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The Canadian Mineral Industry Monthly Report

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COMMISSION GÉOLOGIQUE

February, 1977



Energy, Mines and
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Énergie, Mines et
Ressources Canada

Minerals

Minéraux

PREFACE

This report is prepared in the Mineral Development Sector of the Department of Energy, Mines and Resources. It is prepared from the best information available to us from many sources, but it is only intended to be a general review of the more important current developments in the Canadian mineral industry and of developments elsewhere that affect, or may affect, the Canadian industry. It should not be considered an authority for exact quotation or an expression of official Government of Canada views.

Ce rapport a été rédigé par le Secteur de l'Exploitation Minérale du Ministère de l'Energie, des Mines et des Ressources. Bien que nous ayons eu recours à de nombreuses sources pour vous fournir les meilleurs renseignements possibles, cet exposé n'a pour objet que de passer en revue les développements actuels les plus importants de l'industrie minière canadienne, de même que les progrès accomplis ailleurs qui peuvent intéresser l'industrie canadienne. On ne doit pas considérer cet exposé comme une source de renseignements précis ou comme l'expression des vues du Gouvernement canadien.

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CONTENTS

1	SUMMARY
3	ECONOMIC TRENDS
7	FEDERAL-PROVINCIAL MINERAL AGREEMENTS
7	Offshore Mineral Resources of the Maritime Provinces
8	TAXATION AND LEGISLATION AFFECTING MINING AND ALLIED INDUSTRIES IN CANADA
8	Federal
8	Transportation
9	METALLIC MINERALS AND PRODUCTS
9	Aluminum
9	Chromium
10	Copper
11	Ferrous Scrap
12	Gold
13	Iron Ore
14	Iron and Steel
15	Lead
16	Mercury
16	Nickel
16	Silver
17	Zinc
18	Zirconium
18	INDUSTRIAL MINERALS AND PRODUCTS
18	Asbestos
19	Construction Materials
19	Potash
20	Salt
20	Sulphur
21	MINERAL FUELS AND PRODUCTS
21	Petroleum and Natural Gas
22	Uranium
25	SPECIAL ITEM
25	Second Session of the Intergovernmental Expert Group on Copper, Geneva, February 7-18, 1977
27	RECENT MERGERS AND AMALGAMATIONS
27	NEW PUBLICATIONS

THE CANADIAN MINERAL INDUSTRY FOR FEBRUARY

The following constitutes a brief summary of the Canadian mineral industry based upon information that became available in February.

SUMMARY

1. Canada's unadjusted index of Real Domestic Product was 122.8 in December 1976, a decrease of 2.0 per cent from November.
2. The December index of Mines, Quarries and Oil Wells was 114.6 a decrease of 2.1 per cent from the previous month.
3. Crude and fabricated minerals represent 65.3 per cent of total freight carried by railways in 1976.
4. Bill C-33, proposing major revisions to the *National Transportation Act* of 1967 and to the *Railway Act*, has been tabled in the House of Commons for legislative approval.
5. On February 1, 1977, a Memorandum of Understanding on offshore mineral resources was signed by the Prime Minister of Canada and the Premiers of Nova Scotia, New Brunswick and Prince Edward Island.
6. Alcan Smelters and Chemicals Limited will continue its program, interrupted last year, to improve the environmental and working conditions in its older smelters in Quebec.
7. The United States Senate Foreign Relations Committee has approved legislation that, if passed by Congress, would reimpose an embargo on imported Rhodesian chromite. Five previous attempts have failed.
8. Canadian production of primary copper in 1976 was 747 131 tonnes compared with 733 826 tonnes in 1975, an increase of 1.8 per cent.
9. Canadian industry is reported to abound with inventories of steel scrap.
10. The gold price increased by approximately \$10 (U.S.) an ounce in February.
11. The Cleveland-Cliffs Iron Company raised the prices of its Lake Superior iron ores, effective January 7, 1977.

12. The Algoma Steel Corporation, Limited announced that as of March 1977 it will close its Canadian Furnace Division at Port Colbourne, Ontario, for an indefinite period.
13. The spot price of lead on the London Metal Exchange jumped from £332 a tonne at the beginning of the month, to £414.5 a tonne on February 25.
14. The Yugoslavian government has authorized the state-owned Idrija mercury mine to suspend operations.
15. Production is scheduled to begin in May 1977 at the Brandywine Falls silver property of Van Silver Mines Ltd., located about 25 miles north of Squamish, British Columbia.
16. The Export Development Corp., Royal Bank and Imperial Bank of Canada will provide approximately one-third of the loan capital required to modernize the La Orroya zinc plant in Peru.
17. Great Canadian Oil Sands Limited and Canadian Titanium Pigments Limited are planning a \$10 million operation to recover zirconium oxide as a byproduct of synthetic crude oil production.
18. The Quebec Asbestos Mining Association will spend \$225 000 to evaluate opportunities for the optimum development of the industry in Quebec.
19. Strikes began at three caustic soda-chlorine plants in British Columbia in the first week of February.
20. World sulphur production has declined for the second consecutive year and prospects for a significant increase over the next two or three years are poor.
21. Discussions aimed at building a heavy crude upgrading facility in the Lloydminster area of Saskatchewan are currently taking place.
22. The Saskatchewan Government has announced the terms of reference and composition of the board of inquiry charged with examining the implications of Amok Ltd.'s Cluff Lake uranium project.

ECONOMIC TRENDS

Table 1 shows Canada's unadjusted indexes of Real Domestic Product (RDP). The overall RDP index in December was 122.8, a decrease of 2.0 per cent from November. For the period January to December, RDP increased in 1976 by a modest 4.6 per cent over the year 1975.

The RDP index for mines, quarries and oil wells was 114.6, down 2.1 per cent from November. The metal mines index decreased in December by 6.2 per cent to 103.8. Among metal mines, the largest change was recorded in iron mines, down 11.5 per cent in December over November, but up by 23.9 per cent for the year 1976 from its 1975 level. Mineral fuels registered an increase for the month of 6.2 per cent to 128.3 and, of these, the coal mines index dropped by 9.7 per cent for the month and by 3.9 over the year. The non-metal mining index decreased by 7.5 per cent in December to 125.4. For the year, however, non-metal mines output increased by 13.3 per cent.

Table 2 compares volume of Canadian production in nineteen major minerals. Output fell substantially in December for iron ore (27.2 per cent), lead (21.4 per cent), cement (45.0 per cent), and clay products (25.5 per cent in value terms). Notable increases in annual production were recorded in: iron ore, 24.8 per cent; asbestos, 45.5 per cent; and clay products, 22.4 per cent. Lead production decreased in 1976 by 28.3 per cent from 1975.

Table 3 compares Canada's rail transportation of minerals in 1975 and 1976. While marked changes occurred in the transport of individual products in 1976 compared to 1975, crude minerals increased 6.7 per cent and fabricated minerals declined 2.9 per cent. Overall crude and fabricated minerals increased by 5 per cent. Minerals accounted for 65.3 per cent of total freight carried by railways in 1976.

