

It is further ordered, that the respondents herein shall, within sixty (60) days after service upon them of this order, file with the Commission a report in writing setting forth in detail the manner and form in which they have complied with this order.

IN THE MATTER OF
DIAMOND ALKALI COMPANY

ORDER, OPINION, ETC., IN REGARD TO THE ALLEGED VIOLATION OF SEC.
7 OF THE CLAYTON ACT

Docket 8572. Complaint, May 16, 1963—Decision, Oct. 2, 1967

Order requiring a Cleveland, Ohio, manufacturer of industrial chemical products to divest itself within one year of a Youngstown, Ohio, manufacturer of portland cement to a purchaser approved by the Commission.

COMPLAINT

The Federal Trade Commission, having reason to believe that the party respondent named in the caption hereof, and hereinafter more particularly designated and described, has violated and is now violating the provisions of Section 7 of the Clayton Act (U.S.C., Title 15, Sec. 18), as amended, hereby issues its complaint pursuant to Section 11 of the aforesaid Act (U.S.C., Title 15, Sec. 21) charging as follows:

PARAGRAPH 1. Respondent, Diamond Alkali Company, hereinafter sometimes referred to as "Diamond Alkali," is a corporation organized and existing under the laws of the State of Delaware, with its office and principal place of business located at 300 Union Commerce Building, Cleveland 14, Ohio.

PAR. 2. Respondent is now and has been for many years prior to August 31, 1961, engaged in the business of manufacturing

and selling portland cement under the brand name "Standard Portland Cement."

Its cement manufacturing plant is located in Painesville Township, Ohio, and has an annual capacity now rated at about 2,700,000 barrels.

In addition to manufacturing and selling cement, respondent is engaged nationally in the production and marketing of a wide variety of basic chemicals and plastics.

PAR. 3. For many years prior to August 31, 1961, the Bessemer Limestone and Cement Company, hereinafter sometimes referred to as "Bessemer," was a corporation organized and existing under the laws of the State of Ohio, with its office and principal place of business located at 800 Stambough Building, Youngstown, Ohio.

During said period of time, Bessemer was engaged in the business of manufacturing and selling portland cement, marketing its product under the brand name "Bessemer."

Its cement manufacturing plant, located in the Borough of Bessemer, Lawrence County, Pennsylvania, has an annual rated capacity of about 3,000,000 barrels.

In connection with an as an integral part of its cement manufacturing business, Bessemer quarried and processed limestone, an essential raw material in the manufacture of cement, at facilities adjacent to its cement plant.

PAR. 4. On or about August 31, 1961, Diamond Alkali acquired all of the outstanding stock of Bessemer, which consisted solely of Common Stock, by exchanging therefor 270,322 shares of its \$4 Preferred Stock on the basis of one share thereof for three shares of Bessemer's Common Stock, and by making an aggregate payment of about \$48,000 to holders of Bessemer's Common Stock who, on the basis of said exchange, were entitled to a fractional share of Diamond's Preferred Stock.

Each share of Diamond Alkali's Preferred Stock is convertible, at the option of the holder, into 1.3 shares of its Common Stock which at the time of said exchange was selling for approximately \$72 per share.

PAR. 5. Bessemer, in the course and conduct of its business prior to said acquisition, and Diamond Alkali in the course and conduct of its business prior to said acquisition, at the time thereof, and continuously thereafter, were, respectively, engaged in commerce as defined in the Clayton Act as amended, each of them having sold or shipped portland cement, or having caused it to be sold or shipped, from the state in which it was manufactured to customers located in other states.

Complaint

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PAR. 6. In 1960, the last full year prior to said acquisition on August 31, 1961, the cement sales and the total sales of respondent and of Bessemer were, in millions of dollars, approximately as follows:

	1960 Sales	
	Cement	Total
Respondent	\$7.1	\$138.3
Bessemer	\$6.4	\$ 9.7

In 1961, the cement sales and the total sales of respondent, including said sales of Bessemer for that entire year were, in millions of dollars, approximately as follows:

	1961 Combined Sales	
	Cement	Total
Respondent and Bessemer	\$13.2	\$148.9

The net income of respondent and of Bessemer for the year 1960 were, in millions of dollars, approximately as follows:

	1960
	Net Income
Respondent	\$11.7
Bessemer	\$ 1.5

As of December 31, 1960, the current assets and the total assets of respondent and of Bessemer were, in millions of dollars, approximately as follows:

	Assets of December 31, 1960	
	Current	Total
Respondent	\$47.9	\$142.9
Bessemer	\$ 5.5	\$ 12.2

PAR. 7. For many years prior to and until the time of said acquisition respondent sold substantially all of its production of portland cement within the section of the country consisting of northeastern Ohio and northwestern Pennsylvania, hereinafter referred to as the relevant geographic area and more specifically defined as including Erie, Huron, Richland, Lorain, Ashland, Cuyahoga, Medina, Wayne, Summit, Stark, Lake, Geauga, Portage, Ashtabula, Trumbull, Mahoning and Columbiana counties in Ohio and the counties of Erie, Crawford, Mercer, Lawrence, Warren and Venango in Pennsylvania.

Bessemer, in 1960, sold approximately sixty-five percent of its portland cement in the relevant geographic area. Its remaining

portland cement sales were made in adjacent areas of eastern Ohio, western Pennsylvania, northern West Virginia and north-eastern Maryland.

PAR. 8. For many years prior to the acquisition, respondent and Bessemer were competitively engaged with each other and eleven other concerns in the sale of portland cement in the relevant geographic area.

All of these thirteen concerns, except Bessemer, were either multi-plant producers of cement, or, like respondent, producers with only one cement plant but which plant was a part of a larger industrial enterprise. Bessemer was the last independent, single-plant cement producer in the relevant geographic area.

Of the total unit sales of portland cement in the relevant geographic area in 1960, respondent, with more than 20 percent thereof, had the largest share; and Bessemer, with about 15 percent thereof, had the third, if not the second largest share. As a result of said acquisition, respondent's share of portland cement sales in the relevant geographic area is in excess of one-third.

PAR. 9. The effect of respondent's acquisition of Bessemer, as above alleged, may be substantially to lessen competition or tend to create a monopoly in the manufacture and sale of portland cement in the relevant geographic area in the following ways, among others:

(1) Bessemer, with the third, if not the second largest market share, and the last remaining independent firm, has been eliminated;

(2) Respondent, with the largest market share, has substantially increased its dominant position;

(3) Respondent has substantially enhanced its competitive position by acquiring essential raw material reserves of Bessemer;

(4) Concentration has been so substantially increased that respondent's market share is more than one-third;

(5) Actual and potential substantial competition between Bessemer and respondent and between Bessemer and other competitors in said geographic area has been destroyed;

(6) Purchasers of cement for use in the preparation of ready-mixed concrete and in other products and materials have been deprived of a substantial and independent source of supply; and

(7) Entry of new competitors may be inhibited or prevented.

Prior to the acquisition of Bessemer, respondent had, and subsequent to the divestiture of Bessemer will have, such a dominant competitive position in the sale of portland cement in the

relevant geographic area that the effect of any acquisition by respondent of any of the stock or assets of any other corporation engaged in commerce and in the sale of portland cement in the said area may also be as above alleged.

PAR. 10. The acquisition of Bessemer by respondent, as above alleged, constitutes a violation of Section 7 of the Clayton Act (U.S.C., Title 15, Sec. 18), as amended.

Mr. Michael G. Kushnick, Mr. Robert L. Heggen and Mr. George A. Mathewson supporting the complaint.

Jones, Day, Cockley & Reavis, Cleveland, Ohio, by Mr. Allen C. Holmes, Mr. Richard W. Pogue, Mr. Ernest A. E. Gellhorn, Mr. David L. Foster, and Mr. John S. Walker; and Mr. John A. Wilson, Cleveland, Ohio, for respondent.

INITIAL DECISION BY EDWARD CREEL, HEARING EXAMINER

MAY 15, 1964

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The complaint herein, issued May 16, 1963, charged that Diamond Alkali Company violated Section 7 of the Clayton Act by its acquisition, in August 1961, of all the outstanding stock of The Bessemer Limestone and Cement Company. The complaint alleged that the effect of Diamond's acquisition of Bessemer may be substantially to lessen competition, or to tend to create a

monopoly in the manufacture and sale of portland cement in an area comprised of 17 counties in northeastern Ohio and 6 counties in northwestern Pennsylvania, and alleged certain specific adverse effects on competition flowing from this acquisition.

Respondent's answer, filed June 20, 1963, denied the charges of the complaint, particularly as to the claimed relevant geographic market and the alleged effects of the acquisition; the answer also set forth a summary of the history of Diamond's manufacture of portland cement, including the financial and physical plight of that operation, which conducts its cement business under the name "Standard Portland Cement," sometimes hereinafter referred to as "Standard."

Three prehearing conferences were held at which procedures were developed for obtaining statistical information, and the parties agreed to file trial briefs which they were directed to exchange. Substantially continuous hearings were held from November 4, 1963, to January 6, 1964.

This proceeding is before the hearing examiner for final consideration upon the complaint, answer, testimony and other evidence, and proposed findings of fact and conclusions filed by counsel for respondent and by counsel supporting the complaint. Consideration has been given to the proposed findings of fact and conclusions submitted by both parties, and all proposed findings of fact and conclusions not hereinafter specifically found or concluded are rejected as being inaccurate or as not being material, and the hearing examiner, having considered the entire record herein, makes the following findings of fact, conclusions drawn therefrom, and issues the following order:

FINDINGS OF FACT

The Respondent

Respondent, Diamond Alkali Company (hereinafter sometimes referred to as "respondent," "Diamond Alkali," or "Diamond"), is a corporation organized and existing under the laws of the State of Delaware, with its office and principal place of business located at 300 Union Commerce Building, Cleveland 14, Ohio. The company was organized under the laws of Delaware on December 28, 1928. (Answer; CX 3.)

Diamond Alkali manufactures and sells a number of industrial chemical products, which are generally classified as basic chemicals, organic chemical products, plastics, and miscellaneous non-chemical products, including cement. In 1961, Diamond Alkali

operated 15 manufacturing plants located in various parts of the United States. (CX 3; Tr. 1228.)

Respondent is and has been in a sound financial condition. In 1960 its assets were above \$142 million, and in 1962 its assets were above \$175 million. In 1960 its sales were above \$138 million, and in 1962 its sales were above \$158 million. (CX 1A and C.)

Respondent manufactures its "Standard" brand portland cement at its Painesville, Ohio, cement plant, described below, which is part of its Cement-Coke Division. Apart from The Bessemer Limestone and Cement Company, respondent has never owned or operated any cement plant other than the Standard plant at Painesville, and it has never made any other corporate acquisition relating to cement (Tr. 236).

Less than 10 percent of respondent's 1962 sales of \$158,731,000 was derived from the sale of cement (Tr. 1228; CX 7A). Respondent does not sell concrete, and it does not sell other products to the purchasers of cement, nor does it buy other than very small amounts of products from such purchasers (CX 1; Tr. 2162).

Respondent's Standard cement plant, composed of two plants designated as Plant A and Plant B at Painesville (about 30 miles northeast of Cleveland) is part of respondent's Painesville Works, a facility which also contains certain of respondent's chemical manufacturing operations (Tr. 236, 1229, 1233). The cement plant occupies only a small part of the approximately 100 acres at the Painesville Works (Tr. 1619).

Respondent entered into the manufacture and sale of cement in 1924 because of the availability at the Painesville Works of a limestone sludge which was a waste product of the caustic soda manufacturing operation there (Tr. 1602-03, 1628). The limestone sludge had no commercial value, could not be stored, and presented a serious disposal problem (Tr. 1603, 1628-29). However, it was usable as the primary raw material in the manufacture of cement, thereby reducing respondent's overall cost of cement (Tr. 1603).

As a result of a change in the technology of producing chemical caustic soda, about 1936, the limestone sludge which was formerly a waste product was no longer available for the Standard plant (Tr. 1606). Since that time, respondent has obtained its basic raw material, limestone, from quarries in northern Michigan, approximately 350 miles from Painesville (Tr. 242-45), at a high cost compared to the costs incurred by some of its competitors obtaining limestone from quarries immediately adjacent to their plants (Tr. 242-44, 1232-33, 1670-71, 1775, 1915-17).

The Standard plant as built in 1924 (Plant A) had a rated capacity of approximately 800,000 barrels annually (Tr. 238, 1607). In the 1930's additions were made to Plant A so that its rated capacity just before World War II was approximately 1.2 million barrels annually (Tr. 238, 1608). No other changes were made in the rated capacity of Plant A until it was closed in November 1961 (Tr. 1619-20).

Following World War II, Plant A became a high-cost facility which was increasingly expensive to operate (Tr. 309, 1647, 1770). The high costs resulted from obsolete equipment in the plant, its lack of an adjacent limestone source, its unusual and burdensome labor problems arising from its position in the middle of a chemical works, and its heavy maintenance costs arising out of, among other things, a serious soil subsident situation at Painesville (Tr. 239, 309, 1608-11, 1617-19, 1647, 1657, 1670, 1672-73, 1770, 1660-67; RX 83).

