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# MANUFACTURERS OF MIXED FERTILIZERS 1963

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## MANUFACTURERS OF MIXED FERTILIZERS 1963

Data presented in this report under the heading of Manufacturers of Mixed Fertilizers reflect implementation of the revised Standard Industrial Classification (S.I.C.) and the New Establishment Concept which are being used by the Dominion Bureau of Statistics in its compilations of industry statistics—see items "Standard Industrial Classification" and "Establishment" 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 superphosphates and mixed fertilizers. Establishments primarily engaged in manufacturing chemicals which, in addition to their use as fertilizer materials, also have important industrial uses, e.g. ammonium nitrate, are classified in the Manufacturers of Industrial Chemicals industry.

#### SYMBOLS

The following standard symbols are used in Dominion Bureau of Statistics publications:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- amount too small to be expressed.
- P preliminary figures.
- revised figures.
- x confidential to meet secrecy requirements of the Statistics

TABLE 1 A. Principal Statistics classified by Province, 1962 and 1963

				Man	ufacturing	activity				Т	otal activ	vity	
Year and	Estab-		duction a		Cost of	Cost of	Value of shipments			owners irtners		otal oyees	T-t-1
province	ments	Number	Man- hours paid	Wages		materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	Total value added
	No.		'000			\$'000		-		\$'000		\$*0	00
1961													
Totals	43	884	1,975	3,627	719	39, 648	54, 261	14,426	-	-	1, 460	6, 691	15,449
1962													
Newfoundland	_	_		_	_	_	_	_	_	_	_	-	_
Prince Edward Island	2	7								1			0.00
Nova Scotia	2	74	144	201	22	3,442	4,036	791		_	93	321	840
New Brunswick	3	90	191	317	49	3,638	4,678	1,142	_	_	115	468	1,132
Quebec	6	241	537	1,066	108	9,434	13,903	4,754	-	-	391	1,943	4,840
Ontario	27	520	1,158	2,226	843	26,794	35,798	9,188	-	_	919	4,366	9,809
Manitoba	1	1									į		
Suskatchewan	_					0.18	1 200	0.08			44	189	4.05
Atherta	eran	25	46	96	15	917	1,203	267	_		72	100	300
British Columbia	4												
Yukon and Northwest Territories	_	_	-	_	_	-	-	-	-	-	_	***	_
Totals	45	950	2,076	3,907	1,036	44,224	59, 618	16, 142		-	1,562	7,287	17,02
1963													
Newfoundland	_	_	_	_	_		-		_	-	nan.	_	-
Prince Edward Island	2	1									7		
Nova Scotia	2	146	310	511	68	6,849	8,688	1.749	_	-	193	785	1, 79
New Brunswick	3	J											
Quebec	6	234	491	1,127	119	10,435	14,966	3,868	-	-	374	1,995	4,09
Ontario	27	553	1,223	2,439	864	29,942	43,100	12,481		-	977	4,682	13,66
Manitoba	_	-	_	-	-	-	-	-	-	-	-	_	-
Saskatchewan	_	-	_	_	-	-	-	-	_	-		_	-
Alberta	-	_	_	l sete	_	-	-		_	-	_	_	_
British Columbia	6	20	40	84	12	839	1,226	315	х	х	39	168	37
Yakon and Northwest Territories	com	-	_	_	-	-	-	-	-	-	-	-	
Totals	46	953	2,064	4,160	1,063	48, 065	67,981	18,413	x	x	1,583	7,630	19,91

TABLE 1 B. Principal Statistics classified by Size Groups based on Shipments of Goods of Own Manufacture, 1962 and 1963

				Mani	ufacturing	activity					Total act	ivity	
Size group	Estab- lish- ments		oduction a sted work		Cost of	Cost of materials	Value of shipments of goods	Value		owners artners		otal oyees	Total value
		Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	added
	No.		'000			\$,000				\$'000		\$'0	000
1962													
Jnder \$10,000	}	5	13	15	7	124	175	53	-	_	14	49	72
100,000 ' 199,999	9	58	122	182	30	1,456	2, 489	918	_	_	125	520	1,081
500,000 ** 999,999	12	130	243	404	103	6, 240	8,410	2.160	-	_	213	818	2, 465
1,000,000 ' 4,999,999	20	757	1,698	3,307	896	36, 405	48, 542	13,011	_	-	1, 188	5,749	13, 420
auxiliary units	* * ;										22	151	(13
Totals	45	950	2,076	3,907	1,036	44, 224	59, 618	16, 142	_	-	1,562	7, 287	17,02
Inder \$10,000	} 4	1	2	3	4	29	52	5	x	x	7	29	78
10,000 to \$ 24,999	_		-	_	_	_	_		_	_	_	_	_
50,000 '' 99,999	} 4	21	44	66	8	239	477	168	_	-	44	147	288
100,000 '' 199,999 200,000 '' 499,999 500,000 '' 999,999 1,000,000 '' 4,999,999 5,000,000 and over	5 8 22 3	38 67 544 282	92 145 1, 191 591	127 262 2,302 1,400	23 58 404 566	1, 227 3, 296 28, 380 14, 895	1.790 5,550 40,647 19,463	552 2,176 11,032 4,480	-	-	60 163 896 386	247 790 4,110 2,140	2, 333 11, 944 4, 650
Head Offices, sales Offices and auxiliary units						4 4 4	4 . 4				27	168	(14
Totals	46	953	2,064	4.160	1.063	48,065	67,981	18 413	x	x	1.583	7,630	19,919