TABLE 1

Canada, Indexes of Real Domestic Product, by Industries Unadjusted (1971=100)

Industry or Industry Group	1975			1976			Percentage Changes			
	Nov	Dec	Average 12 Months	Nov	Dec	Average 12 Months	1976		1976	
							Nov	Dec	Nov	Dec
							1975	1975	1975	1975
Real Domestic Product	120.0	119.1	117.6	125.3	122.8	123.0	4.4	3.1	-2.0	4.6
Primary Industries										
Agriculture	26.6	32.2	33.9	34.0	27.2	97.8	27.8	-15.5	-20.0	13.8
Forestry	81.4	93.1	97.5	134.1	125.2	108.5	64.7	34.5	-6.6	11.3
Fishing and Trapping	51.3	78.9	74.7	64.9	49.4	94.2	26.5	-37.4	-23.9	26.1
Mines, Quarries and Oil Wells	114.9	112.2	109.5	117.1	114.6	110.5	1.9	2.1	-2.1	0.9
Metal Mines	108.1	105.8	102.8	110.7	103.8	108.4	2.4	-1.9	-6.2	5.4
Placer and Gold Quartz Mines	69.6	65.2	71.2	79.9	79.2	74.6	14.8	21.5	-0.9	4.7
Iron Mines	139.1	126.2	114.5	153.2	135.6	141.9	10.1	7.4	-11.5	23.9
Other Metal Mines	102.3	102.7	101.4	101.7	97.1	101.8	-0.6	-5.5	-4.5	0.3
Mineral Fuels	121.0	124.3	119.4	120.8	128.3	112.7	-0.2	3.2	6.2	-5.6
Coal Mines	203.7	204.2	201.7	230.2	207.8	193.8	13.0	1.8	-9.7	-3.9
Crude Petroleum and Natural Gas	114.2	117.8	112.6	111.8	121.8	106.0	-2.1	3.4	8.9	-5.3
Nonmetal Mines	123.6	106.6	101.5	135.5	125.4	114.9	9.6	17.6	-7.5	13.3
Asbestos Mines	100.5	86.5	67.2	106.7	100.5	98.0	6.2	16.2	-5.8	45.9
Secondary Industries										
Manufacturing	119.6	110.9	113.8	122.6	114.7	119.1	2.5	3.4	-6.4	4.7
Nondurable Manufacturing	115.2	108.3	111.9	120.2	113.2	117.2	4.3	4.5	-5.8	4.7
Petroleum and Coal Products Industries	130.3	131.5	123.5	132.2	135.9	125.9	1.5	3.3	2.8	1.9
Durable Manufacturing	124.1	113.6	115.7	125.0	116.2	121.1	0.7	2.2	-7.0	4.6
Primary Metal Industries	108.3	59.7	107.0	101.3	98.0	103.7	-6.5	-1.7	-3.3	-3.0
Iron and Steel Mills	109.9	101.3	111.1	113.3	104.2	113.9	3.1	2.9	-8.0	2.5
Steel Pipe and Tube Mills	137.8	114.4	142.1	136.1	121.3	121.2	-1.2	6.0	-10.9	-14.7
Iron Foundries	132.2	91.2	103.4	111.5	87.6	103.3	-15.7	-3.9	-21.4	-0.1
Smelting and Refining	96.0	94.9	97.5	73.9	85.7	84.4	-23.0	-9.7	16.0	-13.5
Nonmetallic Mineral Products Industries	132.5	103.7	118.5	127.2	99.8	119.1	-4.0	-3.8	-21.5	0.6
Cement Manufacturers	140.0	84.7	117.1	127.0	90.2	119.0	-9.3	6.5	-29.0	1.6
Ready-mix Concrete Manufacturers	128.4	66.7	110.6	136.9	67.2	114.9	6.6	0.7	-50.9	3.9
Construction Industry	130.0	109.9	112.9	122.6	103.1	115.6	-5.7	-6.2	-15.9	2.3
Transportation, Storage, Communication	122.3	125.2	124.3	133.6	128.9	130.1	9.2	3.0	-3.5	4.7
Electric Power, Gas and Water Utilities	123.8	141.7	126.2	149.0	163.6	137.4	20.4	15.5	9.8	8.8
Trade	136.5	153.9	125.9	142.2	156.1	132.8	4.2	1.4	9.8	5.5
Finance, Insurance, Real Estate	124.4	125.0	122.6	131.4	131.9	128.3	5.6	5.5	0.4	4.5
Community, Business and Personal Service	122.8	120.4	119.1	127.7	124.8	123.7	4.0	3.7	-2.3	3.8
Public Administration and Defence	118.1	117.9	118.8	121.5	121.0	122.6	2.9	2.6	-0.4	3.3

TABLE 2

Canada, Production of Leading Minerals
(^{'000} tonnes except where noted)

1975				1976			Percentage Changes			
							12 months			
							December 76	December 76	1976	
							December 75	November 76	1975	
				November	December	Total 12 months	November	December	Total 12 months	
				November	December	Total 12 months	December 76	December 76	Total 12 months	
				November	December	Total 12 months	December 75	November 76	1975	
Metals										
Copper		62.9	61.6	733.8	59.3	53.8	723.6	-12.7	-9.3	-1.4
Gold	kg	3 676.8	4 325.7	51 433.1	4 459.0	4 605.9	52 456.0	+ 6.5	+3.3	+ 2.0
Iron ore		4 581.2	4 454.2	44 892.5	5 258.4	3 826.1	56 013.2	-14.1	-27.2	+24.8
Lead		22.8	42.3	349.1	29.0	22.8	250.2	-46.1	-21.4	-28.3
Molybdenum	t	934.8	1 295.3	13 026.7	1 215.6	1 290.1	13 939.3	- 0.4	+ 6.1	+ 7.0
Nickel		19.8	20.0	242.2	19.7	19.3	238.9	- 3.5	- 2.0	- 1.4
Silver	t	96.4	113.3	1 234.6	98.5	118.1	1 310.6	+ 4.2	+19.9	+ 6.2
Uranium(1)	t	413.1	502.9	4 678.6	527.7	431.6	5 046.0	-14.2	-18.2	+ 7.9
Zinc		108.5	106.5	1 055.2	105.4	100.5	1 074.0	- 5.6	- 4.6	+ 1.8
Nonmetals										
Asbestos		138.1	127.2	1 055.7	136.0	130.2	1 536.5	+ 2.4	- 4.3	+45.5
Gypsum		530.5	477.0	5 719.5	544.0	594.9	5 985.0	+24.7	+ 9.4	+ 4.6
Potash K ₂ O		343.5	371.4	4 673.4	419.4	462.2	5 208.9	+24.4	+10.2	+11.5
Salt		406.2	456.7	5 122.6	578.9	660.8	5 855.2	+44.7	+14.1	+14.3
Cement		833.7	499.3	9 720.0	895.5	492.9	9 803.0	- 1.3	-45.0	+ 0.9
Clay products	\$000	7,433.5	5,301.1	72,758.3	8,326.6	6,202.8	89,060.0	+17.0	-25.5	+22.4
Lime		120.6	127.8	1 543.6	149.1	139.0	1 762.8	+ 8.8	- 6.8	+14.2
Fuels										
Coal		2 178.8	2 315.6	25 244.7	2 686.6	2 719.6	25 539.5	+17.4	+ 1.2	+ 1.2
Natural gas	000 m ³	7 522 201.3	8 063 138.1	87 217 427.1	7 723 222.6	8 002 398.4	87 389 395.3	- 0.7	+ 3.6	+ 0.2
Crude oil and equivalent	000 m ³	7 504.8	7 937.6	91 437.1	7 157.8	8 290.6	83 748.8	+ 4.4	+15.8	- 8.4

(1) Tonnes uranium (1 tonne U = 1.299 9 short tons U₃O₈).