The production of cement is one of the most destructive manufacturing processes existing in any industry (RX 13, p. 9). The pulverizing and grinding of limestone to a fine powder, the heating of a slurry mixture of limestone, clay, or shale in the kiln to a temperature of 2700° Fahrenheit to create a highly abrasive cement clinker (CX 50, 51), and the grinding of the clinker into a powder, all create extraordinarily severe operating conditions in the kilns and mills (Tr. 363-64). The kilns, which are the heart of facilities for manufacturing cement, have an expected life of 40 years, if properly used and carefully maintained (Tr. 1804).

By 1954, the rotary kilns in Plant A had had 30 years of nearly continuous use. During that time Plant A had not always been operated properly and at times had not had adequate maintenance (Tr. 1770). The kilns were small and inefficient compared to the large automated kilns in use in most cement plants (Tr. 1668-69; RX 13); the other equipment in Plant A, such as the coolers and the raw and finish grinding mills, was also inefficient (Tr. 239, 309).

In 1954, a highly trained engineer became general manager of the Cement-Coke Division, and therefore of the Standard plant with instructions to rehabilitate Plant A and to see what could be done to make the Division profitable (Tr. 1643-47). Despite this action, the rate of deterioration of the equipment in Plant A accelerated after 1954 (Tr. 294).

During the period of great demand for cement in the early 1950's, Diamond determined to increase the cement manufacturing

capability of the Standard plant to a rated capacity of 2.5 to 2.7 million barrels annually by the utilization of both used and new equipment (Tr. 239, 1647).

This decision resulted in the construction of Plant B, which in large part involved a conversion to cement manufacture of two technologically obsolete rotary lime kilns which had been used in the production of caustic soda since 1938 but were no longer needed (Tr. 239, 1614, 1772-73). Two finish grinding mills, one raw grinding mill, and some clinker storage capacity were also added (Tr. 239, 290).

The conversion of the lime kilns from the production of caustic soda to the manufacture of cement clinker resulted in an "improvised unit" which has not been completely successful because these two manufacturing operations are substantially different (Tr. 1647-49).

The equipment in Plant B has deteriorated badly and today is inefficient in comparison with the modern plants of some of respondent's competitors (Tr. 293-94, 1232, 1656, 1668-69, 1803-05).

The rotary kilns installed in Plant B rest on steel foundations or supports 25 feet high; no other cement kilns in the United States have steel foundations. The fact that the piers or foundations for the kilns were steel instead of concrete resulted in serious vibrations which have abnormally increased the kiln shell deterioration causing cracks in both kilns (Tr. 293-94, 1804). Because of the vibrations, together with soil subsidence and the prior use of the kilns in caustic soda operations, the rotary kilns became warped and cracked, and have required constant and expensive maintenance (Tr. 1232, 1656, 1803-05). The kilns in Plant B are approximately 25 years old (Tr. 294, 1656, 1804).

The Plant B kilns are approximately one-third the size of a modern cement kiln, and their instrumentation is obsolete and limited in scope (Tr. 1668-69). The arrangement, size and design of the kilns prevent the economic installation of modern instrumentation (Tr. 1669).

Respondent purchases limestone, the basic raw material used in the manufacture of cement, for its Standard plant from a quarry at Rogers City, Michigan, about 350 miles from Painesville, Ohio (Tr. 242-45). Respondent has its limestone transported by lake freighter, under contract, to a dock at Fairport Harbor, Ohio, approximately 1¼ miles from the Standard plant (Tr. 242, 1232-33). The limestone is unloaded into storage at the dock, reloaded onto hopper cars, and transported by an independently

owned railroad into the plant for unloading and storage (Tr. 242, 1232-33). Because of purchase, transportation, and handling expense, the limestone cost into storage at the Standard plant is \$2.65 per ton (Tr. 1670, 1775, 1915-17). Standard's cost is about twice that of The Bessemer Limestone and Cement Company (Tr. 1670-71).

Investigations of possible alternative sources of limestone for the Stanadrd plant have failed to develop any suitable source affording lower costs than respondent incurs in buying stone from northern Michigan (Tr. 1236, 1306-07, 1673-74). The large resources of cement grade surface limestone in deposits in Ohio and Pennsylvania (Tr. 1303-04, 1306-07; RX 50) are generally suitable for cement production but are not a feasible source for the Standard plant because of high limestone rail rates to Painesville (Tr. 1306-07, 1673). Respondent investigated methods (such as conveyor belts) of transporting limestone from the dock at Fairport Harbor to the Standard plant other than its present costly system, but concluded that the expense of installation involved in the alternative methods could not be justified (Tr. 1671). It is not considered practicable to mine the low-grade limestone approximately 1,000 feet below the surface of the Painesville Works because nearby salt brining operations have made it a hazardous operation and because of the high cost (Tr. 1304, 1315, 1605-06).

Respondent's lack of an adjacent limestone quarry has a significant effect upon the production cost of its Standard plant (RX 83). The cost of purchasing limestone has increased 5 percent since July 1, 1963 (Tr. 1670).

The Standard plant has high labor costs which are attributable in major part to labor practices not normal in cement manufacturing plants. These practices, which arise from the nature of respondent's Painesville Works as a complex of different manufacturing operations, include plant-wide seniority, a penalty provision designed to curtail contracting-out of various activities, a central maintenance system, and a high degree of craft specialization in the maintenance labor force (Tr. 1608-14, 1657, 1660-67).

By the middle of 1959, there was a substantial body of opinion among respondent's management that it could not profitably continue to produce cement at the Standard plant (Tr. 1616-17). Plant A was closed in 1961 and is being torn down (Tr. 305-06, 1244, 1620, 1670).

Plant A was closed down in November 1961 and the kilns there

have not been operated since that time (Tr. 305-06, 1244, 1620). Bids were requested for the dismantling and sale of the equipment in Plant A, but only token amounts were offered by bidders (RX 47, 48). The stack of Plant A was being torn down in December 1963, and negotiations had been entered into with wreckers "to remove the equipment in Plant A within the next two or three months" (Tr. 1244, 1670). The decision to close Plant B was formally recorded by Executive Committee action on August 15, 1963, and this action was later approved by the Board of Directors of respondent (Tr. 1620; RX 44, 45, 46). Buyers have expressed an interest in purchasing this equipment (Tr. 1655-56).

The decision to discontinue cement production at Painesville and at the subsequent formal actions implementing this decision, were based upon various considerations including the following:

Operation of the Standard cement plant had been either barely profitable or unprofitable. Except for the peak demand years of 1955 and 1956 shortly after Plant B began operations, the Standard plant's return on sales has never exceeded 3.2 percent since 1949 (except 1959, when Medusa's Wampum plant was closed the last half of the year because of a strike (Tr. 1235; CX 2B, p. 3; CX 43; CX 61A). It lost \$182,000 after taxes in 1962 (CX 43); and it lost \$206,000 after taxes in 1963 (based upon the first 10 months of 1963, RX 61A). The acquired Bessemer plant, as hereinafter found, was an efficient producer of cement.

Management considered, but rejected, the idea of improving or modernizing the Standard plant (Tr. 1617-18). Management had also concluded that "it would be a very foolish thing to build a cement plant apart from its limestone supply" (Tr. 1617), a conclusion which was later given added support when following the acquisition management discovered that The Bessemer Limestone and Cement Company's limestone costs were about 30 cents per barrel of cement less than Standard's limestone costs (Tr. 1618).

Even though Diamond did not have a modern, efficient cement plant, it had a substantial organization with a number of technical personnel and the ability to employ men having a wide variety of technical skills (Tr. 300-01, 360-61). Diamond had been in the cement business for more than 30 years and had developed the necessary know-how to conduct such a business (Tr. 300, 1239). Therefore, as part of the consideration of what to do about the situation at the Standard plant and about utilization of these talents, Mr. Welshans, Manager of the Cement-Coke Division, at the request of management reviewed possible solutions other than

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attempted rehabilitation of the Standard plant by construction of new facilities at the Painesville Works (Tr. 1235-36). The possibilities of importing cement clinker from Canada or Puerto Rico were studied (Tr. 1236); however, the difficulty of maintaining supervision over production to insure adequate quality control and the projected lack of profitability of this proposal prevented its adoption (Tr. 296-97). Management also considered the possibilities of selling the Standard plant or of entering into a joint venture with another company, but the difficulties of separating the Standard plant from the Painesville Works prevented the implementation of this concept (Tr. 1242-43, 1622-23). Mr. Welshans recommended, and management agreed, that Diamond should utilize its know-how and management skills by acquiring The Bessemer Limestone and Cement Company (Tr. 1237-39).

In August 1961, respondent's sales area for cement was northeastern Ohio and northwestern Pennsylvania. This area constitutes the Ohio counties of Ashland, Ashtabula, Columbiana, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Mahoning, Medina, Portage, Richland, Stark, Summit, Trumbull, Wayne, and the Pennsylvania counties of Crawford, Erie, Lawrence, Mercer, Venango, and Warren. (CX 5C; Tr. 248.)

All of respondent's preacquisition sales of cement, with minor exceptions, were made within the above-described 23-county area.

Respondent's sales of portland cement in recent years from its Painesville plant were as follows:

	Barrels	Dollars
1959	2,303,914	\$7,716,611
1960	2,040,302	7,138,819
1961	2,024,472	7,031,355
1962	1,850,434	6,189,569
(CX 5B, 7A)		

The Bessemer Limestone and Cement Company

Prior to its acquisition on August 31, 1961, The Bessemer Limestone and Cement Company (hereinafter sometimes referred to as "Bessemer") was a corporation organized and existing under the laws of the State of Ohio, with its office and principal place of business located at 800 Stambough Building, Youngstown, Ohio. It was incorporated in Ohio on July 15, 1919. (Answer; CX 5B, 13.)

For many years prior to its acquisition and continuously thereafter, The Bessemer Limestone and Cement Company was engaged

in the manufacture and sale of portland cement, marketing its product under the brand name "Bessemer." A mortar cement, not a portland cement, was also manufactured by Bessemer. In addition, Bessemer's only other business was processing and selling limestone for use as a blast furnace flux, but this business accounted for less than 10 percent of total sales in recent years. (Answer; CX 3, 5C, 13C.)

At the time of its acquisition, Bessemer was a highly successful company, as indicated by the figures below:

	Total Sales	Net Income	Total Assets
1958	\$9,970,000	\$1,668,345	\$11,128,671
1959	11,952,481	1,968,504	11,705,513
1960	9,733,830	1,552,004	12,239,460
			(CX 2.)

At the time of its acquisition, Bessemer operated one cement manufacturing plant located in the Borough of Bessemer, Lawrence County, Pennsylvania, fifteen miles southeast of Youngstown, Ohio. This plant had an annual capacity to produce cement of approximately 3 million barrels. Bessemer's quarries and processing facilities for limestone are located adjacent to its cement plant. (Answer; CX 12B; Tr. 325.)

The Bessemer cement plant was constructed in 1920 with three kilns. These kilns have been completely rehabilitated and are in condition to operate efficiently until at least 1971. In 1956, a completely integrated new addition to the cement manufacturing facilities was completed at a cost of approximately \$6 million which doubled the capacity of the original plant. (CX 13D; Tr. 323-5.)

At the time of its acquisition, the Bessemer management was actively engaged in plans for improving and expanding existing facilities. It planned to spend approximately \$11 million over the following four-year period to add another new kiln and grinding mills, construct a new quarry road, and purchase additional trucks. Diamond Alkali has proceeded with this modernization program since acquiring Bessemer. (Tr. CX 8A; Tr. 1244, 355-6.)

The lands owned and leased by Bessemer contain its quarries and its reserves of shale and limestone, the major raw materials required for cement manufacture. Present reserve deposits are ample to meet the needs of Bessemer for these materials for the next fifty years, allowing for a possible doubling of the productive capacity. Bessemer also owns or controls approximately 2 million

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tons of coal suitable for use at the cement plant. (CX 3, 8B, 13B and C.)

At the time of its acquisition about two-thirds of Bessemer's sales were in the same 23-county area of northeastern Ohio and northwestern Pennsylvania in which Standard's sales were made. The remainder of its cement was shipped to destinations in northern Ohio, western Pennsylvania, northern West Virginia, Maryland, and southwestern New York. A document containing figures from some *in camera* exhibits has been prepared and filed by counsel supporting the complaint and is often referred to herein as "*in camera* Appendix." (*In camera* Appendix I; CX 13B and C, 16, 3, p. 17; Tr. 321, 346.)

Bessemer's sales of portland cement in barrels and dollars in recent years were:

	Barrels	Dollars
1958	2,024,655	\$6,779,099
1959	2,480,135	8,260,083
1960	1,898,612	6,479,772
1961*	1,839,153	6,248,796
1962*	2,007,323	6,559,150

*Operated as a division of Diamond Alkali after September 1, 1961. (CX 5C, 7A.)

The Acquisition

On or about August 31, 1961, respondent acquired all of the outstanding stock of Bessemer by exchanging therefor 270,322 shares of its \$4 Preferred Stock on the basis of one share for three shares of Bessemer's stock. Each share of Diamond Alkali's preferred stock was convertible, at the option of the holder, into 1.3 shares of its common stock, which at the time of said exchange, was selling for approximately \$72 per share. On the basis of these figures the acquisition was valued at more than \$25 million, although at the time the agreement was reached to exchange stock, the value of respondent's stock was considerably less.

The Bessemer Limestone and Cement Company was merged into the Diamond Alkali Company on August 31, 1961. The acquired company is operated as the Bessemer Cement Company Division of respondent, and the manager of respondent's Cement-Coke Division is also president of Bessemer.

