,014
<b>Totals .....</b>	<b>40</b>	<b>1,198</b>	<b>5,080,965</b>	<b>442,862</b>	<b>30,761,696</b>		<b>44,634,896</b>
<b>1960</b>							
New Brunswick .....	3	108	436,969	47,120	3,260,089	1,000,635	4,184,051
Quebec .....	7	370	1,998,481	88,206	7,523,797	3,303,744	11,266,180
Ontario .....	25	605	2,801,484	333,543	18,452,382	7,563,495	26,193,365
Other provinces .....	7	111	379,061	28,186	3,313,966	930,643	4,216,394
<b>Totals .....</b>	<b>42</b>	<b>1,194</b>	<b>5,615,995</b>	<b>497,055</b>	<b>32,550,234</b>	<b>12,798,517</b>	<b>45,859,990</b>

<sup>1</sup> See note to text.

<sup>2</sup> The changeover to the new classification has delayed the recompilation of "value added" figures for these years and same will not be available until the next issue of this report.

**TABLE 2. Inventories<sup>1</sup>: Manufacturers of Mixed Fertilizers, 1960**

Province	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
<b>Opening:</b>				
New Brunswick .....	150,703	12,611	26,998	190,312
Quebec .....	939,998	959,338	980,300	2,879,636
Ontario .....	2,359,883	3,872,960	875,760	7,108,603
Other provinces .....	685,703	535,595	577,069	1,798,367
<b>Canada .....</b>	<b>4,136,287</b>	<b>5,380,504</b>	<b>2,460,127</b>	<b>11,976,918</b>
<b>Closing:</b>				
New Brunswick .....	114,599	116,883	46,519	278,001
Quebec .....	1,185,041	788,722	800,483	2,774,246
Ontario .....	2,506,371	3,842,779	1,061,996	7,411,146
Other provinces .....	467,643	681,897	487,168	1,636,708
<b>Canada .....</b>	<b>4,273,654</b>	<b>5,430,281</b>	<b>2,396,166</b>	<b>12,100,101</b>

<sup>1</sup> Book value of all manufacturing inventories owned and held at plant and plant warehouses.

TABLE 3. Factory Shipments: Manufacturers of Mixed Fertilizers, 1960

Product	Quantity	Value of factory shipments
	tons	\$
Mixed fertilizers .....	751,322	40,326,573
Superphosphate, milled and screened only .....	13,138	526,312
Ammonium sulphate, milled and screened only .....	355	20,811
Muriate of potash, milled and screened only .....	2,269	139,561
All other products (including superphosphates) .....	..	4,846,733
<b>Total</b> .....	<b>...</b>	<b>45,859,990</b>

TABLE 4. Materials Used: Manufacturers of Mixed Fertilizers, 1960

Material	Quantity	Cost at plant
	short tons	\$
Ammonia, anhydrous .....	6,255	541,931
Ammonium nitrate .....	3,497	289,520
Ammonium phosphate:		
11-48-0 .....	7,978	659,292
16-20-0 .....	2,488	141,873
Ammonium sulphate (sulphate of ammonia) .....	30,091	1,159,138
Borax .....	143	13,808
Calcium cyanamide (cyanamid) .....	580	38,840
Diatomaceous earth .....	22	1,327
Limestone .....	17,598	81,251
Lime or land plaster .....	687	6,759
Magnesium oxide (all forms, including brucite, mag 70, etc.) .....	1,783	76,943
Magnesium sulphate .....	130	11,101
Nitrogen solutions .....	42,991	2,779,857
Phosphate rock .....	157,421	2,271,538
Potassium chloride (muriate of potash) .....	138,123	4,764,068
Potassium nitrate (nitrate of potash) .....	50	6,679
Potassium sulphate (sulphate of potash) .....	19,347	935,988
Potassium magnesium sulphate (sulphate of potash magnesia) .....	4,803	155,967
Sand .....	38,477	124,203
Sodium nitrate (nitrate of soda) .....	72	4,138
Sulphuric acid, 100% .....	101,821	2,042,825
Superphosphate:		
16-18% P <sub>2</sub> O <sub>5</sub> .....	25,131	572,132
20% P <sub>2</sub> O <sub>5</sub> .....	279,470	6,033,934
38-48% P <sub>2</sub> O <sub>5</sub> .....	70,846	4,015,399
Ammoniated .....	16,555	531,679
Urea .....	1,819	168,943
All other materials <sup>1</sup> .....	..	2,617,056
Containers and shipping materials .....	..	2,504,045
<b>Total</b> .....	<b>...</b>	<b>32,550,234</b>

<sup>1</sup> No detailed information on materials used was collected from firms generally reporting value of shipments of less than \$200,000. The total value of materials used by these firms was \$175,000 and this amount is included in "all other materials".

