

Complaint

70 F.T.C.

FINAL ORDER

This matter having been heard by the Commission upon respondent's appeal from the initial decision; and the Commission, for the reasons stated in the accompanying opinion, having denied the appeal, and having modified the initial decision in part:

It is ordered, That the initial decision of the hearing examiner, as so modified, be, and it hereby is, adopted as the decision of the Commission.

It is further ordered, That respondent shall, within sixty (60) days after service upon it 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 the order to cease and desist.

Commissioner Elman dissented and has filed a dissenting opinion.

IN THE MATTER OF

PHILLIPS PETROLEUM CO. ET AL.

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

Docket C-1088. Complaint, Aug. 2, 1966—Decision, Aug. 2, 1966

Consent order requiring the dissolution of major joint ventures in the polyolefin plastics field between Phillips Petroleum Co. of Oklahoma and National Distillers and Chemical Corp. of New York City, and requiring divestiture of a resin plant and three acquisitions made by one of these joint ventures, and requiring the construction of two new resin plants by Phillips and banning future acquisitions and joint ventures by Phillips or National.

COMPLAINT

The Federal Trade Commission, having reason to believe that the above-named respondents have violated the provisions of Section 7 of the Clayton Act and Section 5(a)(1) of the Federal Trade Commission Act, 15 U.S.C. §§ 18 and 45(a)(1), and that a proceeding in respect thereof would be to the interest of the public, issues this complaint, stating its charges as follows:

I. Definitions

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

(a) "Resins" are a class of solid or semi-solid organic products generally of high molecular weight with no definite melting point.

(b) "Polyolefins" are resins formed by the polymerization (*i.e.*, linking together) of molecules of unsaturated hydrocarbons such as ethylene or propylene. The most important polyolefins are polypropylene and low and high density polyethylene.

(c) "Low density [sometimes called "conventional"] polyethylene" is a resin formed by the polymerization of purified ethylene and having a density of 0.940 or lower.

(d) "High density [sometimes called "linear"] polyethylene" is a resin formed by the polymerization of purified ethylene and having a density greater than 0.940.

(e) "Polypropylene" is a resin formed by the polymerization of purified propylene.

(f) "Fiber grade [sometimes called "filament grade"] polypropylene resin" is that grade of polypropylene resin suitable for commercial use in the production of filaments and fibers.

II. The Respondents

a. *Phillips Petroleum Company*

2. Respondent Phillips Petroleum Company ("Phillips") is a corporation organized and existing under the laws of the State of Delaware, with its principal office and principal place of business at Bartlesville, Oklahoma.

3. Phillips, together with its consolidated subsidiaries, is a fully integrated company which distributes petroleum products in almost every state of the United States. Its operations include exploration for and production of crude oil and natural gas; the refining, transporting, and marketing of petroleum; and the manufacture and marketing of petrochemical products.

4. Phillips is the 34th largest industrial corporation in the United States in terms of sales and the 19th largest in terms of assets. Phillips' total sales in 1964 exceeded \$1.3 billion. Its assets, as of December 31, 1964, were nearly \$2 billion, and its retained earnings exceeded \$859 million. Phillips has for many years enjoyed a substantial cash flow and ready access to institutional funds and other sources of capital. During 1964, Phillips' cash flow amounted to \$240 million.

5. Phillips derives a substantial portion of its revenue from the manufacture and sale of petrochemicals. It is a major producer of propylene and ethylene, the raw materials for the production of polyolefin resins. Phillips is also a major producer of polyolefin resins—it is one of the nation's leading producers of high density polyethylene resin, and through joint ventures with National Distillers and Chemical Corporation ("National") which are described more fully below in paragraphs 13 through 19, Phillips is a substantial producer of low density polyethylene resin and polypropylene resin. Finally, Phillips is extensively engaged in the fabrication and sale of end products manufactured from polyolefin resins—polyethylene film and sheet, polyethylene-coated milk cartons and other polyethylene-coated products, injection-molded plastic products, and pipe, hose and fittings made from polyethylene or polypropylene.

6. Phillips has long been a leader in research and development, ranking eighth among all industrial companies in U.S. patents issued in 1963. It derives substantial revenue from the licensing of its patents and from technical services provided in connection with such licensing. In the area of polyolefin technology, it holds the patent on the process most widely used in this country for the production of high density polyethylene; licensees of this process for producing high density polyethylene include Union Carbide Corporation and Celanese Corporation of America. It is also one of the claimants for the basic patent on polypropylene.

