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American Chemical Corporation

In June 1979, American Chemical Corporation announced a tender offer for any and all of the shares of the Universal Paper Corporation. American was one of the largest diversified chemical companies in the United States (**Exhibit 1**). Universal was a large paper and pulp company (**Exhibit 2**).

Universal's management opposed the takeover and, among other things, sued in federal court to have the tender offer blocked on grounds that American's acquisition of Universal would violate the Clayton Act of the U.S. antitrust laws. Both firms engaged in the production of sodium chlorate. Universal alleged that its acquisition by American would substantially reduce competition in the sodium chlorate business, particularly in the Southeastern U.S. market where the two firms were competitors. The U.S. government joined Universal in seeking a preliminary injunction to stop American's tender offer. Though it denied the allegations, American prevented a preliminary injunction by agreeing to divest its sodium chlorate plant located near Collinsville, Alabama, in the event it acquired Universal. American subsequently was successful in acquiring over 91% of Universal's shares.

In October 1979, American began looking for a buyer for the Collinsville plant. A number of potential buyers were approached, including the Dixon Corporation, a specialty chemicals company. After lengthy negotiations, Dixon agreed to purchase the net assets of the Collinsville plant from American for $12 million, subject to approval by its board of directors.

The Market for Sodium Chlorate

Sodium chlorate ($NaClO_3$) was a chemical produced by the electrolytic decomposition of salt (NaCl) according to the chemical formula:

$$NaCl + 3H_20 + \text{energy} \rightarrow NaClO_3 + 3H_2$$

Sodium chlorate was sold either as a white crystalline solid or in a 25% water solution.

Approximately 85% of the sodium chlorate produced in the United States was sold to the paper and pulp industries, where it was used in the bleaching of pulp. Sodium chlorate was reacted with salt (NaCl) and sulfuric acid (H_2S0_4) to produce a bleaching agent, chloride dioxide (ClO_2), according to the formula:

$$NaCl0_3 + NaCl + H_2SO_4 \rightarrow ½Cl_2 + ClO_2 + Na_2\,SO_4 + H_2O$$

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Chloride dioxide was the active ingredient actually used by paper and pulp producers to bleach pulp. The remaining 15% of the sodium chlorate produced in the United States was used in soil sterilants, in oxidizers for use in uranium mining and in producing various chemicals, including sodium chlorite, potassium chlorate and ammonium perchlorate.

Sales of sodium chlorate had grown rapidly during the 1970s from 220,000 tons in 1970 to an expected 435,000 tons in 1979 (**Exhibit 3**). Sales increased by approximately 8.6% per year during the period 1970-1974, but then declined 12% in 1975 when pulp production decreased during the recession. Demand improved during the subsequent recovery, and sales grew by more than 10% per year between 1975 and 1979.

Demand for sodium chlorate from pulp producers was expected to continue increasing at 8% to 10% per year. While pulp production was projected to increase at a slower annual rate of about 3% to 4%, pulp producers' use of sodium chlorate was expected to grow more rapidly since use of sodium chlorate (and the active ingredient chloride dioxide) helped solve their plant effluent problems. Other uses of sodium chlorate also were expected to grow at about 8% to 10% per year.

Capacity additions had not kept pace with sales growth during the 1970s (**Exhibit 3**). Though sales had increased by over 95% between 1970 and 1979, capacity had increased by less than 70% during this period. The resulting tight markets in 1973-1974 and 1977-1978 caused a substantial improvement in profit margins between 1970 and 1979, even though production costs also increased greatly during this period. These tight markets and cost increases had caused prices for sodium chlorate to increase rapidly beginning in 1973 (**Exhibit 3**).

In late 1979, there were a dozen domestic producers of sodium chlorate (**Exhibits 4** and **5**). The market was dominated by large, diversified chemical companies (Hooker, Pennwalt, American and Kerr-McGee). However, a number of paper and pulp companies (Georgia Pacific and Universal) had integrated backward into the production of sodium chlorate. In addition, two firms (Brunswick and Southern) specialized in producing sodium chlorate. The three largest producers accounted for over 55% of domestic capacity.

The majority of sodium chlorate plants were located in the Southeastern United States (**Exhibit 4**) where approximately two-thirds of the product was consumed due to the high regional concentration of pulp and paper mills. Freight costs represented a significant portion of delivered sodium chlorate costs, and plants tended therefore to be located within 800 miles of their principal markets. Market concentration was slightly higher in the Southeastern market than in the total U.S. market. The three largest producers accounted for approximately 59% of the Southeastern market.