TABLE 1C. Principal Statistics classified by Size Groups based on Manufacturing Value Added, 1962 and 1963

				Man	ufacturing	activity					Total act	ivity	
Size group	Estab- lish- ments		oduction a		Cost of	Cost of materials	Value of shipments of goods	Value		owners		otal loyees	Total
	menta	Number	Man- hours paid	Wages	elec- tricity	and supplies used	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	value added
	No.		*000		-	\$'000				\$'000		\$'0	00
1962													
Under \$10,000 \$ 10,000 to \$ 24,999 25,000 '' 49,999	5	11	25	41	12	383	500	100	-	_	22	89	157
50,000 '' 99,999 100,000 '' 199,999 200,000 '' 499,999 500,000 '' 999,999	7 11 14 4	58 113 274 189 305	117 242 637 392 664	166 371 1,111 758 1,459	36 82 219 146 541	1,553 6,377 14,617 7,071 14,224	2,144 7,940 19,315 9,561 20,157	479 1,583 5,174 3,002 5,803		-	99 178 507 260 474	343 662 2,342 1,225 2,475	596 1,735 5,515 3,130 5,906
1,000,000 ' 4,999,999	-	****	-	_	_	-	_	-	-	-	22	151	(13
Totals	45	950	2,076	3, 907	1,036	44, 224	59,618	16,142	_	_	1,562	7, 287	17, 025
1963									-				
Under \$10,000	5	8	17	34	6	93	173	15	х	х	30	120	197
\$ 10,000 to \$ 24,999 25,000 '' 49,999 50,000 '' 99,999	5	28	59	82	15	613	972	337	-	-	40	130	385
100,000 '' 199,999 200,000 '' 499,999 500,000 '' 999,999 1,000,000 '' 4,999,999	9 15 7 5	85 238 291 303	195 508 625 659	318 883 1,400 1,443	58 160 188 636	4,868 13,186 12,679 16,626	6,360 18,774 17,864 23,838	1,396 5,267 4,695 6,703	-	-	163 393 441 489	698 1,762 2,282 2,471	1,760 5,527 5,021 7,042
5,000,000 and over Head offices, sales offices and auxiliary units					-	0.00	4 4 2				27	168	(14
Totals	46	953	2,064	4, 160	1,063	48,065	67,981	18, 413	ж	x	1,583	7, 630	19, 919

TABLE 1 D. Principal Statistics classified by Size Groups based on Total Value Added, 1962 and 1963

		Ì		Мал	ufacturing	activity				Т	otal activ	rity	
Size group	Estab- lish-		duction ated work		Cost of	Cost of	Value of shipments of goods	Value		owners		otal oyees	Total
	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	materials and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	value added
	No.		,000			\$'000		<b>.</b>		\$'000		\$'0	00
1962													
Under \$10,000\$ 10,000 to \$ 24,999	} 5	11	25	41	12	383	500	100	-	_	22	89	157
25,000 '' 49,999 50,000 '' 99,999 100,000 '' 199,999 200,000 '' 499,999	7 11 14	58 113 274	117 242 637	166 371 i,111	36 82 219	1,553 6,377 14 617	2, 144 7, 940 19, 315	479 1,583 5,174 3,002	=	=	99 178 507 260	343 662 2,342 1,225	596 1,735 5,515 3,130
500,000 '' 999,999 1,000,000 '' 4,999,999 5,000,000 and over Head offices, sales offices and	4	189 305	392 664 —	758 1,459	146 541	7,071 14,224	9,561 20,157	5,803	-	_	474	2,475	5,906
auxiliary units						* * *			100		22	151	( 13
Totals	45	950	2,076	3,907	1,036	44, 224	59,618	16,142	-	-	1, 562	7, 287	17, 025
1963													
Under \$10,000 \$ 10,000 to \$ 24,999	} 5	5	10	13	3	123	214	75	x	х	11	24	86
25,000 '' 49,999 50,000 '' 99,999 100,000 '' 199,999 200,000 '' 499,999 500,000 '' 999,999	3 8 17	19 69 247 214	158 529 475	49 277 908 963	11 39 179 156	356 3, 166 14, 134 9, 753	560 4,322 19,690 14,277	185 975 5,338 4,159			29 126 426 353	99 575 1,858 1,715	257 1,206 5,698 4,643
1,000,000 ' 4,999,999 5,000,000 and over	6	399	850	1,949	675	20,533	28,917	7,681	_	_	611	3, 192	8,042
lead offices, sales offices and auxiliary units								4 2 10			27	168	(14
Totals	46	953	2,064	4,160	1,063	48,065	67,981	18,413	x	ж	1,583	7,630	19,919

TABLE 1E. Principal Statistics classified by Size Groups based on Total Employed, 1962 and 1963

				Man	ufacturing	activity				7	otal acti	vity	
Size group	Estab-		duction e		Cost of	Cost of	Value of shipments		Working and po	owners artners		otal oyees	Total
	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	value added
	No.		'000			\$'000	1			\$'000		\$'0	00
1962													
Under 5 employed	] 13	60	120	184	64	3,587	4,517	842		_	102	355	920
5- 14 employed 15- 49 '' 50- 99 ''	21 8 3	314 302 274	699 666 590	1,144 1,289 1,291	196 246 531	14, 383 14, 214 12, 040	19,369 18,693 17,039	5,298 5,328 4,673		_	526 520 392	2, 305 2, 421 2, 055	5,909 5,457 4,753
200-499 " 500 employed and over	_	_	_	_	_	=	_	_	_	-		=	-
auxiliary units						J					22	151	(13
Totals	45	950	2, 076	3,907	1,036	44, 224	59, 618	16, 142	-	-	1, 562	7, 287	17, 025
1963									,				
Under 5 employed	10 21	3 63 279	6 136 636	7 208 1,126	45 209	70 3,082 15,986	100 4,782 22,663	26 1,611 6,256	x _	x	6 93 528	12 366 2,431	38 1,743 7,165
100-199 **	} 11	608	1,286	2,819	807	28,927	40, 436	10,519	-	-	929	4,654	10,987
100 - 499 " 100 employed and over	_	_	et under	_	_	_	_	_			_	_	*****
load offices, sales offices and auxiliary units					* * *						27	168	(14
Totals	46	953	2,064	4, 160	1,063	48, 065	67, 981	18, 413	x	x	1,583	7, 630	19, 919