TABLE 3
Railway Transportation of Minerals

	1975	1976	Percentage Change
	000 tonnes		%
Crude minerals			
Alumina and bauxite	2 309	929	-59.8
Coal	18 602	17 441	- 6.2
Copper ores and concentrates	2 270	2 004	-11.7
Copper-nickel ores and concentrates	5 926	6 692	12.9
Gypsum	3 626	3 661	1.0
Iron ore, concentrates and pellets	48 276	57 735	19.6
Lead and zinc ores and concentrates	2 893	2 638	- 8.8
Potash	7 335	7 895	7.6
Sand, gravel and crushed stone	5 882	5 415	- 7.9
Sulphur	3 941	3 587	- 9.0
Other mine products	4 544	4 709	3.6
Total crude minerals	105 604	112 706	6.7
Fabricated minerals			
Cement	1 569	1 757	12.0
Coke	898	717	-20.2
Iron and steel, primary and manufactured	3 864	3 150	-18.5
Nonferrous metals, primary and manufactured	1 464	1 627	11.1
Oil, gas and related products	11 512	11 458	- 0.5
Other fabricated minerals	3 189	3 127	- 1.9
Total fabricated minerals	22 496	21 836	- 2.9
Total crude and fabricated minerals	128 100	134 542	5.0
Total revenue freight	217 847	206 013	-5.4
Per cent crude and fabricated minerals of total freight	58.8	65.3	

FEDERAL-PROVINCIAL MINERAL AGREEMENTS

Offshore Mineral Resources of the Maritime Provinces

On February 1, after some eight years of negotiation, the Prime Minister and the Premiers of Nova Scotia, New Brunswick and Prince Edward Island signed a Memorandum of Understanding which provides a co-operative framework for the development of offshore mineral resources on the coasts of the three provinces. Both federal and provincial legislation will be required to put it into effect.

The Memorandum adopts the Interprovincial Lines of Demarcation agreed upon in 1964 by the three provinces. The area will be divided into two parts:

- (a) provincial jurisdiction: a part landward of a line to be called the Mineral Resources Administration Line (the M.R.A. Line) which will be at least five kilometres seaward from the ordinary low water mark, and also will be beyond any coal resources accessible by mining from land; and
- (b) federal jurisdiction: a part seaward of the M.R.A. Line.

Mineral resources within agreed demarcated offshore areas would be managed by a Board composed of three members from Canada and one from each of the three provinces, to be called the Maritime Offshore Resources Board with headquarters in Halifax. In the case of deadlock, a time limit will be set by the Federal Minister of Energy, Mines and Resources and, on expiration of the time limit, the Minister will make the final decision.

A federal body, entirely funded by Ottawa, will act on the Board's behalf and undertake the administration of offshore resources. This body will be the Resource Management and Conservation Branch of the Department of Energy, Mines and Resources. The Board itself will be funded 25 per cent by Canada and 75 per cent by the three provinces.

All revenues from offshore resources seaward of the M.R.A. Line will be shared 75 per cent by the respective provinces and 25 per cent by the federal government. Landward of this Line, the provinces will receive 100 per cent of all revenues.

In addition, Nova Scotia retains 100 per cent of revenues attributable to Sable Island. For this purpose, special revenue sharing lines have been fixed around the Island at a distance of not less than five kilometres.

The framework is flexible enough to adapt to the entry of other provinces in the future.

TAXATION AND LEGISLATION AFFECTING
MINING AND ALLIED INDUSTRIES IN CANADA

Federal

Transportation

The Government of Canada's Bill C-33 has been tabled in the House of Commons for legislative approval during the present session of Parliament. The bill proposes major revisions to the *National Transportation Act* of 1967 and to the *Railway Act* whereby primary responsibility for policy making would be returned to the Ministry of Transport from the Canadian Transportation Commission (CTC). Accordingly, it would become the responsibility of the Minister to indicate the measures necessary to achieve the recently redefined objectives of national transportation policy. One important objective of the new transportation policy is that the transportation system be "an effective instrument of support for the achievement of national, regional and social objectives." Where implementation of a particular policy "requires departure from the objective to [meet] commercial viability", additional costs are to be assumed by the Government.

Among other policy objectives, Bill C-33 proposes that rates should be determined by competition within and between modes when economic and technical factors exist. Where no effective competition exists, rates and services will be regulated by CTC to realize the same results as if effective competition existed. Competitive rates could be established in a range between prescribed maximum and minimum rates set by CTC.

Maximum rail rates will be set at two and one-half times the variable cost for the movement of carload lots weighing 30 000 pounds. If the carload weighs more than 30 000 pounds, the rate will be reduced below the maximum rate according to a prescribed formula. CTC will prescribe maximum rates by mileage blocks. The Bill also provides that all rail freight rates, including agreed charge (contract) rates, must be compensatory; that is, the rate must cover both variable costs and long-run fixed costs involved in the rail haul of the commodity.

As an example of minimum compensatory rates, full rail transport cost recovery applicable to branch line construction to service a proposed mine would require that all capital invested in the branch line be recovered over the life span of the mine (usually 20-30 years) and be written off against guaranteed mine shipments. Residual values of the capital stock at the end of the amortization period would be deducted in calculating long-run fixed costs.

An example of successful public investment is the subvention provided by the Government of Canada to construct the Great Slave Lake Railway south of Great Slave Lake. The 430-mile railway was completed in 1966 to provide for movement of freight to the Mackenzie waterway system and to provide a means of transport for lead and zinc mineral concentrates from the Pine Point area to southern British Columbia. The project has given improved access to the Mackenzie corridor and has successfully achieved the desired regional and economic objectives.

METALLIC MINERALS AND PRODUCTS

Aluminum

Alcan Smelters and Chemicals Limited, the operating subsidiary of Alcan Aluminium Limited responsible for Alcan's smelting operations in Canada, has announced that it intends to continue its program, interrupted last year, to improve the environmental and working conditions in its older smelters in Quebec. It also has a program to construct a new smelter in the Saguenay region of Quebec and, on its completion, to reconstruct and modernize its other smelting facilities. Over a long period, this would effect an increase in smelting capacity of approximately 270 000 tonnes. The pursuit of such an undertaking is closely linked to a guaranteed supply of energy. Alcan has presented a brief to the Quebec government asking for early disclosure of the government's long-range intentions with respect to the private production of energy in the province.