7. Phillips is and for many years has been extensively engaged in the purchase, sale and shipment across state lines of petroleum, polyolefins and other products. Phillips is engaged in "commerce" within the meaning of the Clayton and Federal Trade Commission Acts.

B. National Distillers and Chemical Corporation

8. Respondent National Distillers and Chemical Corporation ("National") is a corporation organized and existing under the laws of the State of Virginia, with its principal office and principal place of business at 99 Park Avenue, New York, New York.

9. National is a leading manufacturer of liquor and industrial alcohol. It also produces and markets non-ferrous metal products, aircraft and missile components and a wide variety of chemicals.

10. National is the 123rd largest United States industrial corporation in terms of sales and the 78th largest in terms of assets. National's total sales in 1964, excluding excise taxes, were ap-

proximately \$500 million; its assets, as of December 31, 1964, exceeded \$600 million, and its retained earnings exceeded \$225 million.

11. National is one of the largest plastics producers in the world. It is also one of the principal suppliers of products made of hydrocarbons extracted from natural gas. National, both independently and through joint ventures, is extensively engaged in the manufacture and sale of polyolefin resins. It was the nation's third ranking producer of low density polyethylene resin in 1962. Through National Petro Chemicals Corporation, a joint venture with Owens-Illinois, Inc., it is a substantial producer and marketer of high density polyethylene resin. Through joint ventures with Phillips, described more fully below in paragraphs 13 through 19, National produces low density polyethylene and polypropylene resins.

12. National is and for many years has been extensively engaged in the purchase, sale and shipment across state lines of alcoholic beverages, polyolefins and other products. National is engaged in "commerce" within the meaning of the Clayton and Federal Trade Commission Acts.

C. Alamo Industries, Inc.

13. Respondent Alamo Industries, Inc. ("Alamo"), formerly named Alamo Polymer Corporation, is a corporation organized and existing under the laws of the State of Delaware, with its principal office and principal place of business at 4037 East Independence Boulevard, Charlotte, North Carolina.

14. Alamo is a joint venture equally owned by National and Phillips and was organized in July, 1962 for the production of polypropylene resin and film. It started production of polypropylene in 1964 in a new plant. In 1965 construction was started on an expansion of this plant which will double its capacity. Upon the completion of this expansion in 1966 Alamo will have an annual production capacity for polypropylene resin of 32 million pounds. Alamo anticipates that its sales of polypropylene resin in 1966 will exceed 36 million pounds.

15. Alamo has consummated a number of partial or complete acquisition of companies engaged in the production of products which use or are potential users of polypropylene. Through such acquisitions Alamo has become a leading company in the production and development of polypropylene filaments, fibers and other

polypropylene products. The acquisitions are discussed in more detail in paragraph 39, below.

16. Alamo was organized for and is engaged in the sale and shipment of polypropylene resin, polypropylene film and polypropylene end products across state lines. Alamo is engaged in "commerce" within the meaning of the Clayton and Federal Trade Commission Acts.

D. A-B Chemical Corporation

17. Respondent A-B Chemical Corporation ("A-B") is a corporation organized and existing under the laws of the State of Texas, with its principal office and principal place of business at Deer Park, Harris County, Texas.

18. A-B is a joint venture equally owned by National and Phillips and was organized in 1962 for the production of low density polyethylene resin. The only product it produces is low density polyethylene resin. In 1964 it accounted for 7% of total U.S. production. Expansion has been authorized which will double the capacity of A-B and probably result in it having the third largest capacity of any company in the industry.

19. A-B was organized for and is engaged in the sale and shipment of low density polyethylene resin across state lines. A-B is engaged in "commerce" within the meaning of the Clayton and Federal Trade Commission Acts.

III. The Nature of Trade and Commerce

A. Generally

20. The manufacture of plastics is an important and rapidly growing industry. The production of plastics in the United States has risen from a volume of 1 billion pounds in 1946 to 10.1 billion pounds in 1964. The total value of shipments of plastics in 1963 exceeded \$2 billion, and the value of shipments of plastics products exceeded \$3 billion.