In addition to existing producers, two firms had announced plans to enter the sodium chlorate business in 1980. Union Chemicals Corporation was constructing a 40,000-ton plant in Gainsville, Georgia, and Louisiana Paper Company was building a 35,000-ton plant in Greenville, Mississippi. This increase in industry capacity was expected to reduce margins and decrease capacity utilization during 1980 and 1981. However, as sales and productive capacity achieved a closer balance, prices and margins were expected to improve once again. It should be noted that the selling price necessary to obtain a 15% return on investment on a newly constructed 40,000-ton sodium chlorate plant was estimated to be $420 per ton in 1979.

The Collinsville Plant

American's plant in Collinsville, Alabama, had the capacity to produce 40,000 tons of sodium chlorate per year. Sodium chlorate was produced by the electrolysis of sodium chloride brine in

electrolytic cells called "D cells" which used graphite electrodes. The facility consisted of 20 cell tanks (or groups of cells) which were operated batchwise. They were filled with saturated brine and then electrolized to an end point. Graphite was consumed in the process. The resulting fluid was chemically treated to precipitate impurities, which were discarded. The remaining sodium chlorate solution was either shipped as a fluid or crystallized to a white solid.

The plant had been consistently profitable during the period 1974 to 1979 (**Exhibit 6**). Operating profits had ranged from a low of $817,000 in 1975 to a high of $4,845,000 in 1978. Net assets had grown from $4,619,000 in 1974 to $5,414,000 in 1979. Though the ratio of operating profits to net assets had dropped to 16.9% in 1975, it equaled 90.0% in 1978 and averaged 54.3% during the 1974 to 1979 period.

The major cost of production was electric power. The Collinsville facility needed approximately 7,000 kilowatt hours (KWH) to produce a ton of sodium chlorate and power costs accounted for 55% to 60% of manufacturing costs. Salt, graphite, and other variable costs typically represented another 20%, and labor and maintenance costs accounted for the remaining 20% of manufacturing costs.

Electric power was purchased from the Tennessee Valley Authority (TVA), whose hydroelectric power plants historically had been a source of cheap electric power. During the early 1970s, TVA's rates had been as much as 50% less than the rates of other electric utilities. However, as the region's power demands grew, TVA was finding it necessary to supplement its hydroelectric power plants with more expensive fossil fuel plants. TVA also was facing increasing pressure from consumer groups to allocate the more expensive power of fossil fuel plants to industrial users instead of residential users. As a result, the Collinsville plant's cost of power had increased from $.019 per KWH in 1977 to $.025 per KWH in 1979.

Capital expenditures at the Collinsville plant had ranged from $200,000 to $500,000 per year between 1973 and 1979 and were primarily for maintenance and pollution control. In late 1979 the plant was basically in compliance with all environmental regulations. Future capital expenditures were expected to range from $475,000 to $600,000 per year.

American had supported a research and development program which was expected to reduce costs at its sodium chlorate plants. New sodium chlorate plants increasingly were using metal electrodes (instead of graphite electrodes), which eliminated graphite costs and also reduced power needs by approximately 30%. However, the graphite electrodes at American's plants at Collinsville and Wenatchee, Washington, were not convertible at an acceptable cost to commercially available metal electrodes. American's research group therefore was working on a permanent laminate (or coating) which could be applied to the graphite electrodes in American's plants. Use of this laminate would eliminate graphite costs and was expected to reduce power needs by 15% to 20%. Development was approximately 40% complete, and scale-up to a pilot plant was scheduled for March 1980. American expected that the laminate could be installed at the Collinsville plant at a one-time cost of about $2.25 million, which amount could be depreciated over a period of 10 years. Installation at Collinsville was scheduled for December 1980.

Proposed Sale of the Collinsville Plant to the Dixon Corporation

The Dixon Corporation was a specialty chemicals company which produced a number of chemicals for sale primarily to the paper and pulp industry. Its principal products included sulfuric acid, aluminum sulfate, and liquid sulfur dioxide. As was described earlier, sulfuric acid was used together with sodium chlorate to produce chloride dioxide, which was the active ingredient used to bleach pulp. Sulfuric acid also was used in the manufacture of other chemicals, steels, rayon and

detergents, and in oil refining. Aluminum sulfate was used as a coagulant and purifying agent in the treatment of industrial and municipal waste. Dixon sold liquid sulfur dioxide to the paper and pulp industry for use in bleaching pulp, though it also was used to produce hydrosulfites for use in textile dyeing. The firm's principal plant was located in Calhoun, Georgia, and its sales were concentrated in the Southeastern United States. Dixon's sales had grown rapidly and the firm had been consistently profitable (**Exhibit 7**).