Bessemer and Standard have continued to operate separate sales forces with separate sales managers (Tr. 681, 1690). There has been no allocation of customers between Standard and Bes-

semer, nor is there evidence of any intention to allocate the sales efforts between the two organizations (Tr. 1805-06).

Respondent has improved the sales effort of the Bessemer sales staff, new salesmen have been brought into the organization, an intensive training program has been instituted, and more effective supervision has been provided (Tr. 1695). Respondent has also continued the modernization of the Bessemer plant according to the plan initiated by Bessemer's management prior to the acquisition (Tr. 301-05, 355-58, 1244). The modernization program, the next phase of which will be completed in 1964, will increase capacity, and should improve the efficiency of the Bessemer plant, reduce costs, and permit the production of even higher quality cement (CX 1A).

Interstate Commerce

Bessemer, in the course and conduct of its business prior to its acquisition, and Diamond Alkali in the course and conduct of its business prior to its acquisition of Bessemer, at the time thereof, and continuously thereafter, were, respectively, engaged in commerce as defined in the Clayton Act, as amended, each of them having sold or shipped portland cement, or having caused it to be sold or shipped from the State in which it was manufactured to customers located in other States. (Answer.)

Product Line of Commerce—Portland Cement

Portland cement is a product which possesses unique and peculiar characteristics and uses sufficient to distinguish it from all other products. Portland cement has little utility alone, but is a material which, in the presence of water, binds aggregates such as sand and gravel into concrete. As a practical matter, there is no substitute for portland cement in the manufacture of concrete, which is a widely used building material. (CX 50, p. 1; CX 51, p. 7; Tr. 226, 334, 403, 1087.)

Portland cement is produced by burning, in a kiln at a temperature of approximately 2700° Fahrenheit, a finely ground mixture of limestone, or other lime bearing material, and some additives. The kiln product, called clinker, when ground to a fine powder and mixed with a small amount of gypsum results in a portland cement. (CX 51, p. 4; Tr. 240.)

The several basic phases in the production of portland cement are (a) the quarrying and crushing of limestone and other raw materials, (b) the raw grinding and mixing of materials into a dry mixture or wet slurry. (c) the burning or calcining of the

mixture in rotary kilns to a semi-finished substance known as clinker, and (d) the cooling of the clinker and its final grinding with gypsum added, into cement. (CX 50.)

The term "portland cement," as used in this proceeding, includes Types I through V of portland cement as designated by the American Society for Testing Materials, with any additives thereto or any variation of such types with or without such different additives. It also includes the product known as "portland slag cement" in all its various types. Neither masonry nor white cement are included. More than 90 percent of the cement produced at Standard and Bessemer are Types I and II which are considered the "bread and butter cement of the industry." Portland cement is the principal variety of cement manufactured in the United States. (Tr. 4, 1675.)

The units of cement measure recognized by the trade are the "barrel" which consists of 376 pounds of portland cement, and the "sack" which consists of 94 pounds of portland cement. Portland cement weighs 94 pounds per cubic foot. (CX 51, p. 6.)

The principal customer for portland cement are ready-mixed concrete firms, manufacturers of concrete products, contractors, and building material dealers. Ready-mixed concrete producers account for more than 50 percent of the portland cement consumed. Portland cement is normally sold to volume users in bulk. Sacked cement is generally limited to building material dealers who handle cement for resale. (RX 59, p. 21; Tr. 312, 340, 374, 403.)

The Portland Cement Association is a national organization whose membership is comprised of the vast majority of the cement producers in the United States and Canada. Its principal activities involve research, development, technical services, and promotion, and "are primarily designed to improve and extend the uses of portland cement and concrete." (CX 50, back cover; Tr. 1709-13.)

It is concluded from the facts found above that since both Diamond Alkali and Bessemer manufactured and sold portland cement, and since it was only in the sale of this product that there was actual and direct competition between the two companies, portland cement is the appropriate product line of commerce to consider in testing the probable effect of the challenged acquisition.

Section of the Country

Respondent contends that the relevant section of the country in which to determine the probable effect of this merger is "the

area in which are located the suppliers to whom buyers of cement located in the areas in which Standard and Bessemer market cement, can turn," and that the proof shows that this is an area made up essentially of the States of Michigan, Ohio, Pennsylvania, West Virginia, and Maryland, and the western tip of New York (including Buffalo). It is argued that *United States v. Philadelphia National Bank*, 374 U.S. 321, which cites with approval *Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320, supports its contention. As respondent states, the relevant geographic market in Tampa was the entire 7-State area in which were located suppliers who "could serve" the Florida customer. It was assumed in the Tampa case that all of the suppliers in this area could serve the Florida customers equally, and that the Florida customers could turn to any of them. In the present case, it is not believed that the buyers in the area where Standard marketed could turn to all of the suppliers who marketed in the wide area of 5 States, plus a part of New York. It is believed that since only a limited number of these suppliers solicit and sell in the market area supplied by Standard, that they are the only suppliers that should be considered, and the only mills or terminals of these suppliers that should be considered are those which deliver into the Standard area. For these reasons, the part of this broader area beyond the Standard area is not an area in which it would be expected that there would be adverse effects caused by this acquisition. In the *Philadelphia National Bank* case the Court considered the competitors to be those who were actually located in and doing business in the 4-county area in which the two banks did business. The 23-county area in which Standard marketed is not a separate market separated by natural or other barriers from other markets, but is an area containing many local markets for cement which are separate and distinct from each other. This is the geographic area which contains all the local markets where respondent and Bessemer competed. It appears that this is the area where any significant effects of the acquisition would most likely be found.

Each of these separate local markets could be considered, and it is believed that the metropolitan Cleveland market, which is probably the most important single local market in this entire area, is of sufficient economic significance to be considered a "section of the country" as that term is used in the statute, and that the acquisition could be appraised in this market alone. In Cuyahoga County, Ohio, where Cleveland is located, Standard had 37.76 percent of cement sales and Bessemer had 10.25 percent in 1960, which means that these two firms, now merged, had 48

percent, or almost half of that market in that year. In 1961, the year during which the merger occurred, Standard had 34.58 percent and Bessemer 10.16 percent, or a total of 44.74 percent of this market.

There were only 7 other suppliers in this market during these years, and one of these had only token sales. (*In camera*, Appendix III B and C.)

Although appraising the merger in the Cleveland market appears to meet the test of "section of the country," because the legislative history indicates that "section of the country" was intended to mean any area larger than a small town, it nevertheless appears appropriate in this case to consider the entire area where the two firms competed, which is the 23 counties in northeastern Ohio and northwestern Pennsylvania. Although respondent considered this area as constituting its pre-acquisition market, it was, in an economic sense, an area which contained a great many local markets.

The 23-county area may be fairly considered to have been the area of effective competition between respondent and Bessemer because at the time of the merger they were important competitors in these counties. It is true that they were of less importance in some counties than in others, but that is not to say that overall statistics may not be appraised instead of appraising the competitive importance of the two firms in each county separately.

The relevant section of the country for evaluating the immediate and direct effects of the challenged acquisition is, as counsel supporting the complaint contends, the area of actual competition between respondent and Bessemer in the manufacture and sale of portland cement. The sales area served by the Standard Portland Cement plant of respondent is northeastern Ohio and northwestern Pennsylvania which includes the following 23 counties: Erie, Huron, Richland, Lorain, Ashland, Cuyahoga, Medina, Wayne, Summit, Stark, Lake, Geauga, Portage, Ashtabula, Trumbull, Mahoning, and Columbiana counties in Ohio and the counties of Erie, Crawford, Mercer, Lawrence, Warren, and Venango in Pennsylvania. (CX 5C, para. 6, 6B, 7, 38; Tr. 248.)

During each of the years immediately preceding the acquisition and in the year thereafter, respondent sold from 99 to 100 percent of its Standard brand portland cement in the above defined 23-county area. During this period, Standard brand cement salesmen solicited solely in the 23-county area. Lawrence County, Pennsylvania, was apparently unassigned, but shipments were made by respondent into that county in 1960 and 1961. The assigned sales

area for 1963 includes only the 17 designated Ohio counties and the previously solicited Pennsylvania counties with the addition of McKean County. (CX 5, 6, 7, 39; RX 64A.)

This same 23-county area into which respondent shipped its cement also constituted a large part of Bessemer's market. During each of its last two years of separate operation, Bessemer shipped 66 percent of its portland cement into this area of competitive overlap. Following the acquisition, Bessemer's shipments into this 23-county area accounted for approximately 60 percent of its total shipments. Outside of this area there was no actual competition between respondent and Bessemer. (CX 5, 6, 7, 38; *in camera* Appendix I.)

Prior to its acquisition by respondent, 8 of Bessemer's 14 cement salesmen solicited in various portions of the 23-county area in competition with the Standard brand cement salesmen. In 1963, following the merger, 7 of the 12 cement salesmen employed by the Bessemer Division continued to solicit in various parts of the Standard brand marketing area. (CX 39; RX 64.)

Prior to its acquisition of Bessemer, and continuously thereafter, respondent competed with the following companies in the sale of portland cement in various parts of the 23-county area: The Bessemer Limestone and Cement Company, Diamond Portland Cement Company, Dundee Cement Company, General Portland Cement Company, Huron Portland Cement Company, Lehigh Portland Cement Company, Green Bag Cement Company (a subsidiary of Marquette Cement Manufacturing Company), Medusa Portland Cement Company, Penn-Dixie Cement Company, Columbia Cement Corporation (a subsidiary of Pittsburgh Plate Glass Company), Southwestern Portland Cement Company, and Universal Atlas Cement Company. (CX 5E; Tr. 270, 274.)

The contiguous group of 23 counties lying south of Lake Erie, which comprises northeastern Ohio and northwestern Pennsylvania, constitutes a significant market area in which to test the effects of the acquisition. Situated therein are the large metropolitan areas of Cleveland, Akron, Canton, and Youngstown in Ohio; and Erie, Pennsylvania. This area had a population of approximately 5 million in 1960. The total quantity of cement consumed in this area exceeded 7 million barrels in each of the years 1959 through 1962. (CX 54-55; Tr. 465; *in camera* Appendix II.)

Portland cement is a heavy product in relation to its value which is generally less than one cent per pound. Shipping costs therefore are critical and generally restrict the market area for each producing plant. Respondent recognized the local nature of the

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cement business indicating in its Annual Report that cement is "normally marketed within 150 miles of the plants." (CX 1B, p. 29; 3, p. 2; 51, p. 3; Tr. 408.)

Cement manufacturers attempt to distribute the major portion of their product in areas closely adjacent to their mills. The majority of the suppliers to the 23-county area variously stated that from 75 to 90 percent of their production is sold within a 75 to 100 mile-radius of their respective plants. In fact, the Lehigh Cement Company does not generally solicit beyond 140 miles from its Buffalo plant. (Tr. 899, 372, 638-9, 835, 926, 934, 981, 1017.) Only two of the suppliers to the 23-county area, Huron and Dundee, have broader distribution patterns.

Portland cement is a homogeneous product which cannot be sold at a higher price than the lowest delivered price prevailing at a given destination. While most cement companies quote their customers an f.o.b. mill price plus full freight to the destination, they reserve the right to meet a lower competitive price. When such lower price exists the other sellers must meet it by absorbing the additional freight or not sell their cement. (Tr. 255, 383-4, 627-8, 799.)

The practice of absorbing freight prevalent in the industry, limits the geographic area in which a cement producer can profitably market his product. As the supplier gets further from his plant and closer to that of his competitor the amount of freight that he is required to absorb to be competitive increases, and the return to the company decreases. When the return to the company gets sufficiently low, sales in that area will not be attractive and the producer will not be willing to meet the lower prevailing price. (CX 5C, para. 6; Tr. 256, 385, 644-5, 733, 798, 839, 895, 899, 1568.)

The ability to supply prompt and effective delivery to consumers is another factor which further limits the competitive area of a cement plant. Although the return may be considered satisfactory to the company, the service afforded may not be adequate to obtain the business. (Tr. 259, 347, 379, 798, 839, 982.)

During the period following World War II the amount of portland cement shipped directly to consumers by truck has increased substantially throughout the cement industry. Of the companies serving the 23-county area an average of more than 85 percent of their cement is delivered by truck to the customers. The remaining portion is generally transported by rail with insignificant quantities moving by barge. Both respondent and Bessemer ship in

excess of 90 percent of their cement by truck. (RX 4, p. 6; Tr. 373, 630, 726, 793, 832, 887, 928, 933, 978, 1018, 1055.)

Truck movement provides many advantages for the customer. The utilization of trucks affords exact scheduling and prompt and speedy delivery not always available from the railroads. Smaller quantities, approximately 100 to 130 barrels for truck versus 400 for rail, require less storage on the part of the buyer. In addition, a truckload of bulk cement can be blown into the customer's bins pneumatically, eliminating the cost to the consumer of emptying railroad cars, which is estimated to be from 5 to 10 cents per barrel. Furthermore, consumers no longer find it necessary to be located on the railroad or pay the expenses incident to hauling the cement from the siding to the plant. (Tr. 266-8, 373, 379, 414-5; RX 4, p. 6.)

The advent of truck delivery has generally reduced the marketing reach of cement plants in that it has developed a demand for "split-second" delivery previously unknown to the industry. Customers will not wait for cement from more distant suppliers if they can get it in half the time from closer sources. They generally require numerous deliveries a day (sometimes as many as 15 truckloads). Consequently, customers will turn to the company or companies which are so located as to give the fastest delivery. (RX 13, p. 4; Tr. 888, 374, 798, 928, 645.)

