

created at the end of the billing cycle in which the credit balance is first recorded on a customer's account and at the end of the billing cycle in which the recorded amount of an existing credit balance is changed due to a customer's use of the account. Whenever the recorded amount of an existing credit balance is changed, respondent's obligations under this order with respect to the credit balance existing prior to such change shall automatically be replaced by its obligations under this order with respect to the new credit balance created by said change.

E. *It is further ordered*, That notwithstanding the foregoing, the provisions of this order shall not be applicable to credit balances on accounts administered by third parties.

F. *It is further ordered*, That respondent shall, within sixty (60) days after the entry of this order, file with the Commission a report in writing setting forth in detail the manner and form in which it has complied with this order.

G. *It is further ordered*, That respondent notify the Commission at least thirty (30) days prior to any proposed change in the corporate respondent such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the corporation which may affect compliance obligations arising out of the order.

H. *It is further ordered*, That respondent shall forthwith distribute a copy of this order to each of its retail operating divisions and subsidiaries.

IN THE MATTER OF

ASH GROVE CEMENT CO.*

ORDER, OPINION, ETC., IN REGARD TO ALLEGED VIOLATION OF SEC.
5 OF THE FEDERAL TRADE COMMISSION ACT AND SEC. 7 OF THE
CLAYTON ACT

Docket 8785. Complaint, July 8, 1969-Decision, June 24, 1975

Order requiring a Kansas City, Mo., manufacturer and seller of lime and portland cement, among other things, to divest itself of two producers of ready mixed concrete in the Kansas City marketing area, and for a ten-year period, not to acquire, without prior Commission approval, ready mixed concrete companies whose purchases of portland cement exceed designated amounts. The Commission also decided that a third acquisition of a quarrying business was not anticompetitive.

* For appearances, see p. 969, herein.

Complaint

85 F.T.C.

COMPLAINT

The Federal Trade Commission, having reason to believe that the above-named respondent has violated the provisions of Section 7 of the Clayton Act, as amended, and Section 5 of the Federal Trade Commission Act, 15 U.S.C. §§18 and 45, and that a proceeding in respect thereof would be in the public interest, issues this complaint, stating its charges as follows:

I. DEFINITIONS

1. For the purpose of this complaint the following definitions shall apply:

a. "Portland cement" includes Types I through V of portland cement as specified by the American Society for Testing Materials. Neither masonry nor white cement is included.

b. "Ready mixed concrete" includes all portland cement concrete which is manufactured and delivered to a purchaser in a plastic and unhardened state. Ready mixed concrete includes central-mixed concrete, shrink-mixed concrete and transit-mixed concrete.

c. "Kansas City area" consists of the counties of Cass, Clay, Jackson and Platte, Mo., and the counties of Johnson and Wyandotte, Kans.

II. ASH GROVE CEMENT CO.

2. Ash Grove Cement Co. (hereinafter "Ash Grove") is a corporation organized and existing under the laws of the State of Delaware, with its principal office located at 10 Main Center, Kansas City, Mo.

3. Ash Grove is principally engaged in the manufacture and sale of lime from plants in Portland, Ore., and Springfield, Mo. and the manufacture and sale of portland cement from plants in Louisville, Neb. and Chanute, Kans. In 1966, Ash Grove had net sales of \$24,514,383, net earnings of \$4,445,389, and as of Dec. 31, 1966, assets of \$51,260,681.

4. The Kansas City area is one of the principal markets for portland cement manufactured at Ash Grove's Chanute, Kans. plant. Ash Grove has sold portland cement in the Kansas City area since approximately 1908 and, since 1962, has operated a portland cement transfer station in Kansas City, Kans. to better serve its customers by truck in and around the Kansas City area. In 1966, Ash Grove's Chanute, Kans. plant shipped almost 2.1 million barrels of portland cement of which almost .9 million barrels were shipped to customers in the Kansas City area. Ash Grove has been one of the three leading portland cement suppliers to the Kansas City area since at least 1961.

5. At all times relevant herein, Ash Grove was engaged in selling

and shipping portland cement in interstate commerce and was a corporation engaged in commerce, as "commerce" is defined in the Clayton Act and Federal Trade Commission Act.

III. FORDYCE CONCRETE, INC.

6. Fordyce Concrete, Inc. (hereinafter "Fordyce") was, prior to Nov. 8, 1966, a corporation organized and existing under the laws of the State of Kansas with its principal office located in Kansas City, Kans.