TABLE 1F. Principal Statistics classified by Type of Organization, 1962 and 1963

				Man	ufacturing	activity				T	otal acti	vity	
Type of organization	Estab- lish-		duction ated work		Cost of		Value of shipments			owners artners	Total employees		Total
	ments	Number	Man- hours pald	Wages	fuel and elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	value added
	No.		'000			\$'000			1	\$'000		\$'(	000
1962									1				
Individual ownerships	-	-	-	_	-	-	-	-	-	-	-	-	
Partnerships	4888	_	_		_	-	_	-	_	_	_	-	_
Incorporated companies	} 45	950	2,076	3,907	1,036	44, 224	59,618	16,142	_	-	1,540	7,136	17,038
Head offices, sales offices and auxiliary units			* * *						p 0 e		22	151	(13
Totals	45	950	2,076	3,907	1,036	44, 224	59,618	16, 142	-	-	1, 562	7, 287	17, 025
1963													
Individual ownerships	]												
Partnerships	42	910	1,979	4,021	1,027	44,903	63,300	16,915	х	x	1,504	7,276	18,415
Incorporated companies	J												
Cooperatives	4	43	85	140	36	3,162	4,681	1,497	_	_	52	187	1,517
Head offices, sales offices and auxiliary units			* * *	• • •			• • •	* * *		• • •	27	168	(14
Totals	46	953	2,064	4, 160	1,063	48,065	67, 981	18, 413	x	X	1,583	7,630	19,918

TABLE 2. Industry Output, input and Value Added, 1962 and 1963

	Manufact activit		Non-manufa activit		Tota activi	
	1962	1963	1962	1963	1962	1963
			\$'000			
Output						
I, Shipments and other revenue	59,618	67,981	7,538	9,507	67, 156	77, 488
Inventories - Goods of own manufacture:						
Add closing - Goods in process	6,453	6,018		,	6,453	6,018
Finished goods	3, 583	3,677			3,583	3,677
Less opening - Goods in process	4,873	6,674		* * *	4,873	6,674
Finished goods	3,379	3,461	2-1	0 0 0	3,379	3,461
2. Net inventory change	1,784	(440)			1,784	(440
3. Gross output (1+2)	61, 402	67,541	7,538	9,507	68,940	77, 048
Input						
4. Purchases of goods not of own manufacture	4 * 8	* 8 *	6,693	7,973	6,693	7, 973
Inventories - Goods not of own manufacture:						
Add opening			385	524	385	524
Less closing			539	616	539	616
5. Cost of goods sold (not of own manufacture)		* * *	6,539	7,881	6,539	7,881
6. Materials, supplies, components and semi-processed goods	44,224	48,065	116	121	44,340	48,186
7. Fuel and electricity	1,036	1,063	* * *		1,036	1,063
8. Gross Input (5+6+7)	45, 260	49, 128	6,655	8,002	51,915	57, 130
Census value added (3-8)	16, 142	18, 413	883	1, 506	17, 025	19,919

TABLE 3. Employment and Payroll, 1962 and 1963

					Emplo	yees						Salari	es and wa	ages	
Year and		Producti related			tra	inis- tive	8.	les nd		tal oyees	Product related		Admin- istra-	Sales	Total
province	Manufa	cturing	0	ther	and	office	distri	bution					tive and office	and distri- bution	salaries and wages
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other	onice		1
					num	ber							\$'000		-
1962		1											1		
Newfoundland	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Prince Edward Island								4	0.0		001		ne.	43	321
Nova Scotia	74	_	_	-	11	2	5	1	90	3	201	-	76	9.3	321
New Brunswick	90		-	_	14	3	8	_	112	3	317	_	101	51	468
Quebec	240	1	1		69	. 17	58	5	368	23	1,066	4	479	394	1,943
Ontario	518	2	15	_	199	62	115	8	847	72	2,226	70	1,305	765	4,366
Manitoba															
Saskatchewan					10		F		40	4	96		62	31	189
Alberta	25	_	_	_	10	4	5	10	40	4	96	_	02	31	103
British Columbia	J									0					
Yukon and Northwest Terri-						(1)									
tories		- 1	-	-	-	-	-	-	-	-	-	_	-	_	-
Totals	947	3	16	_	303	88	191	14	1, 457	105	3,907	74	2, 923	1, 283	7, 287
								ĮII i							
1963													į		
Newfoundland	***	_	_	-		_	_	-	_	_	_	_	-	-	_
Prince Edward Island	3														
Nova Scotia	146	_	euts.	_	28	6	13	_	187	6	511	_	191	83	785
New Brunswick	]														
Quebec	234	_	1		66	18	54	1	355	19	1,127	2	488	378	1,995
Ontario	551	2	3	_	201	66	151	3	906	71	2,439	11	1,379	854	4,682
Manitoba	_	-	_	-		_	_	-	_	_	_	-	-	_	-
Saskatchewan	_	-	_	=	-	-	-	-	-	_	-	-	- 1	-	_
Alberta	-	_	_	_	_	_	-	-	-	-	_	-	-	_	_
British Columbia	20	_	-	-	10	4	5	-	35	4	84	-	52	32	168
Yukon and Northwest Terri- tories	_	_	_	-	_	-	_	_	_	_	mar.	_	_	_	_
Totals	951	2	4		305	94	223	4	1, 483	100	4, 160	14	2, 110	1, 346	7, 630