The Jamaican government has signed a formal agreement with Kaiser Aluminum & Chemical Corporation which gives the Jamaican government control of Kaiser's operating subsidiary in Jamaica. In November 1974, Kaiser and the Jamaican government signed an agreement providing for government acquisition of 51 per cent interest in the Kaiser Bauxite Company and re-acquisition of some 40 000 acres of land. The government guaranteed Kaiser a supply of bauxite and allowed Kaiser a lower bauxite levy. In November 1976, the Jamaican government concluded a similar agreement with the Aluminum Company of America. The Prime Minister of Jamaica expects to have similar formal agreements signed by mid-year with Reynolds Metals Company, Alcan Aluminium Limited, The Anaconda Company, and Revere Copper and Brass, Inc. concerning their operating subsidiaries in Jamaica.

The six Japanese metal firms who were involved in joint feasibility studies for the expansion of Revere Copper and Brass, Inc.'s Scottsboro, Alabama aluminum smelter and its alumina facilities in Jamaica have dropped out of the project. The smelter capacity was to have been expanded from 108 000 tonnes to 326 000 tonnes a year and the Jamaican capacity to be increased by 544 000 tonnes of alumina a year. Other aluminum companies are now reported to be negotiating the acquisition of Revere's aluminum operations.

Chromium

The United States Senate Foreign Relations Committee has approved legislation that, if passed by Congress, would reimpose an embargo on Rhodesian chromite imported into the U.S. The legislation would repeal the Byrd Amendment under which the U.S. has been importing Rhodesian chromite. This will be the sixth attempt to repeal the Byrd Amendment since its inception in 1972.

Two Japanese companies, Mitsubishi Corporation and Japan Metals and Chemicals Corporation, have signed an agreement with the Sudanese government for the joint development of chrome deposits in Sudan. The agreement calls for an investment of \$50-60 million (U.S.) during a 10-year period. After an initial feasibility study, a joint venture will be formed, owned 51 per cent by the Sudanese government and 49 per cent by the two companies. The completed project will have an annual capacity of 200 000-300 000 tonnes of ore.

Copper

The cash price for copper wirebars moved in the range 63-67 (U.S.) cents a pound on the London Metal Exchange (LME) during February, to a month-end price of 66.3 (U.S.) cents a pound. North American producer prices established at the beginning of the month remained in effect without change during February. The continued erosion in the value of the Canadian dollar relative to the U.S. dollar may result in a further adjustment in price by Canadian producers. The value of the Canadian dollar fell from \$0.98 (U.S.) at the end of January to \$0.97 (U.S.) at the end of February.

LME and New York Commodity Exchange (COMEX) warehouse stocks of copper again rose during February. On Friday, February 25, 1977 these stocks stood at 624 300 tonnes and 209 000 tonnes respectively.

According to Statistics Canada, Canadian production of primary copper in 1976 was 747 131 tonnes compared with 733 826 tonnes in 1975, an increase of 1.8 per cent.

The Second Session of the Intergovernmental Expert Group on Copper took place in Geneva, February 7-18, 1977. Throughout the course of the meeting, studies of the world copper market were analysed and discussed. The Intergovernmental Council of Copper Exporting Countries (CIPEC) tabled a proposal for a modified pricing formula for internationally traded copper. An account of this meeting is included as a "Special Item" in this Report.

The Quarterly Review of CIPEC for the period October-December 1976 was received during February. A summary of news from member countries shows that financial returns from the copper mining industry to most member countries improved substantially in 1976 compared with 1975. To highlight:

- In Chile, a strong surplus trade balance was reported. Central Bank foreign exchange reserves increased by \$300 million in 1976 to \$720 million at year-end. Gran Minería del Cobre produced 840 000 tonnes and sold 908 000 tonnes in 1976. Total Chilean primary copper production exceeded 1 million tonnes compared with 828 000 tonnes in 1975.

- In Peru, the trade deficit was reduced to \$690 million (U.S.) in 1976 compared with \$1.1 billion (U.S.) in 1975. In 1977, a further improvement is expected with the increase in production and exports resulting from the Cuajone project and the Cerro Verde project, which have a combined capacity of 185 000 tonnes of copper a year.
- Zambia reported a reduction in its balance of payments deficit relative to 1975 of 30 per cent in 1976, to K.105 million. Copper production was reported to have increased by 11 per cent in 1976.
- Papua-New Guinea signed two major sales contracts of ten and fifteen years' duration with Japanese buyers. The contracts cover 60 per cent of Bougainville concentrate production. Thirty per cent of production goes to Germany with the balance to Spain, Mexico and Yugoslavia.

A report prepared for the United States Commerce Department Bureau of Standards urges that, because of vast domestic U.S. reserves and divergent sources of supply outside the U.S., dependence upon overseas suppliers poses little or no economic threat to the United States. The report expresses doubts that CIPEC has enough market power to cause severe economic damage to the principal consuming countries.

The president of Sumitomo Metal Mining Co. Ltd. is advocating the adoption of a producer price system for the world copper market as a means to reduce price fluctuations.

Financial results for the full 1976 year are now becoming available for Canadian copper producers. Earnings for the year appear to be of generally the same magnitude as for 1975, which is considered to have been a very poor year.

Ferrous Scrap

Canadian industry is reported to have substantial inventories of steel scrap. However, dealers and scrap brokers are expressing hope for improved domestic and export markets in the first half of 1977, based on the declining value of the Canadian dollar and on a prospective recovery in the steel industry during 1977. In the Vancouver area, No. 1 heavy melt is selling for \$40 a tonne and scrap yards and warehouses are full. The major consumer, Western Canada Steel Limited, is not buying scrap because of low steel production, a result of low demand and heavy competition from Japan.

The market for scrap in Edmonton, Alberta remains strong as The Steel Company of Canada, Limited continues to buy Canadian scrap due to steel market demands resulting from the ongoing energy boom.

In the Toronto-Hamilton market, the price of No. 1 heavy melt has remained at \$55 a tonne since last November, from a high of \$80 in April 1976.

In the Quebec area, conditions should improve in early 1977 when Sidbec-Dosco Limited of Montreal, the largest user of scrap, exhausts its large inventories subsequent to the settlement of a six-month strike in early October.

Low scrap prices render production of metallized iron less attractive because the latter depends on the interrelationship among the cost of iron ore products (pellets, lumps, fines), the availability and cost of gas and/or oil, and the price of scrap. While scrap prices have remained primarily in the \$65-\$85 range since 1975, the price of iron ore products and the price of oil and gas have increased considerably.

Gold

The International Monetary Fund (IMF), as trustee for the Trust Fund established to handle the funds obtained from IMF gold auctions, has announced that the Trust Fund is making its first interim loan disbursement to 12 of 61 eligible members. Members are eligible for loans in proportion to their quotas in the IMF on December 31, 1975. The 12 members named have qualified on the basis of both their need for balance of payments assistance and their existing programs for balance of payments adjustments. The February 7, 1977 issue of the *IMF Survey* lists the names of the qualifying countries and the amount of Special Drawing Rights they are to receive. Further details on the Trust Fund are contained in this issue. It also contains details on the sixth gold auction and on the first round of restituted gold sold to member countries in January 1977, including the quantity received by each country.

The Philippine government has instituted a subsidy program to aid the depressed gold mining industry. The subsidy calls for a support price of \$140 (U.S.) per ounce for mines producing less than 2 333 kilograms per year and is applicable only to primary domestic producers. The assistance is retroactive to January 1, 1977 and will remain in effect for five years.