7. Since 1961, Fordyce had been engaged in the production and sale of ready mixed concrete in the Kansas City area and on Nov. 8, 1966 was operating two ready mixed concrete plants in the Kansas City area. For the fiscal year ended Jan. 31, 1966, Fordyce had sales of \$2,804,068, net profit of \$34,910, and as of Jan. 31, 1966, total assets of \$1,259,003.

8. Fordyce has been one of the leading producers of ready mixed concrete and consumers of portland cement in the Kansas City area since its organization in 1961 and, in 1966, sold over 216,000 cubic yards of ready mixed concrete and consumed over 299,000 barrels of portland cement.

9. At all times relevant herein, Fordyce was engaged in selling and shipping ready mixed concrete and purchasing portland cement in interstate commerce and was a corporation engaged in commerce, as "commerce" is defined in the Clayton Act.

IV. ACQUISITION

10. On June 1, 1964, Ash Grove purchased 5,225 shares of authorized but previously unissued share of Fordyce for \$100,000 which resulted in its ownership of 50 percent of the outstanding stock of Fordyce. On Nov. 8, 1966, Ash Grove purchased the other 5,225 outstanding shares of Fordyce for \$300,000, giving Ash Grove 100 percent ownership of Fordyce.

V. LEE'S SUMMIT READY-MIXED CONCRETE & MATERIALS COMPANY

11. Lee's Summit Ready-Mixed Concrete & Materials Company (hereinafter Lee's Summit) was, prior to Jan. 4, 1966, a corporation organized and existing under the laws of the State of Missouri, with its principal office located in Kansas City, Mo.

12. Since 1955, Lee's Summit had been engaged in the production and sale of ready mixed concrete in the Kansas City area and, on Jan. 4, 1966, was operating two ready mixed concrete plants in the Kansas City area. Lee's Summit was also engaged in the production and sale of

ready mixed concrete in Springfield, Mo. from about September 1963 through about May 1966. For the fiscal year ended Feb. 28, 1966, Lee's Summit had sales of \$1,603,751, net profit of \$21,593, and as of Feb. 28, 1966, total assets of \$459,750.

13. Lee's Summit has been one of the leading producers of ready mixed concrete and consumers of portland cement in the Kansas City area since 1961 and in 1966 sold over 66,000 cubic yards of ready mixed concrete and consumed over 91,000 barrels of portland cement.

14. At all times relevant herein, Lee's Summit was engaged in selling and shipping ready mixed concrete and purchasing portland cement in interstate commerce and was a corporation engaged in commerce, as "commerce" is defined in the Clayton Act.

VI. UNION QUARRIES

15. Prior to Jan. 4, 1966, Union Quarries was a division of Union Construction Company, Kansas City, Mo. The owners of Union Construction Company also owned two-thirds of the outstanding stock of Lee's Summit. Union Quarries operated rock quarrying and crushing operations at the two Kansas City area locations on which Lee's Summit also operated ready mixed concrete plants. Union Quarries also had a third Kansas City area location in Lenexa, Kans. It sold crushed stone and portland cement treated base rock in the Kansas City area from all three locations. In 1965, it consumed over 26,000 barrels of portland cement.

16. At all times relevant herein, Union Quarries was engaged in selling and shipping crushed stone and portland cement treated base rock and purchasing portland cement in interstate commerce and was engaged in commerce, as "commerce" is defined in the Clayton Act and Federal Trade Commission Act.

VII. ACQUISITION

17. On Aug. 31, 1962, Ash Grove purchased one-third of the outstanding common and preferred stock of Lee's Summit for \$47,500. On Jan. 4, 1966, Ash Grove purchased the other two-thirds of the outstanding common and preferred stock of Lee's Summit for \$200,000. Also, on Jan. 4, 1966, as part of the same transaction and agreement by which the Lee's Summit stock was acquired, Ash Grove purchased from six individuals, real estate, machinery, equipment and other property used in the Union Quarries quarrying business for \$1,050,000. On Jan. 13, 1966, Ash Grove assigned all of the rights and obligations with regard to the assets used in the operation of Union Quarries to its

newly organized wholly-owned subsidiary, Union Quarries, Inc. a Missouri corporation, which now owns the assets.