Acquisition of the Collinsville plant fit well with Dixon's strategy of supplying chemicals to the paper and pulp industry. Sodium chlorate would complement Dixon's existing product lines. Dixon already did business with some of the Collinsville plant's major customers. Sodium chlorate therefore could be marketed largely through Dixon's existing sales group.

In evaluating the plant's purchase, Dixon prepared the pro forma financial statements shown in **Exhibit 8**. These figures analyzed the plant's future profitability given its unlaminated graphite electrodes and in the absence of the operating economies which might be realized from installing laminated electrodes. Industry overcapacity was expected to push margins down in the short run. However, Dixon expected that sodium chlorate prices would increase on average at 8% per year. Power costs (per KWH) were projected to increase more rapidly at 12% per year. Selling expenses could be reduced by marketing sodium chlorate through Dixon's existing sales force. Dixon also expected to write-up the value of the Collinsville plant, which would increase its depreciation charges.[1]

As part of the sale agreement, American agreed to provide ongoing technical support to the Collinsville plant. American would keep Dixon informed concerning development of the laminated electrodes and make this technology available to Dixon. However, Dixon would have to pay for all costs associated with installation of the laminated electrodes.

Because of its substantial unused debt capacity, Dixon planned to fund the $12 million purchase price entirely with debt capital. It was to be financed in part by privately placing $8 million in 15-year bonds with two insurance companies. These bonds would carry an 11.25% interest rate. The sinking fund provision on these bonds would retire $800,000 of bonds each year beginning the sixth year. The remainder of the $12 million purchase price was to be financed by having Dixon issue American a $4 million note to be repaid in equal amounts over five years. The note would also carry an 11.25% interest rate.[2]

This financing package would temporarily increase Dixon's book debt-to-total capital ratio to approximately 47%. Though the firm had almost no debt immediately prior to the proposed acquisition, Dixon had relied more heavily on debt capital in the past. However, use of this much debt would initially raise Dixon's book debt ratio above its target debt ratio for the consolidated company of about 35%.

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[1]Net working capital accounted for $1.4 million of the $12 million purchase price (**Exhibit 6**). Dixon planned to allocate the $10.6 million balance of the $12 million purchase price to the Collinsville plant. The plant would be depreciated over 10 years on the straight line method of depreciation to a zero residual value. This relatively short life was permitted for tax purposes since it corresponded to the anticipated remaining physical life of the plant.

[2]Market interest rates were as follows:

Short-term Treasury bills:	10.5%
Long-term Treasury bonds:	9.5%
Long-term "AA" Corporate bonds:	10.25%
Long-term "A" Corporate bonds:	10.75%
Long-term "BBB" Corporate bonds:	11.25%

Exhibit 1 Financial Statements for American Chemical and Other Selected Large Chemical Companies

	AMERICAN CHEMICAL					ALLIED CHEMICAL					DOW CHEMICAL				
	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978
Sales ($ millions)	4,828	4,671	4,805	5,235	5,490	2,216	2,333	2,630	2,923	3,268	4,938	4,888	5,652	6,234	6,888
Net income ($ millions)	323	198	212	251	349	151	116	117	135	120	558	616	613	566	575
Earnings per share	$7.60	$4.66	$4.98	$5.91	$8.20	$5.43	$4.17	$4.52	$4.93	$4.25	$3.18	$3.33	$3.30	$3.01	$3.16
Dividends per share	$1.00	$1.25	$1.50	$1.65	$1.80	$1.53	$1.80	$1.80	$1.85	$2.00	$0.60	$0.75	$0.95	$1.15	$1.30
Dividend yield	5.3%	5.7%	4.3%	5.0%	4.1%	6.3%	5.4%	4.5%	4.5%	7.1%	2.5%	1.7%	2.3%	4.5%	5.6%
Common stock prices															
High	$23	$30	$36	$46	$48	$54	$42	$45	$51	$45	$35	$48	$57	$44	$31
Low	10	17	21	30	32	23	27	33	39	28	25	27	38	25	22
Close	19	22	35	33	44	28	33	40	44	28	28	46	43	27	25
Closing P/E	2.5	4.7	7	5.6	5.4	5.2	7.9	8.8	8.9	6.6	8.8	13.8	13	9	7.9
Total capitalization	2,014	2,109	2,198	2,465	2,527	1,550	1,839	1,959	2,279	2,467	3,498	4,316	5,118	5,889	6,793
% Debt	44	37	37	29	39	28	34	33	36	38	37	36	37	40	43
% Preferred stock	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-
% Common stock	56	63	63	71	41	72	66	67	64	62	63	64	63	60	57
Beta	1.20					1.43					1.25				
Interest coverage[a]	6.3	3.9	4.1	4.3	6.7	9.2	5.7	5.2	5.4	4.9	10.6	8.2	6.5	4.9	4.4
Bond rating[b]	BBB/A					A/A					A/Aa				