**TABLE 5. Factory Shipments of Mixed Fertilizers, 1952 - 60 (from All Industries)**

Year	Quantity	Selling value at works
	tons	\$
1952 .....	648,800	30,364,000
1953 .....	694,600	32,751,000
1954 .....	668,200	32,120,000
1955 .....	685,700	33,112,000
1956 .....	703,200	34,408,000
1957 .....	723,100	37,026,000
1958 .....	751,900	40,001,000
1959 .....	757,000	41,498,000
1960 .....	791,000	42,739,000

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

**TABLE 6. Total Sales<sup>1</sup> in Canada of Fertilizer Materials and Mixed Fertilizers, for the years Ended June 30, 1952 - 61**

Year ended June 30	Fertilizer materials	Mixed fertilizers	Total sold in Canada
	tons (2,000 pounds)		
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
1960 .....	243,720	691,708	935,428
1961 .....	297,730	779,682	1,077,412

<sup>1</sup> Except for manufacturing purposes.

Note: A special survey of the fertilizer trade in Canada during the fertilizer year ended June 30, 1961 has been completed by the Dominion Bureau of Statistics and the results have been published in a special report, "Fertilizer Trade", copies of which are available on application to the Information Services Division of the Dominion Bureau of Statistics.

**TABLE 7. Factory Shipments, Imports and Exports of Ammonium Sulphate, 1952 - 60**

Year	Factory shipments	Imports	Exports
	tons		
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	..
1956 .....	339,510	3,144	..
1957 .....	318,634	3,288	..
1958 .....	300,049	5,892	..
1959 .....	307,121	5,941	..
1960 .....	349,677	8,686	..



TABLE 8. Principal Statistics classified according to Type of Ownership:  
Manufacturers of Mixed Fertilizers, 1957 and 1960

Type	Estab- lish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number		dollars		
1957					
Individual .....	2	50	150,424	1,819,951	2,494,278
Co-operatives .....	3				
Incorporated companies .....	34	1,025	3,945,068	25,074,479	36,860,582
<b>Totals</b> .....	<b>39</b>	<b>1,075</b>	<b>4,095,492</b>	<b>26,894,430</b>	<b>39,354,860</b>
1960					
Individual .....	1	49	199,610	2,493,173	3,081,044
Co-operatives .....	3				
Incorporated companies .....	38	1,145	5,416,385	30,057,061	42,778,946
<b>Totals</b> .....	<b>42</b>	<b>1,194</b>	<b>5,615,995</b>	<b>32,550,234</b>	<b>45,859,990</b>

TABLE 9. Principal Statistics classified according to Selling Value of Factory Shipments:  
Manufacturers of Mixed Fertilizers, 1957 and 1960

Establishments reporting a value of factory shipments	Estab- lish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number		dollars		
1957					
Under \$200,000 .....	5	35	70,571	351,662	501,194
\$ 200,000 to \$ 499,999 .....	6	61	173,930	1,193,261	1,741,925
500,000 " 999,999 .....	16	306	1,032,634	8,284,273	11,752,299
1,000,000 " 4,999,999 .....	11	563	2,139,937	17,065,234	25,359,442
5,000,000 and over .....	1				
Head offices .....	—	110	678,420	—	—
<b>Totals</b> .....	<b>39</b>	<b>1,075</b>	<b>4,095,492</b>	<b>26,894,430</b>	<b>39,354,860</b>
1960					
Under \$200,000 .....	4	21	61,249	183,646	298,669
\$ 200,000 to \$ 499,999 .....	8	89	355,228	2,013,600	2,906,664
500,000 " 999,999 .....	13	241	943,605	7,313,903	10,036,105
1,000,000 " 4,999,999 .....	17	749	3,537,878	23,039,085	32,618,552
5,000,000 and over .....	—	—	—	—	—
Head offices .....	—	94	718,035	—	—
<b>Totals</b> .....	<b>42</b>	<b>1,194</b>	<b>5,615,995</b>	<b>32,550,234</b>	<b>45,859,990</b>

TABLE 10. Employees and Their Earnings: Manufacturers of Mixed Fertilizers, 1959 and 1960

Province	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
	number					dollars		
1959								
New Brunswick .....	18	6	96	—	120	138,555	275,302	413,857
Quebec .....	127	60	197	—	384	1,004,147	771,289	1,775,436
Ontario .....	121	48	401	3	573	986,420	1,523,214	2,509,634
Other provinces .....	33	9	79	—	121	145,299	236,739	382,038
<b>Canada .....</b>	<b>299</b>	<b>123</b>	<b>773</b>	<b>3</b>	<b>1,198</b>	<b>2,274,421</b>	<b>2,806,544</b>	<b>5,080,965</b>
1960								
New Brunswick .....	19	6	83	—	108	142,527	294,442	436,969
Quebec .....	118	52	199	1	370	1,136,568	861,913	1,998,481
Ontario .....	133	46	426	—	605	1,069,870	1,731,614	2,801,484
Other provinces .....	25	8	77	1	111	135,055	244,006	379,061
<b>Canada .....</b>	<b>295</b>	<b>112</b>	<b>785</b>	<b>1</b>	<b>1,194</b>	<b>2,484,020</b>	<b>3,131,975</b>	<b>5,615,995</b>