TABLE 3 A. Production and Related Workers, - Manufacturing Activity, by Months, 1962 and 1963

	Estab	olishments report	ng monthly det	ail
Month	196	2	196	3
	Male	Female	Male	Female
		numbe	r	
anuary	987	3	909	
Pebruary	939	3	952	
farch	942	3	944	
April	1,335	3	1,343	
Asy	1,407	4	1,458	
une	840	4	889	
uly	737	3	724	
August	753	3	736	1
eptember	844	3	854	
October	847	3	849	
Vovember	857	3	863	
ocember	888	3	902	
werage for establishments reporting monthly detail (collected only for large establishments).	947	3	951	
verage for small establishments (only annual averages collected)	,		b + e	* * *
wrage for all establishments	947	3	951	

TABLE 4. Industry Inventories, 1963

		Manui	facturing		Non- manufacturing	
Province	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total manufacturing	Products or materials purchased for resale	Total inventories
			book val	ue \$'000		
Opening:					i	
Newfoundland		-	-	/	- 1	_
Prince Edward Island						
Nova Scotia	759	870	369	1,998	46	2,04
New Brunswick					1	
Quebec	2,370	974	931	4,275	102	4,37
Ontario	3,323	4,694	2,064	10,081	278	10, 35
Manitoba		_	- 1	-	-	_
Saskatchewan		-	-	_	- 1	-
Alberta		-	_	_	-	_
British Columbia	186	136	97	419	98	510
Yukon and Northwest Territories		_	_	_	-	_
Totals	6, 638	6,674	3,461	16,773	524	17, 29
Closing:						
Newfoundland		_	-	_		_
Prince Edward Island						
Nova Scotia	875	741	477	2,092	47	2,13
New Brunswick						
Quebec	1,610	856	505	2,970	75	3,04
Ontario	3,957	4,316	2,629	10,902	406	11,30
Manitoba		_	-	_	-	_
Saskatchewan	_	_	_	_	_	_
Alherta		=	_	_	-	-
British Columbia	165	105	67	336	88	42
Yukon and Northwest Territories	_	_	_	_		
Totals		6,018	3,677	16,301	616	16,91

TABLE 5. Purchased Fuel and Electricity Used in Manufacturing Activity, 1962 and 1963

		1962		1963	
Description		Quantity	Cost	Quantity	Cost
1. Large establishments which reported commodity detail:  Bituminous coal:  (a) From Canadian mines  (b) Imported  Sub-bituminous coal (from Alberta mines only)  Anthracite coal  Lignite coal  Coke	ton	641 275 - 41 -	\$'000 8 4 - 1	684 256 - - -	\$*000 8 4 —
Gasoline (including gasoline used in cars and trucks)  Fuel oil including kerosene or coal oil  Wood	Imp. gal.	499,714 1,517,274 222°	131 156 2	359,715 1,413,110	111
Gas:  (a) Liquefied petroleum gases  (b) Other manufactured gas  (c) Natural gas  Other fuel  Electricity purchased		4,939 - 292,441 - 33,012,146	3 - 235 - 407	16, 634 - 430, 900 - 39, 230, 041	318  418 55
Steam purchased  2. Estimate for small establishments: Fuel and electricity  3. All establishments:		-	-	-	
Total fuel and electricity used		H H +	1,037	***	1,06

TABLE 6. Materials and Supplies - Manufacturing Activity, 1962 and 1963

	1962		1963	
Description	Quantity	Cost	Quantity	Cost
	tons	\$'000	tons	\$1000
. Materials used:				
Ammonia, anhydrous	10,880	972	11,880	1.04
Ammonium nitrate	5,234	404	6,022	44
Ammonium phosphate	10,505	738	12,265	85
Ammonium sulphate (suiphate of ammonia)	38,600	1.407	43,128	1.55
Borax	184	20	245	2
Calcium cyanamide (cyanamid)	42	2	45	
Limestone	22,002	118	27,627	15
Lime or jand plaster	4,970	67	7,334	9
Magneslum oxide (all forms, including brucite, mag 70, etc.)	1,822	80	1,728	
Magnesium sulphate	40	3	13 1	
Nitrogen solutions	58, 102	3,576	61,324	3,8
Phosphate rock	339,509	5,237	400, 217	6.4
Potassium chloride (murlate of potash)	169,564	6,850	164,159	6,5
Potasslum nitrate (nitrate of potash)	44	7	44	
Potassium sulphate (sulphate of potash)	22,463	1, 178	18,614	9:
Potassium magnesium sulphate (sulphate of potash magnesia)	4,028	155	4,383	1!
Sand	31.982	90	25,382	,
Sodium nitrate (nitrate of soda)	80	5	766	
Sulphuric acid, 100%	237, 497	3,614	289,351	4.1
	251, 451	0,011	203,501	*1 *
Superphosphate:				
22% or less P <sub>2</sub> O <sub>5</sub>	338, 289	7,566	349,945	7,6
More than 22% P <sub>2</sub> O <sub>5</sub>	84.661	4,714	83,021	4,5
Ammoniated	17,014	746	19,055	9
Urea	2,358	214	2,812	2
All other materials and components used		1,9451	4	3,2
Containers and other packaging materials and supplies used	4 4 3	2,830		3.1
Operating, maintenance and repair supplies used (excluding fuel)		1,643		1,6
Amount paid out to others for work done on materials owned by establishments	v · ·	43		1
Totals		44, 224		48,0

<sup>&</sup>lt;sup>1</sup> No detailed information on materials used was collected from small establishments, the estimated costs for which are included here. These estimated costs were \$165,000 in 1962 and in 1963 \$149,000.