	DU PONT					MONSANTO					UNION CARBIDE				
	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978
Sales ($ millions)	6,910	7,221	8,361	9,435	10,584	3,498	3,625	4,270	4,595	5,019	5,320	5,665	6,346	7,036	7,870
Net income ($ millions)	404	272	459	545	787	323	306	366	276	303	530	382	441	385	394
Earnings per share	$2.74	$1.81	$3.10	$3.69	$5.39	$9.35	$8.63	$10.05	$7.46	$8.29	$8.69	$6.23	$7.15	$6.05	$6.09
Dividends per share	$1.83	$1.42	$1.75	$1.92	$2.42	$2.30	$2.55	$2.75	$3.03	$3.18	$2.18	$2.40	$2.50	$2.80	$2.80
Dividend yield	6.0%	3.2%	3.7%	4.8%	5.8%	5.9%	3.4%	3.2%	5.4%	6.8%	5.3%	3.9%	4.0%	6.8%	8.2%
Common stock prices															
High	$60	$45	$54	$45	$46	$70	$81	$100	$89	$60	$46	$67	$77	$62	$43
Low	28	29	39	35	33	39	41	76	52	44	32	40	56	40	34
Close	31	42	45	40	42	41	76	88	58	47	41	61	62	41	34
Closing P/E	11.3	23.2	14.5	10.8	7.8	4.4	8.8	8.8	7.8	5.7	4.7	9.8	8.7	6.8	5.6
Total capitalization	4,874	5,085	5,772	6,127	6,394	2,396	2,942	3,349	3,668	4,115	3,752	4,485	5,212	5,750	5,997
% Debt	16	17	22	21	17	25	29	27	28	30	26	30	32	30	28
% Preferred stock	5	5	4	4	4	-	-	-	-	-	-	-	-	-	-
% Common stock	79	78	74	75	79	75	71	73	72	70	74	70	68	70	72
Beta	1.22					1.43					1.05				
Interest coverage[a]	9.5	4.1	6.0	6.1	9.5	11.4	9.1	8.4	7.0	6.5	14.0	8.4	7.0	5.0	4.9
Bond rating[b]	AAA/Aaa					AA/Aa					A/Aa				

[a]Equal to earnings before interest and taxes divided by interest expenses. [b]Standard & Poor's rating/Moody's rating.

Exhibit 2 Financial Statements for Universal Paper and Other Selected Large Chemical Companies