VIII. MERGER

18. On Apr. 25, 1966, the name of Lee's Summit was changed to Summit Ready Mix Co. (hereinafter "Summit"). Ash Grove transferred the assets of Summit to Fordyce, its wholly-owned subsidiary on Dec. 20, 1966 and liquidated Summit as of Dec. 31, 1966. As of Dec. 31, 1966, Fordyce had assets of over \$1,700,000 and operated four ready mixed concrete plants in the Kansas City area (two former Lee's Summit plants and two former Fordyce plants) under the trade name Fordyce-Summit.

IX. NATURE OF TRADE AND COMMERCE

19. Portland cement is a material which in the presence of water binds aggregates, such as sand and gravel, into concrete. Portland cement is an essential ingredient in the manufacture of concrete and it represents about 60 percent of the material cost and over one-third of the total cost of manufacturing, distributing and selling ready mixed concrete, the only form in which concrete is sold as a commodity.

20. The portland cement industry in the United States is substantial. In 1966, there were about 50 portland cement companies in the United States operating approximately 184 plants. Total shipments of portland cement in that year amounted to approximately 390 million barrels, valued at about \$1.2 billion.

21. Portland cement manufacturers sell their portland cement to consumers such as ready mixed concrete companies, concrete product manufacturers, contractors and building material dealers. On a national basis, approximately 60 percent of all portland cement is shipped to firms engaged in the production and sale of ready mixed concrete. However, in heavily populated metropolitan areas, the percentage of portland cement consumed by ready mixed concrete companies is generally higher. In general, portland cement consumers have not been integrated or affiliated with portland cement manufacturers. Each has operated independently on a vendor-vendee basis.

22. In recent years, there has been a significant trend of mergers and acquisitions by which ready mixed concrete companies in major metropolitan markets in various portions of the United States have become integrated with portland cement companies. Since 1959, there have been at least 40 such acquisitions.

23. Each vertical merger or acquisition which occurs in the portland cement industry potentially forecloses competing portland cement

manufacturers from a segment of the market otherwise open to them and places great pressure on competing manufacturers likewise to acquire portland cement consumers in order to protect their markets. Thus, each such vertical acquisition may form an integral part of a chain reaction of such acquisitions—contributing both to the share of the market already foreclosed, and to the impetus for further such acquisitions.

24. In the Kansas City area the trend toward vertical integration is well advanced. Four of the leading ready mixed concrete sellers and portland cement consumers in this area have become integrated with portland cement companies since 1963 through acquisition. More than 40 percent of the market for portland cement in the Kansas City area has been potentially foreclosed by vertical integration.

X. EFFECTS OF THE ACQUISITIONS

25. The effect of the acquisitions of Fordyce and Lee's Summit and their merger into one operation and the acquisition of the assets used in the operation of Union Quarries, both in themselves and by aggravating the trend of vertical mergers and acquisitions, may be substantially to lessen competition or to tend to create a monopoly in the manufacture and sale of (1) portland cement and (2) ready mixed concrete in the United States as a whole and various parts thereof, including the Kansas City area, in the following ways, among others:

a. Ash Grove's competitors have been and/or may be foreclosed from a substantial segment of the market for portland cement.

b. The ability of Ash Grove's non-integrated competitors effectively to compete in the sale of portland cement and ready mixed concrete has been and/or may be substantially impaired.

c. The entry of new portland cement and ready mixed concrete competitors may have been and/or may be inhibited or prevented.

d. The production and sale of ready mixed concrete, usually a decentralized, locally controlled, small business industry, has become concentrated in the hands of a relatively few manufacturers of portland cement.

XI. VIOLATIONS CHARGED

26. The acquisitions by Ash Grove of Fordyce and Lee's Summit and their merger into one operation constitute separately and collectively violations of Section 7 of the Clayton Act, as amended, and the acquisition of the assets used in the operation of Union Quarries constitutes a violation of Section 5 of the Federal Trade Commission Act.