Furthermore, many cement consumers have limited storage facilities which have increased the demand for rapid truck delivery and eliminated the more distant producers as practical sources of supply, unless they have conveniently located storage terminals. (Tr. 374, 899.)

Universal Atlas considers itself at a service disadvantage in supplying the Cleveland area by truck from its Fairborn, Ohio, plant, 185 miles away. Furthermore, good service to points beyond 150 miles, by truck alone, is not something that can be depended upon on a regular basis. (Tr. 259, 375, 642, 644, 889.)

The amount of freight absorption required when a more distant supplier provides truck delivery is generally greater than when delivery is by rail. Truck rates and rail rates both start out with a basic rate and then increase as you move further from the plant. Truck rates tend to appreciate more rapidly than do rail rates, so that at a more distant point the truck rate is generally higher than the rail rate. (Tr. 376-7.)

Interstate Commerce Commission regulations prohibit a truck driver from driving more than 10 hours, or working more than 12 hours, during a 24-hour period. Therefore, when a driver cannot

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reach a destination and return within the prescribed driving time, truck rates appreciate rapidly due to the added "lay-over" expenses of the driver and the poor utilization of equipment. This requirement makes deliveries by truck more than 200 miles unattractive to the supplier. (Tr. 376-7.)

Shipments to customers directly by rail, which may result in lower transportation costs to the more distant producer, cannot fulfill the demand for rapid delivery which is necessary to make these producers competitive. Relatively few customers are so situated to take delivery by rail. Those who desire rail shipment must anticipate their needs well in advance as it takes as much as 3 or 4 days to accomplish delivery, assuming that the necessary cars are available at the mill. The consumer must have adequate storage or pay demurrage for the rail cars. In the event of inclement weather, when concrete is not generally poured, this demurrage can result in considerable expense to the consumer. In addition, the purchaser must bear the extra cost of unloading. (Tr. 266, 375, 379, 522, 1869.)

Another factor which limits the sales area of a cement plant is the ability to sell enough cement in a given area to support the cost of a salesman. The volume of cement which the producer anticipates selling must be of sufficient quantity to make it worthwhile to devote the time and money to obtain the business. (Tr. 379, 644.)

It has been estimated that the salary and expenses of a salesman equal approximately \$9 to \$12 thousand per year. These costs are considered before determining to solicit in any new area. Except under unusual circumstances consumers buy only from companies whose salesmen solicit them. (Tr. 1702, 1797, 1807.)

Competitors in the Relevant Geographic Market

The following eleven cement producers competed for the sale of portland cement during the years 1959 through 1962 with both respondent and Bessemer in all or various portions of the 23 counties constituting "northeastern Ohio and northwestern Pennsylvania." (CX 5E; Tr. 270, 274.)

Lehigh Portland Cement Company. The Lehigh Portland Cement Company, Allentown, Pennsylvania, operates 13 portland cement manufacturing plants throughout the United States. Lehigh's manufacturing plant located at Buffalo, New York, with an annual capacity of 2,340,000 barrels serves western New York and some northern border counties of Pennsylvania. Lehigh actively solicited and competed with both respondent and Bessemer in Erie and

Warren counties, Pennsylvania. (Tr. 370, 386, 542; CX 57; RX 25.)

Penn-Dixie Cement Corporation. Penn-Dixie Cement Corporation, New York, New York, operates ten portland cement manufacturing plants and serves the area where Standard sells from plants located at Buffalo, New York (capacity 2,016,000 barrels), and West Winfield, Pennsylvania (capacity 1,908,000 barrels). (Tr. 923, 924, 932; CX 70; RX 29.)

The sales area of Penn-Dixie's Buffalo plant is western New York and the northern border counties of Pennsylvania which were Erie, Warren, McKean, and Potter counties. The market area of Penn-Dixie's West Winfield plant is western Pennsylvania and some eastern border counties of Ohio. Penn-Dixie actively solicited and competed with Standard in all the Pennsylvania counties in which Standard sold, and in Columbiana, Mahoning, and Trumbull counties in Ohio. (Tr. 926, 933, 937; CX 70; RX 29.)

Universal Atlas Cement. Universal Atlas Cement, New York, New York, a division of United States Steel Corporation, operates ten portland cement manufacturing plants all located east of the Rocky Mountains. Universal's manufacturing plants at Universal, Pennsylvania (capacity about 2,800,000 barrels), and at Fairborn, Ohio (capacity about 2,500,000 barrels), serve the market served by Standard. (Tr. 623, 657; CX 60; RX 33.)

The sales area of the plant at Universal, Pennsylvania, is western Pennsylvania and some border counties of eastern Ohio. Universal's Fairborn plant markets its cement primarily in southern and eastern Ohio, and in parts of Indiana and Kentucky. Universal competed with both respondent and Bessemer in all of the Pennsylvania counties in which Standard sold, and in Lorain, Cuyahoga, Columbiana, Mahoning, Richland, and Trumbull counties in Ohio. (Tr. 637, 639, 641, 642, 650-52, 665; CX 60; RX 33.)

Green Bag Cement Company. Green Bag Cement Company, Pittsburgh, Pennsylvania, which was acquired by Marquette Cement Manufacturing Company in 1961, operates a cement manufacturing plant at Neville Island, Pennsylvania. This Neville Island plant (capacity 1,500,000 barrels), serves western Pennsylvania, northern West Virginia, and northeastern Ohio. Green Bag actively solicited and competed with respondent and Bessemer in western Pennsylvania and in Ashtabula, Columbiana, Cuyahoga, Lorain, Mahoning, Portage, Summit, and Trumbull counties in Ohio. (Tr. 1016, 1017, 1020, 1007-9; CX 72; RX 27.)

Columbia Cement Corporation. Columbia Cement Corporation, Columbus, Ohio, a wholly owned subsidiary of Pittsburgh Plate

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Glass Company, operates two portland cement manufacturing plants, both of which are located in Ohio. Columbia's plants at Zanesville, Ohio (capacity 3,200,000 barrels), and at Barberton, Ohio (capacity 1,500,000 barrels), serve the area served by Standard. (Tr. 785-9; CX 67; RX 19.)

The Barberton plant was constructed in 1959 at a cost of approximately \$9 million. As a result of its construction, Columbia's sales area was expanded throughout northeastern Ohio. Previously, Columbia served certain portions of the northeastern Ohio area from its Zanesville plant. (Tr. 791-2, 794, 799.) The principal sales area of Columbia's Zanesville plant is southern Ohio. The sales area of the Barberton plant is northeastern Ohio, southwestern Pennsylvania, Mercer County, Pennsylvania, and northern West Virginia. Columbia actively solicited and competed with both Standard and Bessemer throughout the Ohio portion of Standard's market. (Tr. 789, 796, 797, 803; CX 67; RX 19.)

Southwestern Portland Cement Company. Southwestern Portland Cement Company operates five portland cement manufacturing plants located throughout central and southwestern United States. Southwestern's manufacturing plant, located at Fairborn, Ohio, has an annual capacity of 3 million barrels and serves southwestern Ohio and parts of Indiana and Kentucky. Southwestern actively solicited and competed with both Standard and Bessemer only in Richland County, Ohio. (Tr. 883-7, 892; CX 69; RX 31.)

General Portland Cement Company. General Portland Cement Company operates ten portland cement manufacturing plants located throughout the central and southern portions of the United States. General's manufacturing plant, located at Paulding, Ohio (capacity 2,500,000 barrels), serves the Standard area. (Tr. 827, 853; CX 68; RX 9, 22.)

General's Paulding plant markets its cement in southern Michigan, northern Indiana and northwestern Ohio. General actively solicited and competed with both Standard and Bessemer in Ashland, Erie, Huron, Lorain, and Richland counties in Ohio. (Tr. 834-5, 838-9, 844-5; CX 68; RX 9, 22.)

Dundee Cement Company. Dundee Cement Company, Dundee, Michigan, operates one portland cement manufacturing plant, located at Dundee, Michigan (capacity 5,500,000 barrels), which supplies five distribution terminals located in Illinois, Michigan, and Ohio. Holderbank Financiere, a large cement operating group with affiliated cement companies in Canada, Europe, and South America, holds the principal interest in Dundee. The Dundee plant

was constructed in 1959 at an approximate cost of \$26 million. Dundee's distribution terminal located at Cleveland, Ohio, serves northeastern Ohio. Dundee actively solicited and competed with both Standard and Bessemer throughout the Ohio portion of the market served by Standard. (Tr. 507, 513, 526, 548; CX 59; RX 3.)

Huron Portland Cement Company. Huron Portland Cement Company, Detroit, Michigan, a subsidiary of National Gypsum Company, operates one portland cement manufacturing plant, the Nation's largest, at Alpena, Michigan (capacity 14 million barrels), and thirteen distribution terminals located on the Great Lakes. These terminals are served by company-owned bulk cement transport ships. Among these terminals are those located at Buffalo, New York, Cleveland, Ohio, and Toledo, Ohio. (Tr. 706-9; CX 65; RX 6, 34.)

The sales area of Huron's Cleveland distribution facility is northeastern Ohio. Huron's Buffalo distribution facility supplies primarily western New York and the northern border counties of Pennsylvania, while the Toledo facility serves western Ohio. Huron actively solicited and competed with both Standard and Bessemer in all Ohio counties served by Standard, and in Erie and Warren counties, Pennsylvania. (Tr. 729, 730, 731, 737, 738; CX 65-66; RX 6, 34.)

Diamond Portland Cement Company. Diamond Portland Cement Company, Division of the Flintkote Company, Middlebranch, Ohio, operates a portland cement manufacturing plant located at Middlebranch, Ohio, and a distribution facility located at Cleveland, Ohio. Both Diamond Portland's Middlebranch, Ohio, plant (capacity 3 million barrels) and its Cleveland, Ohio, distribution facility serve the Standard marketing area. Diamond Portland's sales area covers "northeastern Ohio, northwestern Ohio down to Columbus, northern West Virginia, southern Ohio, [and] western Pennsylvania up to Erie County, Pennsylvania." Its principal sales area is the Canton-Akron-Cleveland area. (Tr. 976-7, 980; CX 71; RX 20.)

Medusa Portland Cement Company. Medusa Portland Cement Company operates five portland cement manufacturing plants and five distribution terminals located in the north central portion of the United States. Medusa's manufacturing plant located at Wampum, Pennsylvania (capacity 2,500,000 barrels), and its distribution facilities located at Oakwood, Ohio, and Baybridge, Ohio, serve the Standard marketing area. (Tr. 1053, 1054, 1059, 1068; CX 75-76; RX 14.)

Medusa, after expanding the capacity of its Wampum plant, closed its cement manufacturing plant at Baybridge, Ohio, in 1959. The Baybridge plant was old, having been constructed in 1893, and the raw material supply was almost depleted. The area previously served by the Baybridge plant is now supplied from the Wampum plant. (Tr. 1054, 1069-70, 1072.)

Medusa's Wampum plant serves northeastern Ohio, western Pennsylvania, and northern West Virginia, and a few counties in southwestern New York. The principal area served by Medusa's Baybridge distribution facility is the Ohio counties of Erie and Huron, and a portion of Lorain. The principal area served by Medusa's Oakwood distribution facility is the remainder of Lorain and Cuyahoga, Medina and Summit counties in Ohio. Medusa actively solicited and competed with both respondent and Bessemer throughout the Standard marketing area. (Tr. 1056, 1066, 1068; CX 75-76; RX 14.)

More Distant Plants

Cement producers in Michigan (with the exception of the two having terminals in Cleveland), southern Ohio, West Virginia, Maryland, and eastern Pennsylvania, are not, nor have they been during the period 1959 through 1962, practicable sources of supply to consumers located in the 23-county area of northeastern Ohio and northwestern Pennsylvania. None of these plants made significant shipments into the 23-county area or competed with Standard in the sale of portland cement. (Tr. 270-8, 1731, 392, 649, 1563-4, 1569-70, 1588-90; CX 5E; RX 14, 17, 18, 21, 23-30, 32, 33.)

The Lehigh Valley in eastern Pennsylvania has the largest concentration of cement producing capacity in the United States. There are 15 plants in the "Valley," and two others in adjacent areas of eastern Pennsylvania. The principal market for these producers is the industrial northeast, although most of them made some small shipments into eastern Pennsylvania. (Tr. 2238, 656; CX 77; RX 51, 17, 18, 21, 23-26, 28, 29, 33.)

In order for these eastern Pennsylvania mills to sell their cement in the northwestern Pennsylvania market, it would be necessary for them to extend their present western market fringe by an additional 120 miles. Cement executives stated that they did not ship even as far west as Pittsburgh from the Lehigh Valley, as they considered it to be uneconomical and would place them at a severe service disadvantage. (Tr. 1568-9, 2239, 2241, 2244.)

Cement companies have historic markets and customer relationships which they have cultivated throughout the years, and which they are desirous of preserving. It is not realistic to assume that they would divert their entire production into a given area to obtain short-run gains in the event of a price rise, thereby abandoning their existing markets. (Tr. 1098, 2241, 2244, 285, 981, 1589, 2208.)