	Universal Paper					Crown Zellerbach					International Paper				
	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978
Sales ($ millions)	1,867	1,902	2,136	2,248	2,525	1,172	1,767	2,136	2,318	2,467	3,042	3,081	3,541	3,669	4,150
Net income ($ millions)	149	109	154	168	191	125	75	98	109	112	263	218	254	234	234
Earnings per share	$3.60	$2.63	$3.72	$4.06	$4.61	$5.06	$3.01	$3.88	$4.34	$4.39	$5.95	$4.93	$5.60	$4.98	$4.94
Dividends per share	$0.75	$0.75	$0.75	$0.85	$1.00	$1.75	$1.80	$1.80	$1.83	$1.90	$1.75	$2.00	$2.00	$2.00	$2.00
Dividend yield	6.3%	3.9%	2.5%	2.8%	3.6%	7.5%	5.1%	4.0%	5.6%	6.2%	5.6%	3.5%	2.9%	4.6%	5.5%
Common stock prices															
High	$17	$21	$34	$36	$38	$40	$41	$49	$45	$38	$56	$62	$80	$70	$49
Low	10	12	18	24	26	20	24	36	32	29	32	35	58	39	35
Close	12	19	30	30	28	24	36	43	34	31	36	58	69	44	37
Closing P/E	3.4	7.1	8.1	7.4	6.0	4.7	12.0	11.6	7.8	7.1	6.1	11.8	12.3	8.8	7.5
Total capitalization	1,349	1,620	1,787	1,938	2,018	1,220	1,290	1,345	1,446	1,647	2,207	2,801	3,093	3,303	3,407
% Debt	30	29	32	32	33	33	33	31	30	34	33	41	34	32	28
% Preferred stock	--	--	--	--	--	1	1	1	1	1	-	-	-	-	-
% Common stock	70	71	68	68	67	66	66	68	69	65	67	59	66	68	72
Beta	1.52					1.03					1.43				
Interest coverage[a]	6.8	5.0	6.8	7.4	9.2	8.1	4.5	5.3	5.7	4.7	11.1	5.4	5.1	4.7	5.3
Bond rating[b]	A/Aa					A/A					AA/Aa				

	Mead Corporation					Kimberly-Clark					St. Regis Paper				
	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978
Sales ($ millions)	1,526	1,245	1,599	1,822	2,322	1,439	1,484	1,585	1,726	1,911	1,471	1,395	1,642	1,996	2,300
Net income ($ millions)	82	53	89	98	121	95	103	121	131	149	105	96	91	107	127
Earnings per share	$3.27	$2.05	$3.61	$4.10	$5.12	$4.10	$4.41	$5.21	$5.60	$6.36	$4.76	$4.27	$3.82	$3.36	$3.94
Dividends per share	$0.60	$0.80	$0.89	$0.98	$1.21	$1.48	$1.60	$1.80	$2.20	$2.60	$1.25	$1.43	$1.55	$1.66	$1.74
Dividend yield	9.2%	6.6%	4.4%	4.7%	6.8%	6.5%	4.4%	4.1%	5.1%	6.4%	7.3%	4.5%	4.2%	5.6%	6.4%
Common stock prices															
High	$13	$13	$23	$24	$34	$35	$37	$47	$48	$50	$37	$35	$31	$39	$35
Low	8	9	12	18	17	19	24	36	37	39	18	20	34	29	26
Close	9	12	21	22	23	25	37	44	43	41	19	34	39	31	28
Closing P/E	2.8	5.9	5.8	5.4	4.5	6.1	8.4	8.4	7.7	6.4	4	8	10.2	9.2	7.1
Total capitalization	826	880	965	1,071	1,171	1,030	1,086	1,196	1,347	1,435	1,127	1,189	1,296	1,694	1,791
% Debt	34	35	33	38	36	24	21	20	20	19	33	29	26	31	30
% Preferred stock	6	6	5	4	1	--	--	--	--	--	--	--	--	--	--
% Common stock	60	59	62	58	63	76	79	80	80	81	67	71	74	69	70
Beta	2.16					.99					1.14				
Interest coverage[a]	4.6	2.9	4.5	4.7	5.3	9.1	8.3	10.0	10.1	10.	7.6	7.2	6.1	5.6	5.9
Bond rating[b]	A/A					AA/Aa					NR/NR				

[a]Equal to earnings before interest and taxes divided by interest expenses. [b]Standard & Poor's rating/Moody's rating.

Exhibit 3 Sales and Capacity of Sodium Chlorate Producers in the United States

Year	Sales of Sodium Chlorate	Domestic Capacity	Average Price
1970	220,000 tons	270,000 tons	$129/ton
1971	260,000	300,000	136
1972	280,000	300,000	144
1973	300,000	320,000	152
1974	310,000	335,000	188
1975	270,000	355,000	243
1976	345,000	370,000	295
1977	380,000	385,000	367
1978	410,000	420,000	392
1979	435,000[a]	455,000	413[a]

[a]Expected.