In December 1976, the People's Republic of China shipped 80 797 kilograms of gold (2 597 680 ounces) to the United Kingdom for sale through the London Gold market. No information is available on

whether part or all of the gold has been sold. The size of the consignment has given cause for speculation and some reports indicate that the purpose of the arrangement may be that China wishes to increase its convertible currency holdings in order to intensify the country's industrialization program.

The gold price increased by approximately \$10 (U.S.) an ounce in February, reportedly because of an increase in speculative buying. The high gold price of \$142.75 (U.S.) an ounce on the London Gold market for the month was obtained at the month's closing fixing and the low price of \$131.80 (U.S.) an ounce was reached on February 2. The monthly average of the afternoon fixing gold price on the London Gold market for February 1977 was \$136.30 (U.S.) (\$140.10 Cdn.) compared with \$132.20 (U.S.) (\$133.64 Cdn.) an ounce in January.

The value of the Canadian dollar in relation to its United States counterpart declined substantially during the month, especially in the last few days. Canadian gold producers benefitted from the worldwide increase in the gold price and the exchange rate differential.

Iron Ore

Effective January 7, 1977 The Cleveland-Cliffs Iron Company raised the prices of its Lake Superior iron ore delivered at rail of vessel at lower lake ports. The new prices are as follows: iron ore pellets, 54.6 cents a tonne; Mesabi Non-Bessemer (51.5 per cent Fe), \$20.84 a tonne; and Old-Range Non-Bessemer (51.5 per cent Fe), \$21.09 a tonne. The new pellet price represents an increase of 4.5 per cent from its previous price, resulting primarily from increased costs of energy and capital equipment. Since January 1976, the price of pellets has increased by 10 per cent.

The Iron Ore Company of Canada (IOC) reported net earnings in 1976 considerably higher than in 1975, due to a combination of increased production and higher prices paid for its products. The following table shows IOC's shipments, revenues and earnings for the years 1976 and 1975.

	<u>1976</u>	<u>1975</u>
Shipments (tonnes)	23 961 000	22 316 000
Revenues (\$)	539 540 000	457 455 000
Net earnings (\$)	21 676 000	696 000 (loss)

Iron and Steel

In their interim report covering the first nine months of 1976, the three major Canadian steel companies reported higher ingot production and higher sales. The best performance was recorded by Dominion Foundries and Steel, Limited (Dofasco) with increases in sales and net income of 28 and 37 per cent respectively over the same period in 1975. The worst performance was recorded by Algoma which reported a decrease of net income of 37 per cent over the same period last year. Ingot production, sales and net income for the first nine months of 1975 and 1976 are shown below.

<u>Company</u>	<u>Ingot Production</u>		<u>Sales</u>		<u>Net Income</u>	
	<u>1976</u>	<u>1975</u>	<u>1976</u>	<u>1975</u>	<u>1976</u>	<u>1975</u>
	(000 tonnes)		(million \$)		(million \$)	
The Steel Company of Canada Ltd.	4 673	4 627	1 032.3	921.6	69.8	68.5
Dominion Foundries & Steel, Ltd.	2 747	2 430	691.0	541.3	53.0	38.7
The Algoma Steel Corporation, Ltd.	2 446	2 232	437.1	387.0	17.7	28.0

Sidbec-Dosco Limited, the Quebec Government-owned steel company, has asked the Province's Department of Industry and Commerce for \$115 million to cover a \$40 million operating deficit in 1976, a \$40 million deficit forecast for 1977 and cost overruns in construction work at its Contrecoeur refinery and pelletizing plant in Port Cartier, Quebec.

The Algoma Steel Corporation, Limited has announced that it will close its Canadian Furnace Division at Port Colborne, Ontario for an indefinite period starting in March of this year. The Canadian Furnace Division with an annual capacity of approximately 240 000 tonnes produces several grades of pig iron, primarily for use in the foundry industry in southern Ontario and the United States. The reasons given for the closure were an excess of ironmaking capacity at Algoma's Steel Works Division at Sault Ste. Marie, and the fact that the Canadian Furnace Division had been idle for $8\frac{1}{2}$ of the last 21 months because of poor demand and a highly competitive supply situation. The closure will result in the layoff of 140 workers.

Generally, the steel industry is depressed, not only in Canada but also in the United States and particularly in western Europe. Dumping of steel products on the Canadian market by several countries including Japan, France, Korea, Poland, Czechoslovakia, Belgium and others has been reported in recent months. There have also been significant layoffs in steelmaking plants in Belgium, France and West Germany.

The first Purofer direct reduction plant designed for commercial operation is just about ready to go into full production at Companhia Siderurgica da Guanabara (Consigua), Brazil. The plant, built at a cost of \$40 million, has a designed production capacity of 1 000 tonnes of sponge iron a day. The facility will utilize reducing gas obtained from heavy fuel oil instead of natural gas as the former is readily available in Brazil, whereas natural gas would have to be imported. Consigua is a joint venture between Brazil's Gerdau group and August Thyssen-Hutte AG, Europe's largest private steelmaker and owner of the Purofer direct reduction process.

A second Purofer plant is almost ready to go on stream in Iran. Its daily production capacity will also be 1 000 tonnes of sponge iron.

Lead

Lead continued its show of strength on the London Metal Exchange (LME) during the month. The spot price jumped from £332 a tonne at the start of the month, to £414.5 on February 25. This increase, coupled with the declining value of the Canadian dollar, resulted in the Canadian equivalent price rising from 26.4 cents to 33.6 cents a pound (an increase of 27 per cent). On a kilogram unit basis, this was a price increase from 58.2 to 74.1 cents. By mid-month, producer prices both in Canada and in the United States had been increased from 28.0 to 29.0 cents a pound (63.9 cents a kilogram).

The lead supply situation in the United States is such that Amax, Inc. was forced to declare a *force majeure* on shipments of lead to customers when one of the blast furnaces at its Boss, Missouri plant failed. The furnace was down for four days. The U.S. producers' inventory level is now below 35 000 tonnes and most producers are shipping "hot metal" directly from production instead of metal from inventory. The Glover plant of ASARCO Incorporated is still on strike and is one of the main reasons for the tight supply situation. Other producers were affected by gas shortages and most were forced to curtail production at some time during the month. Two producers, St. Joe Minerals Corporation and ASARCO, are no longer accepting new customers and have ended all spot sales. Some industry members are talking of having to allocate sales of lead in March.

The Japanese supply situation is equally tight. The first shipment of concentrates from Cyprus Anvil Mining Corporation arrived in Japan in mid-February. This is the first shipment since the Cyprus strike ended last December. Inquiries from the U.S.S.R. to purchase Japanese lead had to be turned away.

The lead supply situation will probably remain tight until late spring when the normal slowdown in the battery sector occurs.

Mercury

About mid-February, the Yugoslavian government reportedly gave authorization to the state-owned Idrija mercury mine to suspend operations. The mine, which is the third largest mercury producer in the world, contains about 10 per cent of the world's known mercury deposits but was unable to produce at a profitable level because of low mercury prices over the last two years. The mine, which produces about 15 000 flasks (76 pounds each) of mercury a year, will cease operations but will maintain a skeleton workforce in case the market should turn upward. The suspension of operations by the Yugoslavian mine is likely to have a bullish effect on mercury prices.