1123

Initial Decision

INITIAL DECISION BY ADMINISTRATIVE LAW JUDGE ANDREW C.
GOODHOPE

SEPTEMBER 23, 1974

STATEMENT OF PROCEEDINGS

The Federal Trade Commission on July 8, 1969, issued its complaint in this proceeding charging Ash Grove Cement Company ("Ash Grove"), a corporation, with having violated Section 7 of the Clayton Act, as amended (15 U.S.C. §18), by its acquisition of Lee's Summit Ready-Mixed Concrete & Materials Company ("Lee's Summit"), and Fordyce Concrete, Inc. ("Fordyce"). The complaint further charged Ash Grove with violation of Section 5 of the Federal Trade Commission Act, as amended, (15 U.S.C. §45), by its acquisition of certain assets from individuals, which assets were formerly a division of Union Construction Company of Kansas City, Mo. The complaint was duly served on respondent Ash Grove and respondent appeared by its counsel and filed an answer admitting certain of the allegations of the complaint by denying that it had violated Section 7 of the Clayton Act or Section 5 of the Federal Trade Commission Act.

Extensive hearings were thereafter held, at which time testimony and documentary evidence were offered in support of and in opposition to the allegations of the complaint. At the close of all the evidence and pursuant to leave granted by the administrative law judge, proposed findings of fact, conclusions of law, briefs and proposed orders were filed by counsel supporting the complaint and counsel for the respondent.

Proposed findings not herein adopted either in the form or substance proposed are rejected as not supported by the evidence or as involving immaterial matters. Having reviewed the entire record in this proceeding, including the proposed findings and briefs, the administrative law judge, based upon the entire record, makes the following:

FINDINGS OF FACT¹

THE RESPONDENT

1. Ash Grove Cement Company is a corporation organized and existing under the laws of the State of Delaware, with its principal office located at 10 Main Center, Kansas City, Mo.

2. Ash Grove is principally engaged in the manufacture and sale of lime from plants in Portland, Ore., and Springfield, Mo., and the manufacture and sale of portland cement from plants in Louisville,

¹ The essential jurisdictional facts and facts concerning the various acquisitions were alleged in the complaint and admitted in respondent's answer.

Nebr., and Chanute, Kans. In 1966, Ash Grove had net sales of \$24,514,383, net earnings of \$4,445,389 and as of Dec. 31, 1966, assets of \$51,260,681.

3. At all times relevant herein, Ash Grove was a corporation engaged in commerce, as "commerce" is defined in the Clayton Act and the Federal Trade Commission Act.

Fordyce Concrete, Inc.

4. On June 1, 1964, Ash Grove purchased 5,225 shares of authorized but previously unissued shares of Fordyce for \$100,000 which resulted in its ownership of 50 percent of the outstanding stock of Fordyce. On Nov. 8, 1966, Ash Grove purchased the other 5,225 outstanding shares of Fordyce for \$300,000 giving Ash Grove 100 percent ownership of Fordyce.

5. Prior to Nov. 8, 1966, Fordyce was a corporation organized and existing under the laws of the State of Kansas, with its principal office located in Kansas City, Kans.

6. Since 1961, Fordyce had been engaged in the production and sale of ready mixed concrete in the Kansas City metropolitan area ("KCMA") and on Nov. 8, 1966 was operating two ready mixed concrete plants there. For the fiscal year ended Jan. 31, 1966, Fordyce had sales of \$2,804,068, net profit of \$34,910 and as of Jan. 31, 1966, total assets of \$1,259,003.

7. At all times relevant herein, Fordyce was a corporation engaged in commerce, as "commerce" is defined in the Clayton Act.

Lee's Summit Ready-Mixed Concrete & Materials Company

8. On Aug. 31, 1962, Ash Grove purchased one-third of the outstanding common and preferred stock of Lee's Summit for \$447,500. On Jan. 4, 1966, Ash Grove purchased the other two-thirds of the outstanding common and preferred stock of Lee's Summit for \$200,000.

9. Lee's Summit was, prior to Jan. 4, 1966, a corporation organized and existing under the laws of the State of Missouri, with its principal office located in Kansas City, Mo.

10. Since 1955, Lee's Summit had been engaged in the production and sale of ready mixed concrete in the KCMA and on Jan. 4, 1966, was operating two ready mixed concrete plants there. Lee's Summit was also engaged in the production and sale of ready mixed concrete in Springfield, Mo., from about September 1963 through about May 1966. For the fiscal year ended Feb. 28, 1966, Lee's Summit had sales of \$1,603,751, net profit of \$21,593 and total assets of \$459,750.

11. At all times relevant herein, Lee's Summit was a corporation engaged in commerce, as "commerce" is defined in the Clayton Act.