Exhibit 4 Domestic Producers of Sodium Chlorate

Producer	Capacity	Plants	Capacity
Hooker Chemical Corporation	114,000 tons	Columbus, MS[a]	65,000 tons
		Taft, LA[a]	40,000
		Niagara Falls, NY	9,000
Pennwalt Corporation	72,000	Calvert City, KY[a]	37,000
		Portland, OR	26,000
		Tacoma, WA	9,000
American Chemical Corporation	65,000	Collinsville, Al[a]	40,000
		Wenatchee, WA	25,000
Kerr-McGee Corporation	63,000	Hamilton, MS[a]	33,000
		Henderson, NV	30,000
Inter. Minerals & Chemicals Corporation	40,000	Orrington, ME	40,000
Olin Corporation	20,000	McIntosh, Al[a]	20,000
ERCO Corporation	20,000	Monroe, LA[a]	20,000
Universal Paper Corporation	20,000	Rome, GA[a]	20,000
Georgia Pacific Corporation	15,000	Plaquemine, LA[a]	15,000
Brunswick Chemical Company	11,000	Brunswick, GA[a]	11,000
Southern Chemicals Corporation	10,000	Reigelwood, NC[a]	6,000
		Butler, Al[a]	4,000
Pacific Eng. And Prod. Co. of Nevada	5,000	Henderson, NV	5,000
U.S. Total	455,000 tons		455,000 tons
Southeastern U.S. Total			311,000 tons

[a]Plants serving the Southeastern U.S. market.

Exhibit 5 Financial Statements of Selected Sodium Chlorate Producers

	PENNWALT					KERR-MCGEE					INTERNATIONAL MINERALS AND CHEMICALS				
	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978
Sales ($ millions)	641	714	777	835	921	1,550	1,799	1,955	2,165	2,072	859	1,303	1,260	1,280	1,364
Net income ($ millions)	27	33	35	42	45	116	131	134	119	118	70	166	135	108	120
Earnings per share	$2.81	$3.25	$3.56	$4.23	$4.54	$4.64	$5.15	$5.19	$4.61	$4.57	$3.59	$9.91	$7.73	$6.09	$6.61
Dividends per share	$1.24	$1.36	$1.54	$2.25	$2.05	$.85	$1.00	$1.19	$1.25	$1.25	$.57	$1.38	$2.10	$2.45	$2.60
Dividend yield	7.4%	4.6%	4.9%	5.2%	6.7%	1.4%	1.4%	1.8%	2.7%	2.6%	1.9%	5.3%	5.9%	6.4%	7.4%
Common stock prices	$26	$30	$38	$39	$43	$93	$95	$83	$75	$53	$41	$49	$42	$44	$44
High	15	17	27	32	32	47	60	61	45	40	21	31	33	35	34
Low	17	28	33	39	33	72	70	68	47	48	39	38	41	41	35
Close	6.0	8.6	9.3	9.2	7.3	15.5	13.6	13.1	10.2	10.5	10.9	3.8	5.3	6.7	5.3
Closing P/E	371	441	469	500	524	851	1,091	1,325	1,433	1,533	577	781	990	1,083	1,161
Total capitalization	28	34	33	34	31	19	20	24	21	17	42	38	37	36	32
% Debt	--	--	--	--	--	--	--	--	--	--	10	4	2	1	1
% Preferred stock	72	66	67	66	69	81	80	76	79	83	48	58	61	63	67
% Common stock															
Beta	1.33					1.06					0.81				
Interest coverage[a]	2.9	3.3	3.8	4.1	4.2	19.4	17.1	10.8	8.4	6.4	5.5	11.6	8.4	5.5	6.3
Bond rating[b]	A/A					AA/Aa					NR/A				