TABLE 7. Shipments of Goods of Own Manufacture, 1962 and 1963

Description	1962		1963	
	Quantity	Value	Quantity	Value
	tons	\$*000	tons	\$'000
. Products;				
Mixed fertilizers	825,993	46, 401	888, 225	53,358
Super phosphates, milled and screened only	13,219	522	22,830	870
Ammonium sulphate, milled and screened only	597	41	395	27
Muriate of potash, milled and screened only	5,783	368	7,886	520
All other products (including superphosphates)		12,443		13,744
2. Amount received in payment for work done on materials and products owned by others	***	17		9
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above		(174)		(547
Net adjustment for establishments receiving progress payments	* * *		* * *	
Total adjusted value of shipments and work done	4 0 6	59,618		67, 981

### TABLE 8. Shipments of Selected Goods of Own Manufacture - All Industries, 1955-63

(Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed)

#### A. Mixed Fertilizers

Year	Quantity	Value
	tons	\$'000
955	686,900	33, 112
956	703,000	34, 408
957	723,000	37, 026
958	752,000	40,001
959	757, 000	41,498
960	791,000	42,739
961	871,000	49, 344
962	887,000	50, 117
963	927,000	55, 855

#### B. Factory Shipments and Imports of Ammonium Sulphate

Year	Factory shipments	Imports	
	to	tons	
955	311, 371	7,029	
956	339, 510	3.166	
957	318, 634	3,288	
958	300, 049	5,833	
959	307, 121	5,941	
960	349, 677	8,686	
961	278, 527	9,940	
962	291, 683	14, 151	
963	241, 260	14, 259	

TABLE 9. Total Sales1 in Canada of Fertilizer Materials and Mixed Fertilizers, for the Years Ended June 30, 1955-64

Year ended June 30	Fertilizer materials	Mixed fertilizer	Total sold in Canada
	tons (2,000 pounds)		
1955	139,301	651, 473	790,774
1956	148,037	652, 643	800,680
1957	156, 497	651,754	808, 251
1956	181,973	688, 566	870,539
1959	218,661	689, 553	908, 214
1960	243,720	691,708	935, 428
961	297, 730	779, 682	1,077,412
1962	344, 800	799, 200	1, 144, 000
1963	448, 097	808,744	1, 256, 841
1964	609,580	844, 752	1, 454, 221

Note: A special survey of the fertilizer trade in Canada during the fertilizer year ended June 30, 1964 has been completed by the Dominion Burane 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 Burane of Statistics.

List of Establishments classified to This Industry, 1963
(Does not include establishments classified to other industries, which as a secondary activity, manufacture products typical of this industry)

Name	Location	
rince Edward Island:		
Island Fertilizer Inc,		
Canada Packers Limited	Summerside	
our Septim		
ova Scotia:	The O Walley	
Canadian Industries Limited  Canada Packers Limited		
Canada Packers Limited	Nesbit St., Windsor	
ew Brunswick:		
Canada Packers Limited		
International Fertifizers Limited	Courteway Bay, Saint John	
Summers Fertilizers Co. Inc.	Prince William St., St. Stephen	
puebec:		
Agricultural Chemicals Ltd.	Fort Chambly	
Canada Packers Limited	6000 St. Patrick St., Montreal	
Canada Packers Limited		
Canadian Industries Limited		
Houde, William, Limited		
International Fertilizers Limited	Wolfe's Cove, Sillery	
ntario:		
Arricultural Chemicals Ltd.	Amaranth	
Agricultural Chemicais Ltd.	Marsh St., Port Hope	
Apricultural Chemicals Ltd.		
Bradford Fertilizer and Chemical Co. Ltd.		
Canada Packers Limited		
Canada Packers Limited		
Canadian Industries Limited		
Canadian Industries Limited		
Canadian Industries Limited		
Electric Reduction Co. of Canada Ltd.		
Elmira Fertilizers Ltd.		
Golden Sunshine Fertilizer Co. Ltd.		
Harriston Fertilizers Ltd.		
International Fertilizers Limited		
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 Chemicais Ltd.		
Shamrock Chemicals Ltd.	No. 135 Highway, London	
Swift Canadian Co. Ltd.		
Swift Canadian Co. Ltd.		
United Co-operatives of Ontario	Thamesville	
ritish Columbia:		
Purns and Co. Ltd.	Foot Woodland Drive, Vancouver	
Dutch Treat Fertilizer Products		
Globe Fertilizer Co. Ltd.	Foot Crompton Road, Vancouver	
Green Valley Fertilizer and Chemical Co. Ltd.		
Old Gardener Products Ltd.		
Sergy, Michael	424 No. 5 Rd., Richmond	

#### CONCEPTS AND DEFINITIONS

Census of Manufactures

#### General

The Census of Manufactures is an annual mail survey covering Canada's Manufacturing Industries. It is based on the Standard Classification of Industries and full details concerning the system may be found in the Standard Industrial Classification manual, Catalogue No. 12-501 which is available from the Queen's Printer or the Dominion Bureau of Statistics. In summary, the Classification as it relates to the manufacturing industries provides for a breakdown into 140 industries arranged in 20 major industry groups. Of the 140 (3 digit) industries, 18 are further broken down into 58 (4 digit) sub classes. At the Canada level, principal statistics are collected and compiled for 178 separate industries. They cannot all be published separately by province, however, because of the confidential nature of the data in certain provinces.