12. On Apr. 25, 1966, the name of Lee's Summit was changed to Summit Ready Mix Co. (hereafter "Summit"). Ash Grove transferred

the assets of Summit to Fordyce, its wholly-owned subsidiary, on Dec. 20, 1966, and liquidated Summit as of Dec. 31, 1966. As of Dec. 31, 1966, Fordyce had assets of over \$1,700,000 and operated four ready mixed concrete plants in the KCMA (two former Lee's Summit plants and two former Fordyce plants) under the trade name Fordyce-Summit.

Union Quarries

13. On Jan. 4, 1966, as part of the same transaction and agreement by which the Lee's Summit stock was acquired, Ash Grove purchased from six individuals, real estate, machinery, equipment and other property used in the Union Quarries quarrying business for \$1,050,000. On Jan. 13, 1966, Ash Grove assigned all of the rights and obligations with regard to the assets used in the operation of Union Quarries to its newly organized wholly-owned subsidiary, Union Quarries, Inc., a Missouri corporation, which now owns the assets.

14. Prior to Jan. 4, 1966, Union Quarries was a division of Union Construction Company, Kansas City, Mo. The owners of Union Construction Company also owned two-thirds of the outstanding stock of Lee's Summit.

15. Union Quarries operated rock quarrying and crushing operations at the two Kansas City locations on which Lee's Summit operated ready mixed concrete plants. Union Quarries also had a third Kansas City area location in Lenexa, Kans. It sold crushed stone and portland cement treated base rock in the Kansas City area from all three locations. In 1965, it consumed over 26,000 barrels of portland cement.

16. At all times relevant herein, Union Quarries was engaged in commerce as "commerce" is defined in the Clayton Act and Federal Trade Commission Act.

Lines of Commerce

17. The complaint alleges that the effect of the acquisitions of Fordyce and Lee's Summit and the acquisition of the assets of Union Quarries may be substantially to lessen competition or to tend to create a monopoly in the manufacture and sale in two lines of commerce: (1) portland cement and (2) ready mixed concrete. The respondent denies this allegation.

18. Portland cement is a material which in the presence of water binds aggregates, such as sand and gravel, into concrete. Portland cement is an essential ingredient in the manufacture of concrete and is the most predominant cement manufactured in the United States (Admitted, Ans. Para. 19; CX 98).

19. The portland cement industry in the United States is substantial. In 1966, there were about 50 portland cement companies in this country operating approximately 184 plants. Total shipments of portland cement in that year amounted to approximately 390 million

barrels, valued at about \$1.2 billion (CX 46, 47, 49, 50, 51, 52, 53, 54, 55 and 68).

20. Portland cement manufacturers sell their product to consumers such as ready mixed concrete companies, concrete product manufacturers, contractors, and building material dealers (Admitted, Ans. Para. 21).

21. On a national basis, approximately 60 percent of all portland cement is shipped to firms engaged in the production and sale of ready mixed concrete. However, in heavily populated metropolitan areas, the percentage of portland cement consumed by ready mixed concrete companies is generally higher (CX 49, Table 16; 50, Table 17; 51 and 52, Table 15; 53 and 55, Table 14, and 94).

22. In general, portland cement consumers have not been integrated or affiliated with portland cement manufacturers. Each has operated independently on a vendor-vendee basis (CX 99; Tr. 1640-43, 2549).

23. During the late 1950's and into the 1960's, there has been a significant trend of mergers and acquisitions by which ready mixed concrete companies in various markets throughout the United States have become integrated with portland cement companies. Since 1959, there have been at least 40 such acquisitions (CX 74).

24. Portland cement is a homogeneous product manufactured to standard specifications of the American Society for Testing Materials (ASTM). Generally, the product of one manufacturer is physically substitutable for the product of another (Tr. 2103, 2112, 2208, 2308-09, 2365, 2472, 2627; CX 39C, CX 54, p. 3). There are five basic types of portland cement included in the ASTM specifications. While these five types are used by concrete manufacturers, Types I and II are the most predominantly produced and used, accounting for more than 90 percent of the sales of portland cement (Table 4 of CX 49 and 50; Table 3 of CX 51, 52, 53 and 55; Tr. 2105-06, 2203-04). The same manufacturing process and raw materials are used in producing Types I through V of portland cement. Differences in types occur in the composition of the raw materials, burning temperature, and the fineness of grinding (CX 54, p. 3; 41Q; Tr. 2105-07, 2181, 2203-05, 2270, 2308, 2365).