	GEORGIA-PACIFIC					BRUNSWICK CHEMICAL					SOUTHERN CHEMICALS				
	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978	1974	1975	1976	1977	1978
Sales ($ millions)	2,432	2,359	3,038	3,675	4,403	1.9	2.1	3.0	4.0	4.3	1.7	2.0	2.7	3.6	3.9
Net income ($ millions)	164	148	215	262	302	.20	.15	.37	.71	.79	.10	(.05)	.28	.74	.73
Earnings per share	$1.74	$1.54	$2.12	$2.54	$2.93	$0.40	$0.30	$0.74	$1.42	$1.58	$0.61	$(0.24)	$1.38	$3.69	$3.66
Dividends per share	$0.47	$0.49	$0.70	$0.83	$1.03	$0.10	$0.10	$0.15	$0.35	$0.40	--	--	--	$0.30	$0.30
Dividend yield	3.1%	1.9%	2.1%	3.5%	4.5%	c	c	c	2.9%	3.5%	c	c	c	1.2%	1.3%
Common stock prices															
High	$27	$30	$37	$37	$33	c	c	c	13	14¼	c	c	c	28	31
Low	13	16	26	25	24	c	c	c	7½	9	c	c	c	11	20
Close	15	26	37	28	24	c	c	c	12	11½	c	c	c	25	23
Closing P/E	8.6	16.9	17.4	11.0	8.2	c	c	c	8.5	7.3	c	c	c	6.7	6.4
Total capitalization	1,935	2,150	2,045	2,541	2,878	1.8	1.9	2.1	2.6	3.2	1.6	1.5	1.8	2.4	3.0
% Debt	45	42	22	29	29	33	30	25	19	15	50	50	41	28	21
% Preferred stock	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
% Common stock	55	58	78	71	71	67	70	75	81	85	50	50	59	72	79
Beta	1.50					c	c	c	1.10		c	c	c	1.2	
Interest coverage[a]	4.3	4.4	8.1	9.9	9.3	6.7	5.0	12.3	47	53	3.5	0.4	9.0	22	24
Bond rating[b]	AA/Aa					Not Rated					Not Rated				

[a]Equal to earnings before interest and taxes divided by interest expenses. [b]Standard & Poor's rating/Moody's rating. [c]Stock not publicly traded.

Exhibit 6 Financial Statements for the Collinsville Plant ('000s)

	For the Years Ended December 31,					
	1974	1975	1976	1977	1978	1979[a]
Revenues						
Sales (tons)	36,899	30,819	37,464	40,076	39,790	38,507
Average price/ton	$188	$243	$295	$367	$392	$413
Sales ($000)	$6,937	$7,489	$11,052	$14,708	$15,598	$15,903
Manufacturing Costs						
Variable: –Power	$2,935	$3,395	$4,631	$5,530	$6,173	$6,759
–Graphite	354	369	545	653	689	714
–Salt and other	693	800	1,047	1,274	1,307	1,385
Total variable	$3,982	$4,564	$6,223	$7,457	$8,169	$8,858
Fixed: –Labor	$590	$608	$646	$739	$924	$1,072
–Maintenance	143	201	220	272	235	237
–Other	474	659	902	1,063	509	1,107
Total fixed	$1,207	$1,468	$1,768	$2,074	$1,668	$2,416
Total Manufacturing Costs	$5,189	$6,032	$7,991	$9,531	$9,837	$11,274
Other Charges						
Depreciation	$433	$394	$402	$391	$384	$399
Selling	114	92	126	155	181	204
R&D	105	154	207	274	351	429
Total	$652	$640	$735	$820	$916	$1,032
Operating Profit	**$1,096**	**$817**	**$2,326**	**$4,357**	**$4,845**	**$3,597**
ASSETS						
Accounts receivable	$701	$779	$1,128	$1,456	$1,575	$1,622
Inventories	254	544	681	647	639	651
Net PP&E	4,066	3,978	4,003	3,853	3,964	4,014
Total	$5,021	$5,301	$5,812	$5,956	$6,178	$6,287
LIABILITIES						
Accounts payable	$402	$472	$619	$780	$795	$873
Net Assets	**$4,619**	**$4,829**	**$5,193**	**$5,176**	**$5,383**	**$5,414**
Percent of Sales Ratios						
Power costs	42.3%	45.3%	41.9%	37.6%	39.6%	42.5%
Variable costs	57.4	60.9	56.3	50.7	52.4	55.7
Fixed costs	17.4	19.6	16.0	14.1	10.7	15.2
Manufacturing costs	74.8	80.5	72.3	64.8	63.1	70.9
Operating profit	15.8	10.9	21.0	29.6	31.1	22.6
Accounts receivable	10.1	10.4	10.2	9.9	10.1	10.2
Inventories	3.7	7.3	6.2	4.4	4.1	4.1
Accounts payable	5.8	6.3	5.6	5.3	5.1	5.5
Net assets	66.6	64.5	47.0	35.2	34.5	34.0
Operating Profit/Net Assets	**23.7**	**16.9**	**44.8**	**84.2**	**90.0**	**66.4**

[a]Expected.