There is no evidence of shipments of portland cement into the 23-county area from the mills located at Lime Kiln, Maryland, Martinsburg, West Virginia, and Detroit, Michigan (the Detroit plant of the Peerless Cement Company listed Lorain County, Ohio, as a shipping destination only in 1959; while the exact quantity is not available, it would have to be less than 20 thousand barrels, the reported figure for the group of Ohio counties (RX 24)), or from Silica, Superior, and Ironton, Ohio, which respondent contends competed with Bessemer. These mills do make shipments into some other areas served by Bessemer. For reasons similar to those set out for the Lehigh Valley mills, these plants are not alternative sources of supply to the 23-county area. (RX 14, 18, 24, 27, 32.)

The vice president of the Alpha Portland Cement Company, which operates the plants at Lime Kiln and Ironton, stated that his company has no plans to expand the sales territories of these plants into the 23-county area as the freight absorption would be "exorbitant" and they could not give effective service in competition with the closer mills. The combined shipments of these Alpha plants, as well as the one in the Lehigh Valley, never amounted to more than 2 percent of total shipments into the Bessemer market area. Tr. 1568-70, *in camera* Appendix IV.)

The president of the Standard Lime and Cement Company, which operates the plant at Martinsburg, West Virginia, stated that his company considers the Baltimore-Washington area as its traditional and principal market and that it has no plans of expanding into the 23-county area. Neither western Pennsylvania nor Ohio are considered attractive areas for Standard Lime and Cement, due to distance involved. Martinsburg is 80 miles west of Washington, D.C., in the West Virginia panhandle. Standard Lime and Cement accounted for from 0.5 percent to 2.15 percent of total shipments in Bessemer's market area during the period 1959 through 1962. (Tr. 1589-90, 1595; *in camera* Appendix IV.)

The plant at Superior, Ohio, is operated by the Marquette Cement Manufacturing Company, which owns the Green Bag plant at Neville Island. It competed with Bessemer only in West

Virginia and its shipments therein accounted for approximately $\frac{1}{2}$ of 1 percent of the total portland cement shipments in Bessemer's market. The plant at Silica, Ohio, is owned by Medusa, which presently serves the Standard market area from its plant at Wampum, Pennsylvania. (RX 14, 27; *in camera* Appendix IV.)

Innovations in Distribution

Distribution Terminals. The increased use of trucking has in some instances caused more distant cement producers to construct distribution terminals in the markets they wish to hold. While it is possible that these terminals may be used to expand the market area of a cement mill, some of them have been constructed as "defensive" moves to protect existing markets where more strategically located competitors can offer better truck delivery service. (Tr. 800, 859, 1065, 1578; RX 4, p. 7; RX 13, p. 4.)

Distribution terminals are large storage silos, ranging in capacity from approximately 9 thousand barrels to over 200 thousand barrels, which are capable of receiving bulk cement by rail, truck, or water. Cement is then transferred from these silos into trucks for delivery to customers. These distribution terminals usually cost from \$200 thousand to \$3 million to construct. (Tr. 423, 473, 985, 1002, 1064; CX 59D, 65C-E, 71B; RX 11, page 3; RX 59, page 6.)

Three distribution terminals were constructed within the 23-county area (all in metropolitan Cleveland) during the 1960's. They were built by Medusa, Diamond Portland, and Dundee. Medusa had traditionally been a supplier to this market from its plants at Baybridge, Ohio, and Wampum, Pennsylvania. With the closing of Baybridge in 1959, all of its cement for the Cleveland area was supplied from Wampum, approximately 100 miles away. Medusa considered its determination to construct a terminal in Cleveland as a "defensive move" required by the necessity of affording as good service as its competitors. (Tr. 263, 1064-6.)

The Diamond Portland Cement Company had been a supplier to northeastern Ohio, since the turn of the century, from its plant at Middlebranch, Ohio, approximately 50 miles south of Cleveland. Diamond Portland felt "forced" to construct a distribution terminal in Cleveland in 1962 in order to "stay in the market." While they believed they could serve Cleveland adequately from their plant, they felt it necessary to add to their service in view of the terminals being constructed by their competitors. However, Diamond Portland makes little use of this terminal due to the additional costs of putting cement through the facility. Only 10 percent

of its cement sold in Cleveland was delivered through the terminal facilities. (Tr. 983.)

The Dundee Cement Company constructed its Cleveland distribution facility in 1960 as part of its initial entry into the cement business. Although the plant is only 120 miles from Cleveland, its officers felt the terminal to be necessary to supply effective truck service to its customers. Furthermore, its construction demonstrated that Dundee would be a regular source of supply to northeastern Ohio by virtue of the sizeable financial investment in the terminal. Dundee also makes some shipments from its plant in southeastern Michigan directly to customers in northeastern Ohio. (Tr. 518, 526, 528, 606.)

The Huron Portland Cement Company has had a deep-water distribution terminal in Cleveland since the 1920's, and has been a regular source of supply to northeastern Ohio since that time. It serves its terminal by company-owned bulk cement transport ships from its plant in Alpena, Michigan. Its present facility was purchased from the Lehigh Portland Cement Company in the mid-1950's. Prior to that time, Lehigh operated the terminal as a grinding facility served with clinker transported by water from its Buffalo plant. With the sale of the terminal, Lehigh has withdrawn from the sale of portland cement in northeastern Ohio. (Tr. 713, 723-4, 398.)

Multiple Carload Rates. Multiple carload rates are separately negotiated by the shipper and the railroads to apply to quantity shipments from a specific origin to a specific destination. Generally these rates are applicable only to quantity shipments of five railroad cars, each having a minimum weight of 140,000 pounds (approximately 375 barrels). Their principal use is in supplying distribution terminals, but they may be negotiated to serve a large construction job. (Tr. 373, 517, 1065, 1403-20; RX 57.)

The Dundee Cement Company negotiated multiple-car rates, resulting in a saving of approximately 11 cents per barrel, on shipments from Dundee, Michigan, to its distribution terminal in Cleveland Ohio. The Medusa Portland Cement Company also received multiple-car rates on shipments from Wampum, Pennsylvania, to its distribution terminal in Cleveland, Ohio, with the resulting saving of approximately 10 cents per barrel. The saving on such shipments from the Middlebranch, Ohio, plant of Diamond Portland to its Cleveland terminal is less than 4 cents per barrel. (Tr. 1065-66, 517-18; RX 57.)

The "Bazooka." The "bazooka" is a device for transferring cement from a railroad car to a truck for delivery to a customer.

It has little applicability to serving the day-to-day trade where any substantial volume is involved. Its principal use is to serve remote highway or other construction jobs where the prior movement is by rail and the last few miles by truck, and is generally removed after the job is supplied. (Tr. 872, 735, 912, 1708.)

There is no evidence that the "bazooka" has been used in the Standard sales area, but it is a device which materially decreases the time and expense of unloading rail cars, and might well be used by a seller who wishes to ship into this area by rail and deliver to the customer by truck.

The "Big Bertha." Movable distribution terminals have been used by respondent's competitors to reduce a producer's costs in serving remote areas or in entering new areas (Tr. 767-69, 867-70) because they can be moved (substantially reducing the capital commitment) and can be purchased at a lower cost than the nonmovable type (Tr. 957-60). Similar advantages are obtained from large portable storage tanks developed in the last two years, which are known as "Big Berthas" (Tr. 767-69, 867-70). They are pneumatic tanks which are usually placed next to a contractor's storage bin; cement is transferred into the tank, stored, and transferred pneumatically into the contractor's bin as the need arises (Tr. 767). They increase the utilization of trucking equipment to service large jobs by permitting the carrier to fill the "Big Berthas" at night with trucks which are available to service other customers in the area during the day (Tr. 767-68). The "Big Berthas" also enable a producer to provide rapid service to a customer at a point substantially distant from the distributing point since the "Big Berthas" can be transported by a large truck or rail car; they do not have to be dismantled for shipment (Tr. 767-68, 869). This device may also be used by a seller who wished to extend his delivery area.

The "Flexi-Flo" System. The "flexi-flo" system is a method of combined rail-truck shipment of bulk products recently proposed by the New York Central Railroad. This system envisions the initial shipment of cement from the producing point in specially constructed railroad cars with pneumatic transfer into trucks for delivery to the consumer. The contemplated rate structure for the "flexi-flo" system, which must be approved by various regulatory agencies, is apparently higher than prevailing all-truck rates up to distances of approximately 140 miles, but beyond that point, "flexi-flo" rates will be lower. The proposed rates include truck delivery within 10 miles of the transfer point. The "flexi-flo"

system, according to the New York Central's representative, is designed to supply the shipper with low-cost rail transportation on long hauls combined with the flexibility of truck delivery to the consumer. (Tr. 1844-1903; RX 80-82.)

Evidence of Effects of Acquisition

Market Structure

Prior to its acquisition, Bessemer was a substantial and successful competitor in the relevant geographic market. It was strategically located to serve the growing industrial complex of Cleveland, Akron, and Youngstown. Furthermore, it was the second largest supplier of portland cement (with approximately 17 percent of total shipments) to northeastern Ohio and northwestern Pennsylvania. Its gross sales ranged from \$9 million to \$12 million annually and it was in sound financial condition. (CX 2A-C, 12; Tr. 354-5; see *in camera* Appendix II.)

Portland cement consumers generally have more than one source of supply. This practice developed after the shortage period when customers could not obtain all of their cement needs from one supplier. (Tr. 457, 541)

Although there were 13 separate cement companies supplying the relevant market area prior to the acquisition, only 7 of these companies, including Bessemer, solicited throughout the 23-county area. These 7 companies accounted for 93 percent of the total shipments into the relevant market area. The remaining companies supplied only various portions of the market area. Cement consumers in the relevant area were solicited by an average of 7 cement companies. (RX 58, p. 31; see *in camera* Appendix III a-d.)

The acquisition of Bessemer by respondent eliminated a substantial independent factor which had competed in the sale of portland cement in northeastern Ohio and northwestern Pennsylvania.

The cement industry in the United States has reflected a marked increase in the trend toward concentration by merger. During the period 1955 through 1961, there were 22 mergers involving cement companies. In 1961, there were 50 cement manufacturing companies as compared to 62 in 1958. (CX 62, 74, 80.)

In 1960, the 4 largest suppliers of cement to northeastern Ohio and northwestern Pennsylvania accounted for 71 percent of the shipments, and following the acquisition, the 4 largest suppliers accounted for 79 percent of the shipments. (See *in camera* Appendix II.)

Respondent, the largest supplier of portland cement to the relevant geographic area, substantially increased its market share from approximately 27 percent to 43 percent as a result of the acquisition, an increase of more than 50 percent. (See *in camera* Appendix II; Tr. 2201-2.)

Likelihood of New Entries

The relevant geographic area is served by a number of cement suppliers with excess capacity, and is consequently unattractive to enter. It would seem unlikely that any company not presently selling in the relevant market would make the necessary large capital investment, of from \$15 to \$30 million, to construct a new cement plant to serve this area, while there is excess capacity in the area. (Tr. 465, 511, 473, 479, 893, 1090, 1569, 1589.)

The possibility of an existing cement company, not presently soliciting in the relevant market area, expanding into the 23-county market through the construction of a distribution facility which could distribute in large volume also appears unlikely in the near future.

Although it seems likely that firms not now selling in the Standard area may do so through the use of portable containers, large rail cars, unloading devices, combined rail-truck rates, and other innovations, there is no reason to believe that these methods will allow or persuade a cement manufacturer to become a regular source of supply to the relevant geographic area. While these devices may allow a more distant producer to serve an occasional construction project, such volume would not be expected to alter the existing market structure. (Tr. 872, 735, 912, 1785.)

During the last five years, there has been only one new cement supplier to the Standard geographic area, Dundee. (Tr. 538; *in camera* Appendix II.)

Survey of Consumers

At the request of respondent, Dr. Hans Zeisel, a professor of law and sociology at the University of Chicago, designed and conducted a survey, which was introduced as evidence in this proceeding (RX 58). Dr. Zeisel is a recognized authority in the field of surveys and a scholar with qualifications in several fields, including law and economics (Tr. 1441-45). The survey report prepared by Dr. Zeisel had two parts: Part I was a sampling survey which purported to test opinions of the effect of respondent's acquisition of Bessemer upon all "consumers" (a term used to refer to purchasers and brand specifiers) of cement located in the 88-county area in which Bessemer sold cement; Part II was

a census survey of identical questions asked of all "common customers" of Standard and Bessemer, *i.e.*, customers who made at least one purchase of cement from Standard, and also Bessemer, during the 4-year period, 1959-1962 (RX 58).

Dr. Zeisel's survey was made in response to the request of respondent's counsel that Dr. Zeisel explore whether the consumers of cement in the areas where Standard and Bessemer sold had experienced any adverse effects as a result of the Bessemer acquisition (Tr. 1451-52).

The survey was prepared and conducted throughout in accordance with scientific sampling, statistical and survey procedures. Dr. Zeisel considered himself responsible for the questionnaire, and was of the opinion that he had adequately advised himself of all facts needed to formulate the proper questions (Tr. 1519, 1531). Great care was taken to insure that none of the questions in the survey questionnaire was ambiguous, misleading, or contained a hidden bias (Tr. 1479). The design of the survey was a clustered random sample (except for the portion which was a census survey of "common customers") (Tr. 1537-44). The field work, or actual interviewing, was conducted by National Opinion Research Center of the University of Chicago, a survey organization which has done extensive work for various government agencies (Tr. 1452). Interviewers were given complete instructions, and were instructed not to say anything of relevance about the survey which was not in the questionnaire, extreme care was taken to see that they did not have knowledge that the survey was to be used in litigation (Tr. 1454, 1481). Proper interview supervision and accurate data compilations were assured by the procedures followed (Tr. 1448, 1463, 1467).