25. During the 1960's, portland cement was sold in units of sacks representing 94 pounds and barrels representing four sacks or 376 pounds. The majority of portland cement was shipped in bulk (CX 41 0, 54, pp. 4 and 13; Tr. 2119-20, 2205, 2458).

26. Portland cement is a hydraulic cement which means it will harden under water. However, it is distinguishable in its characteristics and uses from other hydraulic cements such as masonry and natural cements. Masonry cement has a portland cement base but it is not a

portland cement. Masonry cement is used to lay bricks or block. Masonry cement is usually shipped in sacks rather than bulk and a barrel of it weighs 280 pounds compared to a barrel of portland cement which weighs 376 pounds. Masonry cement has different customers and prices than portland cement (CX-54, p. 4; Tr. 2107-08, 2205).

27. Portland cement is manufactured from raw materials such as limestone, clay, shale and alumina, which are combined, burned and ground with gypsum to an extreme fineness (CX 54, p. 3; CX 41E; Tr. 2103-04, 2202).

28. The portland cement industry is a highly capital intensive industry (Tr. 2627, 2112-13). In addition to requiring large amounts of raw materials, a portland cement plant needs large blending tanks, loading and conveying facilities, primary and secondary crushers, kilns, finished grinding equipment and various shipping devices. Only portland cement and subtypes have been made with this specialized equipment (CX 41; Tr. 2112-13, 2209). Due to the high fixed costs experienced by the industry, a plant must be operated at high levels of capacity in order to reduce unit costs sufficiently to break even or make a profit (Tr. 2143, 2240-41, 2315, 2627). During the period 1961-68, if a plant was only selling at 50 percent of its capacity, it would not be running profitably (Tr. 2173, 2240-41, 2263, 2419). A plant would have had to be producing at 85-90 percent of its capacity to make a profit at that time (Tr. 2144). In addition to the large investment in equipment, a new plant faces preoperating costs. There is an initial startup period during which costs are high and profits are not expected. It was not unusual in the portland cement industry for a new plant to experience a startup period of 2 or 3 years before achieving profitability (Tr. 2311-12, 2360).

29. Ready mixed concrete producers have been the most important purchasers in terms of regularity and quantity of purchases (CX 18I, 39D; Tr. 2113, 2115-16, 2209-10, 2312-13, 2365-67). Although heavy contractors are large purchasers of cement, their purchases were more seasonal, sporadic and geographically dispersed than those of the ready mixers (Tr. 2161-62, 2192, 2366).

30. The principal use of portland cement is in the manufacture of concrete; it has no utility by itself (CX 41E, 54, p. 6; Tr. 2104, 2202, 2602). There is no practical substitute for portland cement in the manufacture of concrete (CX 38G, 54, p. 7; Tr. 2104, 2202-03, 2445, 2502; Stipulation re Shaw and Davis, Tr. 2514-15, 2602).

31. In the sale of their product, manufacturers of portland cement consider their competitors to be other manufacturers of portland cement (Tr. 2113, 2367, 2210, 2313). On construction projects, owners, architects and engineers determine what materials will be used. It is

only after that determination is made that contractors, who actually purchase the materials, will solicit bids from the suppliers of the materials specified (Tr. 2113-14). The primary functions of the sales organizations of portland cement manufacturers were the promotion and sale of portland cement. Although salesmen of some manufacturers sold both portland and masonry cements, Universal Atlas, for example, separated portland cement from other cements by organizing two sales departments (Tr. 2118, 2214, 2264, 2369-70, 2390).

32. The price of portland cement was determined on the basis of the value at the mill (mill base) plus freight cost to destination. A manufacturer would determine his price in relation to prices charged by competing portland cement producers in a particular market. If his mill was farther away from the market than that of a competitor but his mill base was the same, he would have to absorb freight in order to remain competitive. Prices were thus determined without reference to the prices of other products (Tr. 2119-20, 2370, 2391-92, 2220). In addition, the lowering of cement prices would not increase the total demand for that product over other products because the demand for cement is derived from the level of construction activity generally and is inelastic (Tr. 2281, 2606).