Nickel

The Hanna Mining Company of the United States and the government of Colombia have expressed confidence that the Cerro Matoso deposit in Colombia will be in production in 1980. The project, one-third owned by the Colombian government, calls for mine development and the construction of a smelter with an annual capacity of 22 500 tonnes of nickel contained in ferronickel. The average nickel content of the ore to be mined during the first 25 years of operation is estimated to average 2.71 per cent nickel. Hanna has asked six Japanese stainless steelmakers to join it in the project. Final decision on a starting date for construction is said to depend on an assessment of the ferronickel market being made during the next six months.

Silver

Production is scheduled to begin in May 1977 at an initial rate of 45-90 tonnes of ore a day at Brandywine Falls, about 25 miles north of Squamish, British Columbia. The property was formerly owned 30 per cent by Tedi Resources Ltd. which was amalgamated with Van Silver Explorations Ltd. late in November 1976 to form Van Silver Mines Ltd. Van Silver maintains 100 per cent ownership of the property.

Initial production will be from underground on the Silver Tunnel zone where probable ore reserves have been estimated at 101 000 tonnes, grading 413.7 grams (13.3 troy ounces) of silver and 1.03 grams (0.033 ounce) of gold a tonne, 0.19 per cent lead and 0.43 per cent zinc. Several thousand tonnes of this ore have been stockpiled at the mill site. The vein has been exposed by three crosscuts from which further mining is to be conducted.

Development will proceed, simultaneously with production from the Silver Tunnel zone, on the Tedi open pit on the northern border of the property about 1 $\frac{1}{4}$ miles from the concentrator. Indicated open pit ore is estimated at 125 000 tonnes, grading 85.5 grams of silver and 1.03 grams of gold a tonne, 0.65 per cent copper and about 5 per cent combined lead and zinc.

It is planned to gradually increase production to the rated mill capacity of 270 tonnes of ore a day. When the mill is operating at full rated capacity, annual silver output could range between about 15 000 and 25 000 kilograms.

The unexpected increase in world silver supplies in 1976 resulted mainly from the demonetization of silver coins by the West German government. Silver content amounted to about 870.9 tonnes (28 million ounces), about half of which was refined in West Germany and the other half exported to and refined in Switzerland.

Early in February, Republican Congressman Silvio Conte re-introduced in the U.S. House of Representatives a bill calling for the disposal of 3 665.1 tonnes (117 837 000 ounces) of silver from the U.S. government strategic stockpile. This stockpile now contains 4 338.9 tonnes of silver, all of which is surplus to the zero stockpile objective. However, none of this surplus silver may be disposed of without Congressional approval. What remains unclear to silver dealers is whether or not Conte's bill, which was rejected by Congress last year after having passed through the House Armed Services Committee, has the approval of President Carter's Administration. Consensus among silver traders is that Conte's new bill is not the Administration bill which is expected to be introduced later this year.

Zinc

Centromin Peru has contracted to modernize the La Orroya zinc plant in Peru and to expand the plant's annual capacity from 72 000 tonnes to 90 000 tonnes of zinc a year by 1980 at a cost of \$92 million. The Export Development Corp., the Royal Bank and the Imperial Bank of Canada will provide \$31.1 million in loan capital to the project. One major engineering-construction-procurement contract worth \$65 million has been awarded to the SNC Group in Montreal covering replacement of a roaster, new leaching, purification, and cadmium buildings, new thickeners, vacuum filters, and a new cellhouse. Minero-Peru also finalized contracts with Sybetra S.A. to construct a 105 000 tonne-a-year turnkey zinc refinery at Cajamarquilla, Peru. This project will cost an estimated \$200 million using financing secured in Europe. Completion of this plant is planned for 1980.

World prices for prime western zinc in February remained unchanged from January in Canada at \$799.17 a tonne, in Europe at \$795 a tonne, and in the United States at \$815.70 a tonne. Prices on the London Metal Exchange continued to strengthen to the \$740-a-tonne level but remained at a substantial discount to producer-quoted price levels.

Zirconium

Great Canadian Oil Sands (GCOS) Limited and Canadian Titanium Pigments Limited are nearing completion of a final agreement on the establishment of an estimated \$10 million operation that will recover zirconium oxide as a by-product of GCOS' synthetic crude oil production. The plant will be operated and controlled by Canadian Titanium. Current plans, which are subject to revision by Canadian Titanium following pilot plant testing, call for the daily processing of 1 350 to 1 600 tonnes of feedstock (waste sands) into zirconium oxide concentrates. The feedstock will be purchased by Canadian Titanium from GCOS.

A U.S. subsidiary of Pechiney Ugine Kuhlmann Development, Inc. of France has announced that it will not participate in a joint venture with Western Zirconium Inc. to produce zirconium metal in the state of Washington. The proposed joint venture was to have built an integrated facility for conversion of zirconium oxide concentrates to metal and for semi-fabrication of zirconium products for use in nuclear reactors, chemical plants and photographic bulbs. Pechiney Ugine Kuhlmann stated its reason for not continuing with the \$30-\$40 million project as a more urgent need for the funds within the company's present operations. Western Zirconium still intends to proceed with the project and has said that it has acquired new, although yet unnamed, partners.

INDUSTRIAL MINERALS AND PRODUCTS

Asbestos

Recent statements by Quebec government officials suggest that nationalization of the province's asbestos industry is not a priority issue. Rather, emphasis will be placed on increasing the amount of further processing of Quebec's annual production of 1.25 million tonnes of fibre.

The Quebec Asbestos Mining Association, the fibre producers' organization, has commissioned a \$225 000, nine-month independent study that is designed to evaluate opportunities for the optimum development of the industry in Quebec.

Construction Materials

St. Lawrence Cement Company has purchased the assets of the Hudson, New York plant of Universal Atlas Cement, a division of United States Steel Corporation, for a reported \$8.2 million. The acquisition will enable St. Lawrence to export surplus production from the Joliette, Quebec plant for distribution in eastern United States. When the Quebec and United States markets show improvement, St. Lawrence plans to fully integrate and modernize the Hudson plant. St. Lawrence already exports close to 450 000 tonnes of cement a year and, with this acquisition, will eventually increase annual exports to nearly 900 000 tonnes.

Allis Chalmers Canada Ltd. has been awarded a \$24 million contract by Cementos Selvelegra of Ecuador for the construction of a 345 000 tonne-a-year cement plant. Surveyer, Nenniger and Chênevert Inc. of Montreal will provide the project engineering and the financing has been arranged through the federal Export Development Corp. and the Royal Bank of Canada.

National Gypsum Company of Buffalo, New York will build a multi-million dollar wallboard plant at Rensselaer, New York. The new plant will serve markets from Syracuse in the west of New York State to Hartford, Connecticut, an area formerly served by the company's New Haven, Connecticut plant which was closed two years ago.

Gulf Oil Canada Limited will close its 75-year-old calcium carbide and acetylene black plant at Shawinigan, Quebec in early 1978. The closure reflects increasing competition from new, high-volume operations in other parts of the world which are coming on stream with the latest available technology. The company marketed calcium hydroxide which was produced as a by-product of the Shawinigan operation. Raw material for the plant came from a high-calcium limestone deposit at Bedford in the Eastern Townships. The quarry may be closed as well. Total number of workers affected could reach 396 (369 at Shawinigan and 27 at Bedford).