Survey findings as to consumers of cement in the Bessemer area included the following:

(1) Eighty-five percent of all consumers purchased more than one brand of cement during the 5-year period preceding the fall of 1963 (RX 58, p. 11). The median number of brands of cement purchased, specified, or solicited for during this same 5-year period was 5 (RX 58, p. 14). Only 14 percent of the consumers purchased, specified, or were solicited by less than 3 brands; 10 percent purchased, specified, or were solicited by 9 or more brands (RX 58, p. 14).

(2) Ninety-four percent of all consumers would prefer not to have more cement salesmen call on them than were then doing so, and 4 percent stated no preference; only 2 percent (the median number of brands purchased and solicited by in this 2 percent

group was 4) wanted more salesmen to call on them (RX 58, p. 15).

(3) Comparing the 2-year period 1960-1961 with 1962-1963, 16 percent of the consumers of cement stated that the quality of cement had gone up in the latter period, 77 percent stated that quality had remained the same (RX 58, p. 16). Comparing these same 2-year periods, 38 percent of the consumers stated that quality of service from cement suppliers had become better in the latter period; 59 percent stated that it had remained the same (RX 58, p. 19).

(4) Ninety-nine and six-tenths percent of all consumers stated that they had not experienced any adverse effects from the acquisition of Bessemer by respondent (RX 58, p. 23).

The results of the census survey of the "common customers" of Standard and Bessemer included the following:

(1) Ninety-six percent of all "common customers" purchased more than one brand of cement during the 5-year period preceding the fall of 1963 (RX 58, p. 28). The median number of brands purchased, specified, or solicited for, by all the "common customers" during this same 5-year period was seven (RX 58, p. 31). Of all "common customers," 98 percent purchased, specified, or were solicited by 3 or more brands, and 30 percent purchased, specified, or were solicited by nine or more brands (RX 58, p. 31).

(2) Ninety-nine percent of all "common customers" would prefer not to have more cement salesmen call on them than call on them now, and 1 percent stated no preference (RX 58, p. 32). None of the "common customers" wanted more salesmen to call on them (RX 58, p. 32).

(3) Comparing the 2-year period 1960-1961 with 1962-1963, 18 percent of the "common customers" stated that the quality of cement had gone up in the latter period, 77 percent stated that quality had remained the same (RX 58, p. 33). Comparing these same 2-year periods, 55 percent stated that quality of service from cement suppliers had become better in the latter period; 44 percent stated that it had remained the same; only 1 percent said it had become worse (RX 58, p. 36).

(4) Ninety-eight and five-tenths percent of the "common customers" stated that they had not experienced any adverse effects from the acquisition of Bessemer by respondent (RX 58, p. 40).

Opinions of Economists and Competitors

Dr. Richard M. Cyert, Dean of the Graduate School of Industrial Administration at the Carnegie Institute of Technology, a distinguished economist and author of numerous articles and books

on economics, analyzed the effects of respondent's acquisition of Bessemer (Tr. 1963-68). Respondent's counsel stated that he was asking the witness to assume certain facts as having been established by the record in this proceeding. Dr. Cyert relied on the hypothesized facts in stating his opinion in response to questions of counsel (Tr. 1983-2019, 2077-81).

The hypothetical facts assumed by Dr. Cyert (Tr. 1983-2019) are far from being an accurate representation of facts established in the record. The hypothetical question contains statements which are not based on facts of record, but are only inferences which are clearly unsubstantiated. Some examples of these inferences represented to Dr. Cyert as facts are: (1) The trend in the cement industry is towards a rail-truck type of transportation; (2) The pressure of excess capacity tends to force producers to seek sales at greater distances; (3) New methods of distribution are enabling, and other methods of distribution will enable, fast delivery by distant sellers thus permitting expansion.

Dr. Cyert concluded from the facts assumed in the hypothetical question that the market in which Standard and Bessemer operated showed the characteristics of the competitive process. He placed primary emphasis on facts showing that there were pressures on price, a number of new companies had entered the area which he thought should be considered, a sufficient number of companies competed in the market to insure the continuation of competition, and no peculiar advantages were available to any company because of size (Tr. 2030-31).

Dr. Cyert, who is also a recognized authority in statistics and in the collection of survey data, was of the opinion that the findings of Dr. Zeisel's survey were a sufficient basis to determine the consequences of the acquisition on the actual and potential customers of Standard and Bessemer. He was of the opinion that these customers had not been adversely affected by reason of respondent's acquisition of Bessemer and that the customers were amply protected against any possibility of any future adverse effects (Tr. 2051).

Dr. Samuel M. Loescher, Associate Professor of Economics at Indiana University, an economist and author, testified that he considered the 23-county Standard area to be a relevant economic market for the "reasons that both the—the acquiring and the acquired enterprise sold into that area, and that in an industry such as the cement industry transportation is a very important factor." (Tr. 2179.)

Dr. Loescher further testified that the 23-county Standard area

was oligopolistic, and it was his opinion that the merger involved here may result in adverse effects on competition. (Tr. 2202-9.)

Witnesses were called from thirteen of the companies which compete with Standard or Bessemer. Each one of these witnesses stated his opinion to be that his company had not been adversely affected by Diamond's acquisition of Bessemer. Eleven witnesses testified that they knew of no facts which would lead them to believe that there could or would be any such effects in the future. One witness stated that in his opinion it was too early for him to predict the effects of the acquisition upon his company (Tr. 401, 592, 680, 775, 818, 876, 908, 972, 1002, 1033, 1108, 1562, 1586).

Respondent's Abandonment Contention

Respondent contends that there can be no adverse effect on competition flowing from the acquisition, because respondent would have been out of the cement business except for its acquisition of Bessemer; that one portion of its Standard plant has already been closed and the remaining portion is scheduled for closing in 1964.

It is true, as found herein, that respondent had encountered difficulties with an aging plant, that it was necessary for it to use high-cost limestone brought to its plant from a considerable distance, and that it had other problems. There were a number of those engaged in the management of respondent who believed that the Painesville operation could not continue to operate profitably, but it had never been concluded by respondent's management that it would get out of the cement business and cease selling cement in the area where it had been successful. Numerous alternatives to closing the plant were considered, and before any final decision had been reached as to the future conduct or abandonment of respondent's cement business, the acquisition of Bessemer was accomplished (Tr. 1616).

It is probably correct that the entire cement manufacturing operation at Painesville will be closed as now planned, but this is not to say that respondent would have abandoned its cement business unless it had acquired Bessemer. In short, it cannot be found that respondent would have disappeared as a cement supplier to the area in which it sells, unless it had acquired Bessemer.

Probability of Adverse Effects

This acquisition may have the proscribed adverse effects on competition because (1) it eliminated an important competitive factor from the market and (2) because it increased the concentration of competitors to the point that respondent's share of the

business increased from 27 to 43 percent. There is no direct evidence of any change in market behavior following the acquisition, and no evidence of any actual adverse effects on competition, and the conclusion which is reached that this acquisition violates the statute as charged is based on the two factors mentioned above.

This case appears to fall within the pattern discussed in *Philadelphia National Bank*, *supra*. The discussion there clearly indicates that it is correct to consider here the area in which the two firms competed as being the proper area in which to appraise any probable effects of the acquisition. With regard to this, the court in that case said:

We part company with the District Court on the determination of the appropriate "section of the country." The proper question to be asked in this case is not where the parties to the merger do business or even where they compete, but where, within the area of competitive overlap, the effect of the merger on competition will be direct and immediate. (*U.S. v. Philadelphia National Bank*, 374 U.S. at 357.)

The court also cited with approval the *American Crystal Sugar Co. v. Cuban-American Sugar Co.*, 152 F. Supp. 387, 398 (D.C.S.D. N.Y. 1957), *aff'd*, 259 F. 2d 524 (C.A. 2d Cir. 1958), where it was determined that the overlapping sales areas of the two firms involved was the appropriate and relevant "section of the country" to be considered. Also, in *Brown Shoe Co. v. United States*, 37 U.S. 294, at 337, the court said:

The fact that two merging firms have competed directly on the horizontal level in but a fraction of the geographic markets in which either has operated, does not, in itself, place their merger outside the scope of § 7. That section speaks of "any * * * section of the country," and if anticompetitive effects of a merger are probable in "any" significant market, the merger—at least to that extent—is proscribed.

If the area where the two firms competed is the "section of the country" in which to appraise the effects of this acquisition, and the decided cases hold that it is within this area that the likelihood of adverse effects may be judged, then it is clear that the changes in the structure of the market in this area are such that the merger will in all likelihood have adverse effects on competition. There are no countervailing considerations which would indicate an opposite result.

In the *Philadelphia National Bank* case, at 363, the court said:

* * * Specifically, we think that a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market, is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anti-

competitive effects. See *United States v. Koppers Co.* 202 F. Supp. 437 (D.C.W.D.Pa. 1962).

Such a test lightens the burden of proving illegality only with respect to mergers whose size makes them inherently suspect in light of Congress' design in § 7 to prevent undue concentration. Furthermore, the test is fully consonant with economic theory. That "[c]ompetition is likely to be greatest when there are many sellers, none of which has any significant market share," is common ground among most economists, and was undoubtedly a premise of congressional reasoning about the antimerger statute.

The merger of appellees will result in a single bank's controlling at least 30% of the commercial banking business in the four-county Philadelphia metropolitan area. Without attempting to specify the smallest market share which would still be considered to threaten undue concentration, we are clear that 30% presents that threat.

The Proposed Order

Divestiture is the only remedy which can be applied here which will restore, to the extent restoration is possible, competition which existed prior to the acquisition.

The proposed order served with the complaint and the order proposed by counsel supporting the complaint are the same and contain a provision which would prohibit respondent from acquiring any stock or assets of any corporation engaged in interstate commerce and engaged in selling portland cement in the 23 designated counties of northeastern Ohio and northwestern Pennsylvania without the prior approval of the Federal Trade Commission.

Counsel supporting the complaint contend that "The record establishes that Diamond Alkali's share of the market is so substantial, and its customer relationships apparently so well developed, that any future acquisition by it of portland cement manufacturers selling in the relevant market would have similar anticompetitive effects. Consequently, it is submitted that the ten year prohibition against the future acquisition of companies engaged in the sale of portland cement in the relevant market without the prior approval of the Federal Trade Commission is appropriate."

Since the 23-county area is not a single market, but is an area containing many separate local markets in which respondent's market share and customer relationships vary substantially, the argument of counsel supporting the complaint is not valid for each of these local markets. It would seem that respondent could at some time within the next ten years acquire a firm selling in only a few counties where respondent and the acquired firm had small shares of the market without substantially lessening competition. It is therefore concluded that the prohibition against

future acquisitions is inappropriate in this case. It is believed that in the event respondent, which had not acquired a cement manufacturing firm or plant previous to the acquisition of The Bessemer Limestone and Cement Company, should make an acquisition in an area where it and the acquired firm are important competitors, the likelihood of a lessening of competition could be more properly tested in a new proceeding.

CONCLUSIONS OF FACT

1. Diamond Alkali and Bessemer, prior to and at the time of the acquisition, were corporations engaged in the sale of portland cement in interstate commerce.
2. Portland cement is a line of commerce within the meaning of Section 7 of the Clayton Act, as amended.
3. Northeastern Ohio and northwestern Pennsylvania, as described in the complaint, is a geographic section of the country within the meaning of Section 7 of the Clayton Act, as amended.
4. Bessemer has been permanently eliminated by the acquisition as a substantial competitive factor in the production and sale of portland cement in northeastern Ohio and northwestern Pennsylvania.
5. Concentration in the manufacture and sale of portland cement in northeastern Ohio and northwestern Pennsylvania has been significantly and substantially increased by the acquisition of Bessemer by Diamond Alkali.
6. The acquisition of Bessemer by Diamond Alkali may have had, and may be expected in the future to have, the effect of substantially lessening competition in the manufacture and sale of portland cement in northeastern Ohio and northwestern Pennsylvania.

CONCLUSIONS OF LAW

1. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondent.
2. The acquisition of Bessemer by Diamond Alkali violates Section 7 of the Clayton Act, as amended.

ORDER

It is ordered, That respondent, Diamond Alkali Company, a corporation, through its officers, directors, agents, representatives and employees, shall, within six months from the date of service upon it of this order, divest itself absolutely, in good faith, and as a unit, and to a purchaser approved by the Federal Trade

Commission, of all stock and of all right, title and interest in all assets, properties, rights and privileges, tangible or intangible, including but not limited to, all properties, plants, machinery, equipment, raw material reserves, trade names, contract rights, trademarks, and good will, acquired by respondent as a result of its acquisition of the stock and assets of The Bessemer Limestone and Cement Company, together with all plants, machinery, buildings, land, raw material reserves, improvements, equipment and other property of whatever description that have been added to or placed on the premises of the former The Bessemer Limestone and Cement Company.

It is further ordered, That pending divestiture, respondent shall not make any changes in any of the plants, machinery, buildings, equipment, or other property of whatever description of the former The Bessemer Limestone and Cement Company, which shall impair its present rated capacity for the production, sale and distribution of cement, or its market value, unless such capacity or value is restored prior to divestiture.