33. Portland cement is a relevant line of commerce within the meaning of Section 7 of the Clayton Act, as amended, and a relevant product market for purposes of Section 5 of the Federal Trade Commission Act. This conclusionary finding is in accord with previous Commission and court decisions to the same effect, which are, of course, binding on the administrative law judge. *Permanente Cement Company*, 67 F.T.C. 334 (1965); *Diamond Alkali Co.*, 72 F.T.C. 700 (1967); *U.S. Steel Corp.*, 74 F.T.C. 1270 (1968), *rev'd* on other grounds, 426 F.2d 592 (6th Cir. 1970); *Mississippi River Fuel Corp.*, 75 F.T.C. 813 (1969), *affirmed*, 454 F.2d 1083 (8th Cir. 1972); *Missouri Portland Cement Co.*, [1967-1970 Transfer Binder] Trade Reg. Rep. Paragraph 18,805 (1969) [76 F.T.C. 1064]; *Marquette Cement Manufacturing Co.*, 75 F.T.C. 32 (1969); *OKC Corp.*, 77 F.T.C. 1342 (1970), *affirmed*, 455 F.2d 1159 (10th Cir. 1972). There is nothing in the arguments to the contrary of respondent which indicate that a reversal of these decisions should be made at this time.

34. Ready mixed concrete is a material produced by combining portland cement, aggregates such as rock and sand, water, and occasionally certain admixtures (CX 38F; Tr. 2441, 2502; Stipulation re Shaw and Davis, Tr. 2514-15). Of these essential raw materials, portland cement is the most expensive and no other cement is considered to be a practical substitute (CX 38G; CX 54, p. 7; Tr. 2445, 2502; Stipulation re Shaw and Davis, Tr. 2514-15; Tr. 2602). Portland

cement represents approximately 60 percent of the raw material cost and 35 percent of the total cost of producing, distributing, and selling ready mixed concrete (Tr. 2446-47, 2502; Stipulation re Shaw and Davis, Tr. 2514-15). Coarse aggregate is the second most costly raw material in ready mixed concrete accounting for 25 percent of the raw material cost (Tr. 2447, 2502; Stipulation re Shaw and Davis, Tr. 2514-15).

35. There are three methods by which ready mixed concrete can be produced. In a central-mix operation all the raw materials are completely mixed at the plant, and the concrete, which is ready to be poured at the time it is loaded into the hauling vehicles, is then transported to the point of usage. In a transit-mix operation, the dry ingredients are measured and loaded into the hauling vehicles. Water is added on the way to the job site. Shrink-mixing is the process by which the ingredients are partially mixed at the plant and further mixed at the point of usage (CX 38F, CX 43, p. 32D-2; Tr. 2441-42). The ready mixed concrete produced by any of these methods is delivered to purchasers in a plastic, unhardened state (CX 38Z2; Tr. 2441, 2446, 2517).

36. The equipment used to produce ready mixed concrete consists of conveyors, bins, scale hoppers, and trucks equipped with revolving drum bodies to mix and haul the concrete. This equipment is specialized and cannot readily be used for any purpose other than the production and distribution of ready mixed concrete (CX 38F-G; Tr. 2442-43; Stipulation re Shaw and Davis, Tr. 2514-15).

37. Producers of ready mixed concrete generally do not manufacture and sell any other products (CX 38D, CX 43, p. 32D-2; Tr. 2441, 2501, 2516; Stipulation re Shaw and Davis, Tr. 2514-15).

38. Ready mixed concrete is produced to meet specifications which require the concrete to withstand certain pounds of pressure per square inch. These different pressure levels are known as "strengths." The strength is increased usually by increasing the amount of portland cement per cubic yard of ready mixed concrete to be produced, and reducing the amount of water and/or aggregate. Increased strengths of concrete require the use of increased quantities of portland cement resulting in higher production costs and sales prices. (CX 38I, J; Tr. 2448, 2455-58; Stipulation re Shaw and Davis, Tr. 2514-15, 1862, 1758, 1834).

39. Ready mixed concrete is sold principally to contractors or subcontractors for use in the construction of commercial buildings, schools, residential structures, foundations, sidewalks, bridges and roads. After the concrete is delivered to the job site, the contractor or builder is responsible for putting it in place (CX 38W; Tr. 2449, 2503, 1682, 1730, 1732; Stipulation re Shaw and Davis, Tr. 2514-15).