Slate mining is being revived in Newfoundland on a deposit in the Trinity Bay area. Slate of comparable quality to that available in Wales and Vermont State has been produced for side-walls, patios, basements and fireplaces - uses where texture and a range of colours are important requirements.

Potash

On February 11, the United States Treasury tentatively revoked an earlier judgement which had found Duval Corporation of Canada and Amax Potash Limited, responsible for the dumping of Canadian potassium chloride. The finding had already been revoked for most of the other companies originally affected by the December 1969 inquiry results.

Salt

Strikes began at three caustic soda-chlorine plants in British Columbia in the first week of February. The unions stated that the strikes are in protest against an Anti-Inflation Board roll-back of their 1976 negotiated wage increases. The strike at one of the plants ended on February 21 with agreement on a new contract with substantial fringe benefits. The new contract will be reviewed by the Anti-Inflation Board.

Sulphur

World sulphur production has declined for the second consecutive year and prospects for a significant increase over the next two or three years are poor. In addition to deliberate cutbacks by voluntary sulphur producers in response to recessionary demand, changes of a longer term nature have begun to affect several major world suppliers.

Canada's output from natural gas has declined over three years from a peak in 1973 of 7.2 million tonnes to 6.3 million tonnes. Although higher natural gas prices will lead to new sour gas developments, it is unlikely that they will be sufficient to sustain a significant growth in output. In fact, tar sands sulphur and smelter gas sulphur output will at best maintain the present plateau of total Canadian sulphur production over the next 10 years.

The United States Frasch industry, which has sustained this country's dominance as a world producer of sulphur since the turn of the century, is facing several difficulties. New developments in west Texas, although of considerable size, appear sufficient only to maintain present levels of output as the older dome deposits decline in production. Of 37 Frasch mines developed since the inception of the industry in 1895, only 10 remain in operation; of 12 developed in the last 15 years, seven have closed, and three have closed since 1975. The latest, Texasgulf's Fannett Frasch Sulphur Mine in Jefferson County, Texas, is to close March 1 according to a press release issued on February 8, 1977. The reasons for closure were cited as "the high cost and scarcity of natural gas, depletion of reserves and increases in other production costs coupled with the company's large sulphur inventory."

Since the price of natural gas a few years ago at 23¢/million cubic feet (mcf) represented an average of 20 per cent of sulphur production costs, gas prices as high as \$2.50/mcf have alone more than doubled costs. Of even greater significance is the threat of curtailment of gas supplies.

Of the remaining ten mines, five account for over 85 per cent of production or some 6.5 million tonnes. It is likely that the five smaller mines and at least one of the larger mines will close by 1985, thereby reducing output to about 5 million tonnes. Smelter acid and oil and gas refining in the United States will tend to maintain the present sulphur production plateau.

France's production, mostly from sour natural gas, reached its current output of 1.8 million tonnes several years ago and it is expected to decline gradually in future.

Mexico's annual production over 24 years has varied between 1.2 and 2.4 million tonnes. The latter appears to be a ceiling in that technical difficulties in production have been a fact of life throughout this period and exploration has met with little success.

Canada, the United States, France and Mexico account for about one half of total world sulphur production. Of the remaining major producers, Poland, the Middle East and possibly Japan appear to have the greatest potential for expansion of output.

MINERAL FUELS AND PRODUCTS

Petroleum and Natural Gas

Discussions aimed at building a heavy crude upgrading facility in the Lloydminster area are currently taking place between the Saskatchewan government, the federal government and company officials. The discussions center on the construction of one large upgrading plant on the Saskatchewan side of Lloydminster which could be used on a public utility basis by heavy oil producers in the area. The discussions are the result of the federal government's policy to put as much of Canada's oil as possible to domestic use. To do this, the large reserves in the Lloydminster area must either be refined there, or they must be upgraded so that they can be transported in pipelines to eastern Canada refineries. It would seem that the latter of these two alternatives is the most practical. No cost studies have yet been prepared on building an upgrading facility, but preliminary estimates place the costs at between \$250 million and \$1 billion, depending on the size of the project.

The federal government and three of the Atlantic provinces have reached agreement on how revenues from future mineral discoveries, including oil and gas, will be divided between federal and provincial treasuries. Under the terms of the agreement, the provinces of Nova Scotia, New Brunswick and Prince Edward Island will receive 100 per

cent of the royalties from discoveries within 5 kilometres of their coasts and 75 per cent of royalties from discoveries further offshore. The federal government would receive the remainder. The two-tiered agreement would allow Nova Scotia to keep the royalty revenues from any oil or gas produced in the vicinity of Sable Island where oil and gas has been discovered. (See the section "Federal-Provincial Mineral Agreements" in this Report for details on the agreement.) The federal government and Newfoundland, however, have not yet agreed on offshore minerals jurisdiction, and both governments are preparing submissions for a ruling from the Supreme Court of Canada.

In the United States, a Federal Power Commission (FPC) administrative law judge recommended approval of an \$8.5 billion transCanada pipeline system proposed by Canadian Arctic Gas Pipeline Limited, believing it to be superior to proposals put forward by El Paso Natural Gas Company or Alcan (Foothills Pipe Lines Ltd.). The judge's recommendations will be reviewed by the FPC commissioners who have until May 1, 1977 to make recommendations to the United States government. In Canada, the National Energy Board (NEB) is currently reviewing several proposals, including that of Canadian Arctic Gas Pipeline Limited, to transport gas from the Mackenzie Delta. The decision date is as yet indefinite.

Great Canadian Oil Sands Limited reported a 1976 profit of \$11.9 million from their tar sands operation at Fort McMurray, Alberta. This compares to a loss of \$991 000 a year earlier. Production of synthetic crude was 17 477 000 barrels for a daily average of 47 800 barrels, representing a 12 per cent increase from 1975 production of 15 533 000 barrels or an average 42 600 barrels per day (b/d).

The NEB will maintain the level of light and medium crude oil exports at 180 000 b/d until the end of June 1977, and will continue to license heavy oil exports using the procedure it adopted early this year based on estimated producibility and domestic demand. Heavy oil exports for March have been set at 118 000 b/d. The level of exports for the last six months of 1977 will be announced in April when the NEB releases its report on crude oil supply and demand following the results of hearings held late last year.

Uranium

The Saskatchewan Government has announced the terms of reference and composition of the board of inquiry charged with examining the implications of Amok Ltd.'s Cluff Lake uranium project. In arriving at its recommendations, which must be passed to the provincial Minister of the Environment by November 1, 1977, the board will:

- i) review all available information on the probable environmental, health, safety and social effects of the project;
- ii) facilitate the provision of information to the public;
- iii) receive public comment on any matter related to the proposed development, including social, economic and other implications of the expansion of the province's uranium industry; and
- iv) determine if the measures proposed by Amok to protect environmental quality meet the requirements of Saskatchewan and Canadian law, regulations and policies, and report to the provincial government on the adequacy of such laws, regulations and policies.