Exhibit 7 Financial Statements of Dixon Corporation ('000s)

	For the Years Ended December 31,				
	1975	**1976**	**1977**	**1978**	**1979**
Sales	$19,128	$23,830	$28,348	$34,770	$42,259
Cost of goods sold	14,085	16,889	19,950	24,467	29,185
Selling and administrative	1,952	2,308	2,824	3,291	4,436
Research	325	388	593	682	716
Interest	400	320	240	160	80
Taxes	1,125	1,878	2,285	2,932	3,818
Profit after taxes	$1,241	$2,047	$2,456	$3,238	$4,024
Earnings per share	$1.13	$1.86	$2.23	$2.94	$3.66
Dividends per share	$.20	$.30	$.40	$.40	$.50
Cash and marketable securities	$385	$357	$556	$1,273	$2,996
Other current assets	4,208	5,016	5,939	7,267	8,917
Property, plant and equipment	7,436	7,895	8,354	8,842	8,918
Total assets	$12,029	$13,268	$14,849	$17,382	$20,831
Current liabilities	$2,314	$2,836	$3,402	$4,138	$5,113
Debt (incl. cur. mat.)	5,000	4,000	3,000	2,000	1,000
Stockholders' equity	4,715	6,432	8,447	11,244	14,718
Total liabilities	$12,029	$13,268	$14,849	$17,382	$20,831
Stock price range	$7–14	$8–22	$19–30	$25–40	$35–45
Closing stock price	$9	$20	$27	$38	$40 (10/30)
Beta	---	---	1.06	---	---
Bond rating	----	----	Not rated	----	----

[a]Expected.

Exhibit 8 Pro Forma Financial Statements for the Collinsville Plant ('000s)

	Expected 12/31	For the Years Ended December 31,				
	1979	1980	1981	1982	1983	1984
Revenues						
Sales (tons)		32,000	35,000	38,000	38,000	38,000
Average price/ton		$415	$480	$520	$562	$606
Sales ($000)		$13,280	$16,800	$19,760	$21,356	$23,028
Manufacturing Costs						
Variable: –Power		$6,304	$7,735	$9,386	$10,526	$11,780
–Graphite		645	791	875	940	992
–Salt and other		1,285	1,621	1,753	1,836	1,956
Total variable		$8,234	$10,147	$12,014	$13,302	$14,728
Fixed: –Labor		$1,180	$1,297	$1,427	$1,580	$1,738
–Maintenance		256	277	299	322	354
–Other		1,154	1,148	1,179	1,113	1,153
Total fixed		$2,590	$2,722	$2,905	$3,015	$3,245
Total Manufacturing Costs		$10,824	$12,869	$14,919	$16,317	$17,973
Other Charges						
Selling		$112	$125	$138	$152	$168
R&D		451	478	508	543	591
Depreciation		$1,060	$1,110	$1,160	$1,210	$1,270
Total		$1,623	$1,713	$1,806	$1,905	$2,029
Operating Profit		$833	$2,218	$3,035	$3,134	$3,026
ASSETS						
Accounts receivable	$1,622	$1,328	$1,680	$1,976	$2,136	$2,303
Inventories	651	598	756	889	961	1,036
Net PP&E	10,600	10,025	9,440	8,840	8,230	7,560
Total	$12,873	$11,951	$11,876	$11,705	$11,327	$10,899
LIABILITIES						
Accounts payable	873	730	924	1,087	1,175	1,267
Net Assets	$12,000	$11,221	$10,952	$10,618	$10,152	$9,632
Percent of Sales Ratios						
Power costs		47.5%	46.0%	47.5%	49.3%	51.2%
Variable costs		62.0	60.4	60.8	62.3	64.0
Fixed costs		19.5	16.2	14.7	14.1	14.1
Manufacturing costs		81.5	76.6	75.5	76.4	78.0
Operating profit		6.3	13.2	15.4	14.7	13.1
Accounts receivable		10.0	10.0	10.0	10.0	10.0
Inventories		4.5	4.5	4.5	4.5	4.5
Accounts payable		5.5	5.5	5.5	5.5	5.5
Net assets		84.5%	65.2%	53.7%	47.5%	41.8%
Operating Profit/Net Assets		7.4%	20.3%	28.6%	30.9%	31.4%

[a]These pro forma financial statements were based on the following assumptions: (1) Continued use of **unlaminated** graphite electrodes; (2) Though excess industry capacity would hold price increases to less than 8% annual rate in 1980, by 1984 the average annual price increase over the period 1979–1984 was assumed to equal 8%; (3) Power costs per KWH would increase 12% per year; (4) Depreciation would increase because Dixon would have written up the value of the Collinsville plant to $10.6 million.