21. The growth in production of polyolefins has been rapid. In 1964, production exceeded 2.8 billion pounds, more than double the amount produced in 1960. Furthermore, in 1964 polyolefin production represented 29% of all plastics production. The value of polyolefin shipments in 1963 exceeded \$500 million.

22. The raw materials for the production of polyolefins are derived from natural gas and petroleum. The primary source is the "cracking" of petroleum gases such as ethane, propane, or light-

naphtha hydrocarbons. The ethylene and propylene derived from the "cracking" process are polymerized into resin. Small amounts of fillers, plasticizers and colorants may be added to the resin. The resin is then fabricated into intermediate or end products.

23. There are a number of major uses for polyolefin resins, with film and sheet constituting the largest use and molded articles the next largest. Molded articles include blow-molded containers such as bleach and detergent bottles and injection-molded articles such as housewares, toys and components for home appliances. Pipe and the extrusion coating of paper or paperboard (*e.g.*, milk cartons) represent other major polyolefin end uses.

24. Though the three polyolefin resins overlap, each resin has characteristics that suit it for particular purposes. Because low density polyethylene resin is the most flexible, has the least tensile strength, and has the lowest softening point, it is the predominant resin in the production of film and sheet, in wire and cable coating, and in extrusion coating. High density polyethylene resin, with its greater rigidity and strength, predominates in the manufacture of blow-molded containers. Polypropylene is the stiffest, has the greatest tensile strength and the highest melting point. It accounts for practically all polyolefin resin consumed in the manufacture of filament and fiber. A few companies produce all three resins, however, most produce only one or two of the three.

B. *Low Density Polyethylene Resin*

25. Low density polyethylene was developed and patented by Imperial Chemical Industries, Ltd., of Great Britain ("I.C.I.") before World War II. Production has risen steadily from 8 million pounds in 1943 to 1.9 billion pounds in 1964.

26. Low density polyethylene resin is now being produced by 10 companies. In 1962 the four largest producers accounted for 70% of total production and the eight largest for 95%.

27. Barriers to entry into the production of low density polyethylene are relatively high. Purchase of a license and technical know-how to undertake production may cost several million dollars. A relatively large plant is required for entry. The average sized plant has a capacity of approximately 130 million pounds a year, and the smallest has a capacity of about 50 million pounds. At the present time A-B has authorized the construction of two new plants each having 70 million pounds annual capacity. The

construction costs for a plant of such size are approximately \$14 million.

28. Forward vertical integration into fabrication by resin manufacturers also presents a major barrier to entry into the manufacture of low density polyethylene resin. The leading end use of low density resin is in the manufacture of film and sheet. Until 1955, manufacture of film and sheet was primarily a small business operation, and only one polyolefin resin producer was engaged in its manufacture. By the end of 1962, largely through acquisitions, twelve polyolefin producers had obtained facilities for the manufacture of polyethylene film or sheet. Production by such manufacturers accounted for over one-half of total shipments of film and sheet in 1962.

29. Considerable vertical integration, largely through acquisition, has also occurred in other end-use markets for low density polyethylene resin. In extrusion coating, Phillips, in October, 1964, acquired Sealright-Oswego Falls Corporation, which in 1963 accounted for 8% of U.S. value of shipments of paper milk cartons. Milk cartons constitute the largest single use for extrusion coated paper and paperboard. Additional integration occurred in other extrusion coating uses with the acquisition by Phillips, in December, 1962, of the H. P. Smith Paper Company, a producer of polyethylene coated paper and paperboard. There have also been a number of acquisitions in the last few years of companies producing pipe from low density polyethylene.

C. Polypropylene

30. Polypropylene resin was developed in 1954 in Italy. Product and process patents have been issued in the United States and other countries to Montecatini Mining and Chemical Company, a large Italian chemical company. However, the patent situation in the United States is still unsettled. An interference proceeding is presently before the Patent Office involving the composition-of-matter patent. Phillips is among the claimants which also include Standard Oil of Indiana, du Pont and Montecatini. Commercial production of polypropylene resin began in this country in 1957 and reached 270 million pounds in 1964. Rapid growth of consumption has been forecast. During the first six months of 1965 production was 42% greater than in the corresponding period of 1964.

31. Including Alamo, there are nine companies now engaged in production of polypropylene resin in the United States. In 1962,