Inexco Mining Company (Canada) Ltd. has announced updated estimates for the Gaertner deposit which it holds jointly with Uranerz Exploration and Mining Limited and Saskatchewan Mining Development Corporation at Key Lake in northern Saskatchewan. Inexco now estimates that the deposit contains some 19 000 tonnes uranium and 18 960 tonnes nickel. Grades in the Gaertner deposit have been reported up to 38 per cent uranium and 45 per cent nickel. Grades in the nearby Dielmann deposit have been reported up to 17 per cent uranium and 25 per cent nickel.

Kerr Addison Mines Limited has announced the sale of 673 tonnes U for delivery between 1977 and 1981 from its Agnew Lake operation to the Swedish Nuclear Fuel Supply Co. A 100-tonne U sale has also been announced by New Joburke Explorations Limited for delivery from its Uranium City property to Atomic Energy of Canada Limited between October 1978 and June 1979. Meanwhile, exports of uranium from Canada to Japan and to the European Economic Community have been banned pending the renegotiation of nuclear safeguard agreements.

The United States Energy Research and Development Administration (ERDA) has reported that some 10.4 million metres of uranium exploration and development drilling was carried out in the United States in 1976, compared with 7.9 million metres a year earlier. This exceeds the peak year in 1969 when some 9.1 million metres were recorded.

Several announcements of production plans have been reported in the United States: Rocky Mountain Energy Co. hopes to build a 907 tonne-a-day mill in the Copper Mountain area of Wyoming for start-up in 1981 (plans for a similar mill at Bear Creek, Wyoming were announced in January); Cotter Corporation will commence construction of a new 907 tonne-a-day, \$26 million mill at Canon City, Colorado

to replace its existing 454 tonne-a-day mill on the same site; Freeport Uranium Recovery Co. plans to build a \$32 million facility to recover some 304 tonnes of uranium a year as a by-product of phosphate rock fertilizer operation; and Wyoming Mineral Corp. plans to build a 154-tonne-U a year uranium recovery plant at the Farmland Industries phosphoric acid production facility near Bartow, Florida for start-up in 1979.

The Australian Government is reportedly considering some kind of assistance for Mary Kathleen Uranium Limited which suffered a \$13.6 million loss in 1976. Australia's current export commitments are being supplied by Mary Kathleen, which resumed production in April 1976; full capacity had not been attained by year-end.

SPECIAL ITEM

Second Session of the Intergovernmental Expert Group on Copper, Geneva, February 7-18, 1977

Summary

The Second Session of the Intergovernmental Expert Group on Copper (IEGC) examined a wide range of studies on the world copper market. Papers examined and discussions which followed produced a perceptible improvement in the appreciation of the complexities and problems of the world copper market. A number of developing countries appeared somewhat more receptive to the establishment of a copper consultative body; most developing countries, however, continued to advocate an immediate move into a commodity agreement based upon a buffer stock. An interim measure designed to improve the earnings of the copper-exporting countries in the short-term received cautious, but inadequate, discussion. The Third Session of the IEGC will be held in March 1977 to draft recommendations to the UNCTAD preparatory Meeting on Copper which will reconvene in May 1977.

Background

The Intergovernmental Expert Group on Copper (IEGC) held its Second Session in Geneva, February 7-18, 1977. The IEGC was created at the UNCTAD Preparatory Meeting on Copper during its first meeting in September 1976, to carry out a program of studies on copper and to make recommendations, not later than March 1977, for consideration by the next session of the Preparatory Meeting on Copper in May 1977.

Canada is a member of the "nucleus" of the IEGC charged with the responsibility of carrying out a work program consisting of studies on agreed topics. Canada contributed six papers in advance of the February meeting, of which five originated in the Mineral Development Sector of the Department of Energy, Mines and Resources.

The Work Program

The work program as laid out by the Chairman covered discussion of the less contentious study topics during the first week. These included industry statistics, structure of trade, marketing and pricing, capital requirements and costs, supply-demand trends, ore reserves, scrap, joint production of metals, substitution, and investment flows.

February 1977

During the second week, the discussions covered more sensitive topics including stocking arrangements, supply management measures, a consultative body on copper, and remedial interim measures, including a proposal by CIPEC for a revised pricing method for copper moving in international trade.

In the course of the meeting, there was a perceptible increase in awareness by the developing countries of the complexity of the world copper industry and its problems, and a retreat by most of them from the insistence that quick and easy solutions could be found. The only exceptions appeared to be Peru and Indonesia who continued to reject suggestions that further studies and very careful consideration of all the possible side effects of any action should precede choice of any concrete measures. Suggestions for the establishment of a permanent body on copper or Copper Consultative Organization (CCO) were also strongly resisted by these two countries.

The developed countries, including Canada, continued to press for the establishment of a CCO, suggesting that the question of stocking arrangements and a commodity agreement could be studied most effectively by a CCO, which would be a complement rather than an alternative to a commodity agreement.

The meeting also examined a proposal for an interim remedial price measure tabled by CIPEC. Two possible formulas were suggested as means to raise prices realized by exporters. In general, only guarded, reluctant responses were made by other delegations, and the matter was left open for further discussion at subsequent meetings. CIPEC stated that it was flexible on the price formula to be used, and would make no decision before June 1977.

Although these different viewpoints as to the best course of action were present, they did not prevent a constructive examination of the studies submitted. The chairman produced two informal papers which summarized the proceedings, thus avoiding the difficult process of reaching agreement on an official final report. These informal papers will form the basis for a detailed account of the proceedings to be prepared by the UNCTAD Secretariat before the March 1977 meeting of the IEGC. This Third Session of the IEGC to be held in March, will frame recommendations to the Preparatory meeting, to be reconvened in May.

RECENT MERGERS AND AMALGAMATIONS

(as recorded from the Gazettes)

Tourbe Mousseuse Real Inc. - Real Peat Moss Inc. was formed by the amalgamation of Atlas Peat Moss Co. Inc., Belle Peat Moss Co. Inc., Central Peat Industries Ltd., La Ferme de Tourbe Inc., Laurentide Peat Moss Co. Ltd., Real Peat Moss Corporation, Temis Mill Inc., Tourbiere du Port Ltée on 5 January 1977. Source Quebec Gazette 22 January 1977.

W.R. Grace & Co. of Canada Ltd. amalgamated with Grace Construction Materials Ltd. on 1 January 1977 to form a new company using the name W.R. Grace & Co. of Canada Ltd. Source Canada Gazette 5 February 1977.

Shell Canada Resources Limited - Ressources Shell Canada Limitee amalgamated with Peigan Oil of Canada Limited, Cree Oil of Canada Limited, Anglo Canadian Oil Co. (1955) Ltd. and Young Drilling Company Limited to form a new company under the name of Shell Canada Resources Limited - Ressources Shell Canada Limitee on 1 January 1976. Source Canada Gazette 5 February 1977.

NEW PUBLICATIONS

The following publications were prepared in the Mineral Development Sector, Department of Energy, Mines and Resources and released for distribution in February.

Preprints, *Canadian Minerals Yearbook 1975*,
Aluminum; Cement; Natural Gas; Potash.

The above publications are available from Publishing Center, Department of Supply and Services, Ottawa, for 50¢ a copy.