It is further ordered, That the aforesaid assets and stock required to be divested under this order shall not be sold or transferred, directly or indirectly, to anyone who at the time of the divestiture is an officer, director, employee, or agent, or otherwise, directly or indirectly, connected with or under the control of respondent.

It is further ordered, That, in said divestiture, respondent shall not sell or transfer, directly or indirectly, any of the aforesaid stock and assets, to any corporation, or to anyone who, at the time of said divestiture, is an officer, director, employee or agent of a corporation, which, at the time of such sale or transfer, is engaged in the manufacture, sale or distribution of cement in the geographic area heretofore served by The Bessemer Limestone and Cement Company.

It is further ordered, That respondent shall, within such time as may be fixed by order of the Federal Trade Commission, submit in writing for the consideration and approval of the Commission, its plan for complying with the provisions of this order.

OPINION OF THE COMMISSION

OCTOBER 2, 1967

BY REILLY, *Commissioner*:

The Commission on October 22, 1965, affirmed the complaint herein, adopting the hearing examiner's findings of fact, and found

respondent to be in violation of Section 7 of the amended Clayton Act, 15 U.S.C. 18, as a result of its acquisition on August 31, 1961, of the outstanding stock of The Bessemer Limestone and Cement Company.

Prior to the acquisition, respondent had manufactured cement in two plants, designated "A" and "B," located at the site of its chemical works at Painesville, Ohio. Following the Bessemer acquisition, Diamond Alkali discontinued cement production at its Painesville works owing to the inefficiency and uneconomic condition of both plants A and B, both of which were obsolescent, and owing also to the lack of an adjacent limestone quarry. Plant A was closed down in November 1961 after issuance of complaint herein and its machinery was dismantled. Plant B, we are informed, was dismantled and sold in August 1964 following the issuance of the initial decision in this matter. Diamond Alkali, thus, after a transition period, has confined its manufacturing operations to the plant acquired among the Bessemer assets.

These facts present for consideration a novel question, namely, having found a violation of amended Section 7, to what extent can the Commission devise an effective remedy; and what should that remedy be, where the acquiring firm has divested itself of the preacquisition assets corresponding to the particular assets whose acquisition gave the merger its anticompetitive character. In short, what can the Commission do when there is no longer in being duplicate manufacturing facilities which upon an order of divestiture could form the basis for two viable firms and thus a restoration of competition.

Having found a violation, it is incumbent upon the Commission to fashion a remedy which will, to the extent possible, restore competition to the state of health it might be expected to enjoy but for the acquisition. *Ekco Products Company*, Docket No. 8122, April 21, 1964, Opinion, p. 16 [65 F.T.C. 1163, 1216].

Prior to Diamond Alkali's acquisition of Bessemer, there existed in the relevant geographic area, in addition to the firms not directly involved herein, two viable companies, Diamond and Bessemer, the former having an obsolescent plant but a far from moribund business. After the dust settled, there was one viable company in being.

Because we were confronted with a question of first impression, we deferred issuance of a remedial order and sought the aid of the parties in considering alternative forms of order which might be helpful in devising a remedy which would be at once fair to Diamond Alkali and in the public interest.

The Commission's task has not been lightened by the espousal of polar positions by the two parties. Complaint counsel insists upon divestiture and has not supplied any attractive alternatives. Its attitude appears to be that Diamond Alkali violated the law and placed itself in a vulnerable economic position by disposing of its facilities and should pay for it by being compelled to divest itself of the acquired firm. Respondent, on the other hand, stating vigorously its intention never to reenter the cement business if compelled to divest, urges that ordering divestiture would be penal and pointless since it would merely substitute one competitor for another and that therefore it should be permitted to retain the Bessemer assets but be compelled to produce a new competitor and to refrain from further acquisitions for ten years. It argues in effect that it was only trying to remain in the cement business, an essentially procompetitive act, but that its plant was uneconomic and obsolescent; and a condition of its economic survival as a competitive force was to secure efficient manufacturing facilities. Respondent's position is that to order the divestiture of the Bessemer assets on these facts would not only be penal but would produce no tangible benefit beyond the vindication of the statute. We disagree.

The Commission is of course not concerned with wreaking vengeance nor is it interested in adopting a purely formalistic remedy. Implicit in its original opinion herein is the determination that while Diamond Alkali had every right to remain in the cement business, it did not have the right to impair the competitive vigor of the market by the way it chose to proceed. The policy of the amended Clayton Act is that this end, *i.e.*, plant rehabilitation and business survival, be achieved by internal expansion, not by illegal acquisition, *U.S. v. Philadelphia National Bank*, 374 U.S. 321, 370. The question thus is not whether Diamond Alkali would have been forced out but rather, in addressing itself to the problem of staying in, it should have thought in terms of internal expansion, not acquisition. *Cf. Permanente Cement Company*, Docket No. 7939, April 24, 1964, Opinion, p. 5 [65 F.T.C. 410, 491].

Moreover, Diamond Alkali has made an acquisition which has left it with over 40% of the relevant market. This is something more than merely protecting its business by replacing an obsolescent plant. It has aggrandized its business through its readiness to eliminate a substantial competitor and to substantially increase concentration in the relevant market.

While we do not believe the Commission would be justified in adopting a purely retributive remedy nor in adopting one other-

wise justified which is needlessly harsh, nevertheless, the Commission cannot be deterred in framing a remedy by pleas that it might work hardship upon the respondent. The Supreme Court has held that the remedial phase of antitrust cases is crucial and that the primary focus of inquiry as to remedy is whether the relief adequately redresses the economic injury arising out of the violation. *U.S. v. E. I. du Pont de Nemours & Co.*, 366 U.S. 316, 326, 327. And in framing a remedy the fact it is harsh is not necessarily relevant "for it is well settled that once the government has successfully borne the considerable burden of establishing a violation of law all doubts as to the remedy are to be resolved in its favor." *U.S. v. E. I. du Pont de Nemours & Co.*, *supra*, p. 334.

The most appropriate remedy to redress a Section 7 violation is generally divestiture. It is specified in the enforcement provisions of the amended Clayton Act and normally commends itself as a rational course in restoring competition to the condition which obtained prior to the merger.

Unquestionably there are exceptional circumstances where the economic evil inherent in the acquisition is not so much the immediate elimination of a competitor and the consequent increase in concentration here and now but in the longer-term trend toward concentration of which the merger is symptomatic. In cases such as these an order confined to the prohibition of future mergers is itself an indirect form of divestiture, since it frustrates systematic acquisition programs designed to maintain dominant market position and eliminates the barrier to entry presented by the mere presence of large firms holding dominant market shares.

These exceptions to the general rule can be reasonably invoked however only when the proof of their probable efficacy is clear and convincing. In the absence of proof to the contrary the assumption of this Commission must be that "only divestiture can reasonably be expected to restore competition and make the affected markets whole again," *National Tea Company*, Docket No. 7453, Opinion, March 4, 1966 [69 F.T.C. 226]. Moreover, if an order of divestiture appears to the Commission to be in all likelihood the most effective available remedy, the Commission need not justify its order beforehand by showing that it will unquestionably restore competition. Nevertheless, because of the peculiar circumstances present here, it becomes necessary to inquire (1) whether divestiture is necessary as the only effective remedy, in view of the fact that divestiture normally envisions a resultant situation wherein two firms exist where there had been one, and thus a diminution of concentration, a circumstance

which is not the case here, or (2) whether alternatively a less harsh order may not be equally effective.

The Commission, in short, must adopt that remedy which promises the greatest likelihood of restoring competition. It may be imperfect; it may even be somewhat problematical, but so long as it is the most promising avenue of relief and gives greater promise than does doing nothing, the Commission's obligation is clear. The immediate question which arises is whether restoration of competition can be achieved at all and whether it requires divestiture or might be accomplished without it. Is it possible, for example, to induce Diamond Alkali to remain in the market by granting concessions short of permitting retention of the Bessemer assets? The Commission cannot of course compel Diamond Alkali to remain in the industry, and we are limited in offering inducements by the fact that Diamond Alkali now and in the future is free to stay or go as it pleases.

Complaint counsel has suggested delaying divestiture for a period of three years as an inducement to Diamond Alkali to build a new plant. Quite apart from the fact that Diamond Alkali has indicated no interest whatever in such a solution, we think it unlikely, given the present over-capacity in the area, that anyone at the present time could be induced to make the necessary capital outlay, on the order of 25 million dollars, to erect a manufacturing plant. If as the hearing examiner found, and we agree, the likelihood of expansion into the area by firms outside is remote, at least for the present, the creation of new facilities by those already in the market, such as Diamond Alkali, is equally remote. Moreover, we seriously question whether a purchaser of the Bessemer assets, specifically the manufacturing plant, could be readily found when it is to be confronted with a new plant of equivalent size built by Diamond Alkali.

Thus, although it would be most desirable to have two competitors in the place of one now operating, it does not appear feasible at the present time.

Other than delayed divestiture suggested by complaint counsel, no inducement has been suggested which is likely to placate Diamond Alkali sufficiently to prompt its remaining in the market if required to divest itself of the Bessemer assets. We are confronted at the outset with Diamond Alkali's adamant refusal to consider any remedy which involves its divestiture of the Bessemer plant. Any suggestions Diamond Alkali has put forward are grounded upon this premise.

The question of permitting Diamond Alkali to retain some por-

tion of the assets other than the Bessemer plant is further complicated by the fact that the present Bessemer-Diamond Alkali complex appears to be a unitary operation which does not admit of dismemberment. This for the reason that there is only one plant which is the kernel of the operation. Diamond Alkali has made it plain it will not become a distributor, for example, by retaining terminals and possibly customers, but must have manufacturing facilities, and it is not about to erect them.

Thus, it remains to inquire whether some remedy can be found which will permit Diamond Alkali to retain the Bessemer acquisition virtually intact and yet restore a measure of competition.

We have explored the possibility that a solution may be found whereby Diamond Alkali might retain the plant and give up a number of customers, including those it gained from Bessemer. Apart from the difficulty of identifying and segregating those customers peculiar to Bessemer (many customers are held in common), this tactic would involve the Commission in a compliance undertaking for which it is not equipped. Certainly we could not specify that a certain number of customers be transferred to a newcomer without the customers' acquiescence. Their indignation at being transferred as though they were chattels can be readily imagined. We cannot feasibly compel Diamond Alkali not to serve customers who wish to be served by it. While we could order Diamond to abandon a certain percentage of its business, we have no guarantee that that would result in any appreciable improvement in the competitive climate. It could be all secured by one competitor with no appreciable diminution in concentration.

The only alternative acceptable to Diamond is to leave it with the manufacturing plant and business of Bessemer and compel it to assist in the creation of a new competitor. To this latter end it is prepared to forego the use of the "Standard" brand name, to sell its Cleveland terminal to a newcomer and assist the latter in financing a terminal, to provide the newcomer with a list of cement purchasers in the 23-county area, together with other assistance in setting up in business, and to guarantee the newcomer sales up to 100,000 barrels for each of three years. By the terms of its proposal Diamond would be excused from further obligation to produce a new competitor if none were produced within one year. We find this proposal totally unacceptable for a number of reasons:

It is not a plan for restoration of competition but a promise of one year's effort in this direction by Diamond. Moreover, Diamond's obligations under an order and the contractual relations between it and its candidate would inevitably raise questions of

interpretation and performance which would necessarily cast the Commission in the role of arbiter and impose upon the Commission a compliance surveillance task whose dimensions would be badly out of proportion to any benefit realized. More than that, the terms themselves give little or no promise of restoration of competition.

Guaranteed sales of 100,000 barrels represent a miniscule percentage of the relevant market and for reasons amply stated in the record we would have every expectation that a year would pass with no candidate produced. Respondent's counsel has noted that the likelihood that any candidate would content itself with a mere distributorship is unheard of, and, as we noted above, the hearing examiner has found, and we agree, that the likelihood of a new-comer erecting a plant at a cost of 25 million dollars, with the attendant problem that the present over-capacity in the market would be further aggravated, is extremely remote. We are told that sales of 100,000 barrels will support one salesman; hardly a threat to the peace of mind of the Diamond Alkali sales department.

We had hoped for a giant stride toward restoration of competition. Diamond proposes a mincing step. One hundred thousand barrels represent slightly more than 2% of Diamond's and Bessemer's combined sales in 1959 and less than 3% of their combined 1962 sales. It is 4% of the output of the plant which Diamond Alkali acquired from Bessemer. Considering that this merger left Diamond with over 40% of total sales, over 15% of total sales being secured by virtue of the Bessemer acquisition, Diamond's proposal is hardly one which the Commission can greet with enthusiasm. Diamond offers to forego the use of the "Standard" brand. We note that at the time the offer was made Diamond had not used this brand for two years.

Diamond has indicated that its proposal is not final and it is prepared to explore the acceptability of modifications or substitutes. However, the proposal advanced thus far offers no promise that any meaningful solution could be arrived at or that Diamond would come up with anything substantially more attractive in subsequent submissions. In order to justify the risk that further delay would vitiate this arduous litigation and result in no redress whatever, the Commission would have to have more solid promise of success than we perceive at present.

Moreover, and most importantly, we are wary of any solution that represents little more than hopeful tinkering. A jerry-built remedy inspires little confidence in the effective discharge by the Commission of its obligations.