The reporting unit for the Census is designated as the establishment (see definition of "Establishment" in following section) and a return is requested from every establishment classified to a manufacturing industry. Although respondents are required to submit reports covering the calendar year, financial year reports other than the calendar year are accepted in instances where respondents find it impossible to supply calendar year data from accounting records. When an establishment is operated for only part of a year a report is required covering the period of operation.

There are four different questionnaires used in the Census of Manufactures; (a) short form (b) long form (c) head office questionnaire and (d) commodity questionnaire. The short and long forms are used to obtain principal statistics and commodities shipped from establishments classified to manufacturing industries and differ only in the amount of detail requested. The short form is a single-sheet questionnaire sent to small manufacturers generally reporting shipments of less than \$100,000; this cut-off, however, varies somewhat between industries. The head office questionnaire is generally used for company head offices and/or auxiliary units separately located from the manufacturing establishment(s), (see following notes on Head offices and auxiliary units). The Commodity questionnaire is used to survey certain establishments which are coded (on the basis of their principal activity) to industries other than manufacturing in the Standard Industrial Classification system, but which undertake some manufacturing as a subsidiary activity. This single-sheet questionnaire is designed to collect information on the quantity and value of goods of own manufacture shipped by such establishments in order to achieve full coverage of domestically manufactured commodities (see the following note under Shipments).

The results of the Census are presented in some 140 publications. In addition to these annual industry publications there are annual summary reports for Canada and the provinces and special reports giving principal statistics by detailed geographic areas, by type of ownership and size of establishment. A special annual report covering the shipments of all manufactured commodities arranged in alphabetical order is also published.

Since 1960 the following major changes have been implemented in the Census of Manufactures: (a) a revised Standard Industrial Classification (b) a new establishment definition and (c) an extension of the establishment definition to cover the non-manufacturing activities of manufacturing establishments. The statistics presented in the various 1963 reports reflect the complete implementation of these changes and enable comparisons to be made with the years 1961 and 1962. For a complete description of the procedures followed in establishing the revised series, reference should be made to the Explanatory Notes included in the 1960, 1961 and 1962 industry publications. The statistical framework within which the Census of Manufactures is now carried out is based on the following concepts and definitions which have been developed as part of a general programme to achieve a fully integrated system of economic statistics.

#### **Establishment**

A manufacturing establishment is typically a factory, mill or plant principally engaged in manufacturing activities. The majority of such establishments are firms but many firms have more than one establishment. Such firms are requested to submit a separate Census of Manufactures report for each manufacturing establishment which can meet the reporting requirements embodied in the following definition of the "establishment":

"The smallest unit which is a separate operating entity capable of reporting the following principal statistics:

Materials and supplies used
Goods purchased for resale as such
Fuel and power consumed
Number of employees and salaries and wages
Man-hours worked and paid
Inventories
Shipments or sales."

Each establishment is required to report on all the activities carried out within it's accounting boundaries (except income from investments such as rent, interest and dividends) and data on the different activities (manufacturing, trading in goods not of own manufacture, construction by own labour force, revenue from services, etc.) are requested to be reported separately. It should be noted that the statistics for separate activities are not completely consistent since some respondents cannot distinguish, in their records, materials, shipments and inventories relating solely to their own manufacturing activities. For example, inventory of goods purchased for re-sale may not be distinguishable from inventory of own manufactured goods. Complete consistency, therefore, can be obtained only at the "all operations" (total activity) level and for studies or statistical measures requiring accurate coordinated data, the "total" statistics should be used.

The number of establishments represents the number of operating units that are principally engaged in the activities of the manufacturing industries to which they have been classified. These units do not necessarily represent the total number engaged in the production of a commodity mainly produced in a certain industry. Some commodities are produced as secondary products in other manufacturing and non-manufacturing industries. It should be noted that head offices and auxiliary units which are surveyed separately are not included in the establishment count, (see following notes on head offices and auxiliary units).

#### **Head Offices and Auxiliary Units**

All head offices and auxiliary units of companies classified to the manufacturing industries such as sales offices, administrative offices, warehouses, laboratories, etc. are now surveyed as part of the Census of Manufactures.

These head offices and auxiliary units are either included in an establishment report or are surveyed by means of the head office questionnaire. The former is the most common case where a single establishment firm has its executive personnel, sales office, etc. located at the site of the manufacturing plant (establishment). The special head office questionnaire is generally used where a firm, regardless of the number of establishments, has separately located offices or auxiliary units. Such offices or units do not constitute establishments within the Census of Manufactures as they do not normally generate operational revenues, but give rise only to costs of operations (mainly salaries and wages) which are automatically included in the value of shipments or sales. Although not considered as establishments, and hence, not included in the "establishment" count for an industry, the operational costs are reflected in either the "Industry" statistics (3 or 4 digit level) or the "Major group" statistics (2 digit level) according to the following rules:

- (a) In the case of single establishment firms, statistics for separately located offices and units are classified to the same industry (3 or 4 digit) as the establishment;
- (b) In the case of multi-establishment tirms, the statistics for such offices and units are coded to the same industry as the establishments of the

firm, when all establishments are in the same industry (3 or 4 digit). When establishments of such firms are coded (1) to different industries within a major group, (2) to industries in different major groups or (3) to industries in different divisions of the Standard Industrial Classification, then the statistics are included in the major group totals (2 digit level) in which the major part of the company's operations are classified. Although this may result in some distortion of major group statistics in the case of (2) and (3) the statistics at the industry (3 or 4 digit) level in all cases will be left free of these company-wide data.