TABLE 11. Production Workers, by Months: Manufacturers of Mixed Fertilizers, 1960

Month	Male	Female	Total
	number		
January .....	828	2	830
February .....	778	2	780
March .....	847	2	849
April .....	1,167	2	1,169
May .....	1,148	2	1,150
June .....	669	2	671
July .....	548	2	550
August .....	609	2	611
September .....	671	2	673
October .....	663	2	665
November .....	691	2	693
December .....	773	2	775
<b>Averages .....</b>	<b>785</b>	<b>2</b>	<b>787</b>

**TABLE 12. Fuel and Electricity Used: Manufacturers of Mixed Fertilizers, 1960**

Kind	Quantity	Cost at plant	
		\$	
Bituminous coal—Canadian .....	ton	1,844	26,500
Imported .....	"	350	4,995
Anthracite coal .....	"	32	688
Gasoline (including gasoline used in cars and trucks) .....	Imp. gal.	289,115	94,979
Fuel oil .....	"	1,037,877	110,342
Gas—Liquefied petroleum gases .....	"	6,719	2,457
Natural .....	M cu. ft.	56,261	51,894
Other fuel .....		..	10,434
Electricity purchased .....	kwh.	12,003,530	188,266
Steam .....		...	6,500
<b>Total</b> .....		...	<b>497,055</b>

**TABLE 13. Imports of Fertilizers, 1959 and 1960**

Item	1959		1960		
	Quantity	Value	Quantity	Value	
		\$		\$	
Ammonium sulphate .....	ton	5,941	208,159	8,686	276,473
Potash, muriate of .....	"	95,299	2,282,054	146,685	3,381,927
Potash, sulphate of .....	"	24,742	815,011	23,944	825,886
Soda, nitrate of, or cubic nitre .....	"	21,684	880,470	18,283	81,038
Nitrogen solution .....	"	21,826	1,154,091	20,509	1,170,893
Nitrogen fertilizer, n.o.p. ....	"	376	59,166	601	144,420
Triple superphosphate .....	"	64,328	2,885,308	83,142	3,925,911
Superphosphate, n.o.p. ....	"	142,142	2,605,896	119,689	2,178,357
Phosphate fertilizer, n.o.p. ....	"	3,985	273,386	6,243	235,889
Sulphate of potash magnesia and potash fertilizer, n.o.p. ....	"	4,451	72,250	5,564	79,878
Fertilizer, mixed .....	"	8,094	749,778	4,060	470,743
Fertilizer materials, n.o.p. ....	"	10,307	804,963	9,535	710,229
Basic slag .....	"	392	9,975	560	14,700

**TABLE 14. Exports of Fertilizers, 1959 and 1960**

Item	1959		1960		
	Quantity	Value	Quantity	Value	
		\$		\$	
Ammonium sulphate .....	ton	—	8,506,770	—	8,572,429
Nitrogen fertilizer, n.o.p. ....	"	—	14,420,401	—	19,135,605
Nitrogen-phosphate fertilizers .....	"	—	22,894,111	—	20,902,855
Chemical fertilizers, mixed .....	"	39,792	2,204,978	59,482	3,411,823
Fertilizers, except animal, n.o.p. ....	"	39,564	765,754	10,719	325,770





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CHEMICALS AND CHEMICAL PRODUCTS INDUSTRIES

Directory of Firms, Manufacturers of Mixed Fertilizers,<sup>1</sup> 1960

Name of firm	Location of plant
<b>Prince Edward Island:</b>	
Island Fertilizer Inc. ....	Charlottetown
Canada Packers Limited .....	Summerside
<b>Nova Scotia:</b>	
Canadian Industries Limited .....	Pier 9, Halifax
Canada Packers Limited .....	Nesbit St., Windsor
<b>New Brunswick:</b>	
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
<b>Quebec:</b>	
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
<b>Ontario:</b>	
Agricultural Chemicals Ltd. ....	Orangeville
Agricultural Chemicals Ltd. ....	Marsh St., Port Hope
Agricultural Chemicals Ltd. ....	London
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
Dominion Fertilizers Ltd. ....	Port Maitland
Elmira Fertilizers Ltd. ....	Elmira
Golden Sunshine Fertilizer Co. Ltd. ....	Essex
Harriston Fertilizers Ltd. ....	Harriston
Hy-Trous Co. of Canada (1959) Ltd. ....	Cornwall
Manchester Products Limited .....	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
<b>Manitoba:</b>	
Bard Fertilizer Ltd. ....	710 Pembina Hwy., Winnipeg
<b>British Columbia:</b>	
Globe Fertilizer Co. Ltd. ....	Foot Crompton Road, Vancouver
Green Valley Fertilizer & Chemical Co. Ltd. ....	North Surrey

<sup>1</sup> For statistical purposes includes as well firms manufacturing superphosphate.