Finally, Diamond Alkali proposes to accept in lieu of divestiture,

a prohibition against acquisitions of assets of producers in this industry for a period of ten years. We think this is an inadequate alternative. Prohibitions against future acquisitions are appropriate where the evil of the merger is its contribution to a trend toward concentration, perceptible sometimes in conglomerate and market extension mergers. On the other hand, where substantial concentration and the elimination of competition is immediate and palpable, as is the case in this horizontal merger where the surviving firm holds 40% of the relevant market, there is no discernible benefit to be achieved through a prohibition against future acquisitions.

We have said elsewhere that the Commission has an obligation to adopt that course most conducive to the restoration of competition. Unless there is a real likelihood of future market concentration due to the probability of future acquisitions, a prohibition against future acquisitions can only be justified on the legalistic ground that it vindicates the statute. It would not redress the violation in any positively beneficial way and we could not justify it at all if there is at hand a remedy which gives any promise of restoring competition.

We might speculate that a prohibition against future acquisitions might insure that the further threat to competition implicit in the possibility of Diamond's growth through acquisitions is eliminated, and this elimination is justified because a deterrent to new entry is thereby removed. However, this is hardly justified if there is available a method whereby, through divestiture, Diamond itself becomes a deterrent in the form of potential competition to those already in the market. In short, if it is argued that a prohibition against future acquisitions would be an effective remedy because it prevents Diamond from enlarging its size and power and thus makes entry more attractive than it otherwise might have been for other firms, now unknown, to play the role of potential competitor, the answer is that this is a poor substitute for divestiture which would have Diamond itself play the role, and very convincingly. In place of hopeful speculation, we would have a potential competitor at hand and one whose size and power insure that it will not be ignored by those in the market.

It remains to be considered whether requiring Diamond Alkali to divest the Bessemer assets will adequately redress the anticompetitive effect of the acquisition, that is, whether any countervailing pro-competitive result will flow from such divestiture which will serve to redress the lessening of competition occasioned by the acquisition.

We think the appropriate remedy here is divestiture for the reason that it is the only course which will tend toward the restoration of competition as it existed prior to the acquisition. However, because Diamond Alkali has vehemently expressed its intention to withdraw from the cement industry should it be required to divest, we think it is necessary to set forth as clearly as possible the reasons why we believe divestiture will nevertheless procure a desirable economic result.

In a way, ordering divestiture is a "pig in a poke" because we know we have an effective competitor now on the scene, and we have no guarantee that anyone brought in as a substitute for Diamond Alkali would measure up to its level of effectiveness. Moreover, we are aware that there is an economic waste in compelling divestiture with its consequent dislocations, production lags, personnel problems, etc. It is thus necessary to determine whether the benefits achieved by ordering divestiture warrant paying the economic price.

In so doing, we are confronted with two questions, (1) will Diamond Alkali in fact be a potential competitor and (2) if so, will it provide beneficial results sufficient to warrant ordering divestiture?

We have noted earlier that Diamond Alkali has gone to considerable lengths to persuade the Commission that if it is compelled to divest Bessemer, it will not under any circumstances reenter the cement industry. In connection with its submittal of proposed alternative forms of order it has supplied the Commission with an affidavit of Raymond F. Evans, Chairman of the Board and Chief Executive Officer of Diamond Alkali, which sets forth in forceful terms why it is not in the firm's interest to reenter the cement industry should it be compelled to divest itself of the Bessemer plant. The affidavit states flatly that "* * * there are neither now in existence nor in prospect facts which would cause it now or in the foreseeable future to build a cement plant to manufacture cement for sale in the 23 county area * * * [and that] * * * the company will not continue in the cement business."

This positive expression of intention is of course designed to remove an important prop, intention to enter, from the argument that Diamond Alkali, if forced to divest the Bessemer plant, will be a potential competitor. *U.S. v. Penn-Olin Chemical Co.*, 378 U.S. 158 (1964).

Diamond Alkali offers a number of arguments to support its assertion that it is not a likely future entrant: It is constitutionally oriented toward chemicals, not cement; it has never expanded its

cement production beyond its Painesville works; it has been dissatisfied with the return on cement investment and cannot justify the commitment of risk capital to it; industry plant expansion has resulted in over-capacity with a decline in plant utilization, etc.

While litigation strategy could well dictate the course here adopted by Diamond Alkali, we nevertheless ascribe no disingenuous motives to the expression of intention which Diamond Alkali has submitted; and we are fully aware that expressions of intention are an important element in determining whether a particular firm represents potential competition. But whether or not a present expression of intention is dispositive of the question whether a firm may become a competitor in the future and is thus a potential competitor here and now is another matter.

For the Commission to attempt to divine with any certainty on the basis of presently operative facts what Diamond will do in the future would involve an unacceptable measure of speculation. Even accepting Diamond Alkali's statement at its face value it provides no firm assurance that it accurately reflects what will be the future decision of management on the question of reentry. A statement of present intention is necessarily subjective and transitory subject to change with changes in the industry, in the fortunes of the firms and in the composition of Diamond Alkali's Board and management. To hold that present intention is a reliable determinant of future conduct runs counter to the economic principle that future conduct will be guided by what is best for the firm at that time. Future decisions will be made by those then in charge without reference to commitments made in the course of this litigation. Furthermore, the vigor with which Diamond resists divestiture testifies to an abiding interest in the cement industry; and we are not persuaded that after 40 years in the cement business and having tasted of the rewards of holding in excess of 40% of the relevant market, Diamond Alkali will permanently turn its back on the cement business.

Thus, we cannot consider the affidavit persuasive of Diamond's future status as a potential competitor. Moreover, and most importantly, the affidavit is directed to the Commission in the hope of persuading the Commission that Diamond is not a potential competitor, but in the final analysis it is the reaction of those in the market-place which is crucial in determining whether Diamond is a credible potential competitor. The relevant test is not what respondent tells the Commission now nor what the objective likelihood of entry is, as though that could be determined, but rather what the Commission can learn as to the probable reaction

of those in the industry, what they think and do. The respondent may have no present intention to enter. Certainly its affidavit suggests reasons why entry at this time is unattractive. Nevertheless, if it is a credible potential competitor in the eyes of those in the industry, we believe divestiture promises beneficial competitive results.

Stripped of the Bessemer works, Diamond Alkali presents to the industry in the 23-county area the image of a firm which has engaged in the cement business for 40 years, and one which, as we have noted above, has experienced a substantial share of the relevant market. It is a large, powerful, diversified, apparently well managed firm which did not voluntarily withdraw from the cement business but was driven from it despite a stout resistance. If Diamond Alkali had simply withdrawn by liquidating its plant without buying another, it would be a less persuasive potential competitor; but here it stayed and replaced the obsolescent plant, thus clearly demonstrating its interest in the industry.

It is inconceivable that those in the 23-county area in future appraisals of the market's probable makeup will lose sight of the very considerable threat that reentry by Diamond Alkali presents, and be guided accordingly. Diamond Alkali will be a potential competitor unless those in the industry are convinced it is wholly improbable that it will reenter. Only then will it fail to serve its purpose as a silent threat to those in the industry and the "comfortable" life they may lead.

Thus, we are of the firm conviction that Diamond Alkali will be a potential competitor and that this competition will redress to the extent possible the anticompetitive impact of the merger.

We see no reason to dwell at length on the beneficial competitive significance of potential competition. It has received the approval of the courts and represents, we think, sound economic theory, *U.S. v. Penn-Olin Chemical Co.*, *supra*; *U.S. v. El Paso Natural Gas Co.*, 376 U.S. 651 (1954).

At the time of Diamond's acquisition of Bessemer the cement industry in this market was concentrated, with 93% of shipments being accounted for by seven firms. Diamond Alkali alone had 27% of shipments and Bessemer 16%. The merger, thus, in addition to eliminating a substantial competitive factor, contributed to increased concentration in the market.

In these circumstances the potential competition represented by Diamond Alkali assumes special value. With its history of involvement in the industry, its financial resources and management skill,

there is no question that it presents to the industry a factor which must be reckoned with. We have said,

A fundamental concern of Congress in amending Section 7 of the Clayton Act in 1950 was with the effect on competition of concentrating the business of a particular market or industry in the hands of too few sellers. In markets where one or a very few firms control a large part of the total sales, there is a tendency for all firms to refrain from vigorous price competition. * * * [In such circumstances] * * * the mere prospect of new competition may have a salutary effect. The large seller in a concentrated market knows that the entry of new competitors would jeopardize the stable price structure of the market and might well lead to lower prices, as a result of greater competition, and lower profits. He also knows that if prices in the market are so high as to make it easy for a new competitor to cover his costs, make a healthy profit, and still be competitive with the firms presently operating in the market, the attractiveness of entry to prospective competitors will be great, and the likelihood of actual entry substantial. The most effective way of discouraging entry into a concentrated market is for the major sellers to keep their prices down to a level low enough to make entry unattractive to new competitors. *Beatrice Foods Company*, Docket No. 6653, April 26, 1965, Opinion, pp. 27, 28 [67 F.T.C. 473, 715-716].

We can conceive of no more convincing potential competitor than Diamond Alkali as an "aggressive, well equipped and well managed corporation" [whose interest in entry, based upon past involvement] " * * * would be a substantial incentive to competition which cannot be underestimated." *U.S. v. Penn-Olin Chemical Co.*, *supra*. And this incentive to competition is not some speculative future event but a beneficial reaction here and now, a brake on oligopoly.

Thus, we do not base our hopes for an improvement in competition in this industry upon speculation that Diamond might at some future date reenter and actively contribute to deconcentration at that time. Rather it is the "inert" effect which Diamond will have now and in the future upon those in the market whose pricing and competitive conduct is influenced by the knowledge that Diamond may reenter when circumstances are ripe. Moreover, even if Diamond, through pique or otherwise, should never reenter, its effect as a potential competitor remains so long as those in the market have reason to believe it is a threat.

Furthermore, it is worth noting that in some respects Diamond as a potential competitor is a more desirable competitive factor than as an actual participant in the market. The barriers to entry in this industry, not the least of which is the immense cost of erecting a plant, automatically reduce the number of potential entrants. In these circumstances Diamond becomes especially credible, and therefore valuable, as a potential entrant. The competitive disadvantage in having a big firm such as Diamond Alkali

in the market, that is, deterrent to entry by small firms and ability to smother smaller competitors in the market, *Federal Trade Commission v. The Procter & Gamble Co.*, 386 U.S. 568 (1967); *Ekco Products Company, supra*, can be viewed as an asset when the firm stands on the edge as a threat to the entrenched oligopolists. If what is required is a large firm and there are, as a consequence, few available, Diamond becomes a convincing candidate. On the other hand, where entry is easy and attractive there is in consequence a large number of potential entrants which by their number inevitably diminish the deterrent effect of any one of them.

Moreover, we are not unmindful of the possible deconcentration attending the divestiture of an operation representing over 40% of the relevant market and the opportunity for some others in the market to secure a portion of this business.

In sum, the Commission in this matter has two choices. It can either leave Diamond Alkali *in statu quo* on the assumption that it probably will not be a potential competitor if we order divestiture, and thus nothing would be gained by ordering divestiture, or we can order divestiture on the assumption that Diamond will remain a potential competitor notwithstanding its declared intent to the contrary. If we select the first course, we are simply throwing up our hands and surrendering all chance that this Section 7 violation will be remedied. If we select the second way, we preserve whatever promise of enhancement of competition is implicit in Diamond Alkali as a potential competitor. For the reasons set forth above we have chosen this second course.

An appropriate order will issue.

FINAL ORDER

By order dated October 22, 1965 [68 F.T.C. 1204], the Commission directed the parties to submit proposed alternative forms of order in disposition of this matter. The Commission having considered these proposals together with briefs and oral argument, and for the reasons stated in the accompanying opinion, being of the opinion that the following order is most appropriate in light of the Commission's decision and the public interest,

It is ordered, That respondent, Diamond Alkali Company, within one (1) year from the date this order becomes final, shall divest, to a purchaser or purchasers approved by the Federal Trade Commission, as a going concern, all stock, assets, properties, rights and privileges, tangible and intangible, acquired as a result of the acquisition of The Bessemer Limestone and Cement Company, together with all additions thereto and replacements thereof.

Complaint

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It is further ordered, That pending divestiture, Diamond Alkali Company not make any changes in any of the aforesaid stock and/or assets which would impair their present capacity for the manufacture and sale of cement, or their market value.

It is further ordered, That, in the aforesaid divestiture, none of the stock and/or assets be sold or transferred, directly or indirectly, to any person who is at the time of divestiture an officer, director, employee, or agent of, or under the control or direction of Diamond Alkali Company or any of its subsidiaries or affiliates, or to any person who owns or controls, directly or indirectly, more than one (1) percent of the outstanding shares of voting stock of Diamond Alkali Company or any of its subsidiaries or affiliates.

It is further ordered, That Diamond Alkali Company, within sixty (60) days from the date this order becomes final, and every sixty (60) days thereafter until it has fully complied with the provisions of this order, submit in writing to the Federal Trade Commission a report setting forth in detail the manner and form in which it intends to comply, is complying, and/or has complied with this order. All compliance reports shall include, among other things that will be from time to time required, a summary of all contacts and negotiations with potential purchasers, the identity of all such potential purchasers, and copies of all written communications to and from such potential purchasers.

By the Commission, without the concurrence of Commissioner MacIntyre because of his view that to require divestiture here would impose an undue hardship upon respondent without offsetting benefits to the public by way of any prospective enhancement in the competitive situation.