#### **Employees**

#### (a) Production and related workers - Manufacturing activity

In addition to those engaged in production and assembling activities, they include those employed in storing, inspecting, handling, packing, warehousing, etc. They also include employees engaged in maintenance, repair, janitorial and watchman services and line supervisors (working foremen) engaged in similar work to that of the employees they supervise. Production and related workers engaged in manufacturing activity are reported as those receiving pay during the last pay period of each month, an average for the year being obtained by summing the monthly figures and dividing by 12. This procedure is followed even though the establishment did not operate in all months in order to arrive at equivalent annual fulltime employment. The numbers are somewhat affected by turnover, in that employment is overstated when an employee changes employment during a pay period. The man-hours of production and related workers in manufacturing activity represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays, etc.). In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour and which are based on selected occupations.

#### (b) Production and related workers - Non-manufacturing activities

Such employees include those on manufacturing establishments' payrolls engaged in activities such as construction undertaken for the use of these establishments, some outside piece-workers employed in certain industries, logging employees who are reported as part of a sawmilling establishment and any other production workers who are not engaged in manufacturing-type operations.

#### (c) Administrative and office employees

This category includes all executive and supervisory officials such as presidents, vice-presidents, comptrollers, secretaries, treasurers,

etc., together with managers, professional, technical and research employees, superintendents and factory supervisors above the line supervisor or working foreman level, and clerical staffs. Also included are employees in activities such as advertising, credit collections, purchasing, personnel, legal, medical, etc. It should be noted that prior to 1961 this category also included working owners and partners. Also included in this category are employees located at head offices or auxiliary units separately located from the establishment; these are generally included in the figures for the province in which they are located according to the rules outlined under "Head offices and auxiliary units" above.

#### (d) Sales and distribution workers

This category includes office personnel whose salaries are charged to selling expense, travelling salesmen, driver salesmen, truckdrivers and their helpers, etc. It may also include some sales employees who are reported as part of a manufacturing establishment but are not working at the establishment's location. These are generally broken down by province in cases where more than 15 employees are involved in any one province. The figures exclude persons working on a commission basis who are not considered regular employees of the establishment.

#### (e) Total Employees

This total comprises the foregoing categories including employees located at separately located head offices and auxiliary units. The numbers of employees included under categories (b), (c) and (d) are reported in the form of annual averages and represent as closely as possible full time employment; adjustments are made when reported figures indicate the existence of part time or seasonal employment. In all the above categories, figures on employment refer to the calendar year whether or not other establishment statistics can only be reported on a fiscal year other than the calendar year.

#### Working Owners or Partners

These are not now included in the statistics of employees and salaries and wages. There is some duplication in numbers when a person owns more than one establishment and is reported as a working owner on each Census return. Withdrawals of working owners defined as amounts withdrawn by owners or partners for normal living expenses excluding withdrawals for payment of income tax.

#### Salaries and Wages

Salaries and wages refer to gross earnings of employees before deductions for income tax and employees contributions to social services such as sickness, accident and unemployment insurance, pensions, etc. They include all salaries, wages, bonuses, profits shared with employees, the value of room and board where provided, commissions (paid to regular employees only) as well as any

other allowance forming part of the worker's earnings. Payments for over-time are included. Figures on salaries and wages refer to the calendar year.

#### Fuel and Electricity

Figures for fuel refer to amounts actually used (including fuel used in cars, trucks, locomotives, etc.), not to purchases unless the quantities are substantially the same. Any fuel and electricity produced by establishments for internal consumption are not included in the total cost. Values represent laid down cost at the establishment including freight, duty, etc. Although fuel and electricity used is considered part of manufacturing activity it should be noted that it also includes relatively small amounts used in non-manufacturing activities since these cannot be reported separately.

#### Materials and Supplies

#### (a) Manufacturing activities

Figures represent quantities and laid down cost values, at the establishment, of materials, supplies and purchased components owned and used during the year in manufacturing activities and related processes. These statistics represent only commodity items or physical goods (cost of services or overhead charges such as advertising, insurance, depreciation, etc. are not included) whether purchased from others or received as transfers (in the form of materials, components or semi-processed goods) from other establishments of the reporting company. Included are maintenance and repair supplies not chargeable to fixed assets accounts and any amounts charged by other establishments for work done on materials owned by the reporting establishment. Cost of repairs or maintenance done by outside contractors and cost of returnable containers are not included.

#### (b) Non-manufacturing activities

#### 1. Purchases for re-sale as such

Figures represent cost of materials or products purchased from others by the reporting establishment (or received as transfers from other establishments of the reporting company) for re-sale as such in the same condition as purchased. Included are any finished products received on consignment from other countries.

#### 2. Other materials and supplies used

Figures represent the cost of materials and supplies, if any, used in new construction and in the production of machinery and equipment (for the use of the reporting establishment) by the establishment's own employees. Included are materials used for any capital repairs and alterations carried out by the establishment's employees. Amounts paid to outside contractors for construction and repair work are not included nor is the cost of purchased machinery and equipment. Also included is the cost of office supplies not chargeable to

fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment-operated cafeterias and lunch counters, first aid and medical supplies, laboratory supplies, etc.

#### Shipments

#### (a) General

The figures represent revenue from all production, sales, services and related activities of reporting establishments with shipments valued in Canadian dollars at the point at which the establishment relinquishes control. The unsold portion at year end of consignment shipments in Canada is treated as inventory and not as shipments but all shipments to foreign countries for which the form B13 "Customs Canada Export Entry" has been completed, are treated as shipments.

In those industries where work on principal products extends over a relatively long period, (Fabricated Structural Metal Industry, Aircraft and Parts Manufacturers, Railroad Rolling Stock Industry and Shipbuilding and Repair Industry) the value of production rather than the value of shipments is recorded. There are certain establishments in other industries which also operate on a basis of progress payments. For these establishments, shipments are also adjusted to work put in place on the basis of the net change in progress payments over the year.

#### (b) Shipments of goods of own manufacture

These figures represent shipments of goods made from own materials either in the reporting establishments or by other manufacturers on the basis of a charge to the reporting establishments for work done. Included are revenue from repair and custom work, amounts received in payment for work done on materials owned by other establishments and the cost (book value) of any goods shipped on a rental basis.

All products and by-products of own manufacture shipped from the establishment are covered, including transfer shipments to sales outlets, distributing warehouses or to other manufacturing plants of the reporting firm, when such units are treated as separate establishments. The value of shipments are net of returned goods, discounts, returns, allowances, sales tax and excise taxes and duties, returnable containers and charges for outward transportation by common or contract carriers. Transportation or delivery expense incurred by the reporting establishment's own carriers are included.

Shipments of goods of own manufacture of establishments which are coded to some other division of the Standard Industrial Classification (on the basis of principal activity) but which are engaged in manufacturing as a subsidiary activity are collected by means of the Commodity questionnaire referred to earlier. Such shipments together

with shipments of goods of own manufacture of establishments forming the universe of manufacturing industries are compiled and recorded in the various industry publications.

#### (c) Shipments of goods not of own manufacture

These figures represent the net selling value at establishment (net of discounts, returns, allowances, sales taxes and excise duties and taxes and transportation charges by common or contract carriers) of all products or materials (including products transferred from other establishments of the reporting firm) sold as such in the same condition as purchased or received as transfers. For those industries which ship such goods on a rental basis, the value of shipments represents the book value of these goods. All sales of consignment goods from other countries are included.

#### (d) Other revenue

Figures represent the book value of fixed assets, if any, (new construction and machinery and equipment including major repairs, alterations, additions, modifications, installation and assembly work) produced during the year for the use of reporting establishments by the establishment's own employees and for which depreciation accounts are maintained. Included also are any revenues from the sale of electricity and from any operations performed by the establishment's own employees, such as revenue from goods produced or purchased for rental (the book value of such goods are included as part of shipments of goods of own manufacture or shipments of goods not of own manufacture), servicing revenues, commissions on sales (when not included in value of sales), revenue for companyoperated cafeterias and lunch counters and revenue from outside installation or construction work not related to the establishment's own products, sale of used materials (excluding sale of used fixed assets) research and development work, etc. As mentioned previously the figures do not include non-operating revenue such as rent, dividends, interest, etc.

#### Inventories

#### (a) Manufacturing activities

Values represent the book values of manufacturing inventory owned in Canada. Inventories held for which progress payments have been received are not included. Where progress payment accounts are maintained, the change in these accounts is treated as a net adjustment to shipments. Figures consist of inventory owned at the plant and at warehouses or selling outlets which are treated as extensions of establishments for the purpose of reporting shipments. Inventory owned in transit in Canada or on consignment in Canada is included. Goods shipped abroad and held in inventory are included in shipments. Opening inventories may differ from the closing inventories of the previous year because of changes in classification, the

receipt of revised data, the inclusion of new establishments and the removal of establishments which did not operate during the survey year.

#### (b) Non-manufacturing activities

Figures represent the book value of inventory of goods purchased for re-sale as such without further processing, owned by the reporting establishments and held at plants and at any warehouses or selling outlets which are treated as extensions of establishments. Other characteristics are the same as in (a) above.

#### Value Added

#### (a) By manufacturing activities

Figures are compiled by deducting the cost of materials and fuel and electricity consumed from the value of production (value of shipments adjusted for changes in the value of inventories of finished goods and goods in process).

#### (b) By non-manufacturing activities

The figures are compiled by deducting the the cost of goods purchased for re-sale (adjusted for changes in the value of inventories of goods

purchased for re-sale) and the cost of other materials and supplies used from the value of shipments of goods not of own manufacture, plus other revenue.

#### (c) By Total activities

The figures consist of value added by manufacturing activities plus value added by non-manufacturing activities. This total value added figure may, in some cases, be less than value added by manufacturing activities as a result of expenditures associated with non-manufacturing exceeding revenues from such activities or because of a decrease in inventory of goods not of own manufacture exceeding the mark-up on the sale of such goods. "Value added" is sometimes referred to as net production. However, to arrive at the National Accounts concept of net production, or Gross Domestic Product at "Factor cost" it would be necessary to subtract also the cost of advertising, insurance and other business expenses which are not collected as part of the annual Census of Manufactures. "Value added" figures for the primary industries, manufacturing and construction are published in DBS publication Catalogue No. 61-202, "Survey of Production".



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