UNITED STATES OF AMERICA BEFORE FEDERAL TRADE COMMISSION

In the matter of	
OCCIDENTAL PETROLEUM) Docket No. C-4139
CORPORATION)
a corporation)
and)
VULCAN MATERIALS COMPANY)
a corporation.))

COMPLAINT

Pursuant to the Federal Trade Commission Act and the Clayton Act, and by virtue of the authority vested in it by said Acts, the Federal Trade Commission ("Commission"), having reason to believe that Occidental Petroleum Corporation, a corporation subject to the jurisdiction of the Commission, has entered into an agreement to acquire the chemicals business of Vulcan Materials Company, a corporation subject to the jurisdiction of the Commission, and that the acquisition, if consummated, would result in a violation of Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45, and Section 7 of the Clayton Act, 15 U.S.C. § 18, and it appearing to the Commission that a proceeding in respect thereof would be in the public interest, hereby issues its complaint, stating its charges as follows:

A. THE RESPONDENTS

- 1. Respondent Occidental Petroleum Corporation ("Occidental") is a corporation organized, existing, and doing business under and by virtue of the laws of the State of Delaware with its headquarters and principal place of business at 10889 Wilshire Boulevard, Los Angeles, CA. It is the parent company of Occidental Chemical Corporation ("OxyChem"), whose headquarters and principal place of business is located at Occidental Tower, 5005 LBJ Freeway, Dallas, Texas 75244.
- 2. Occidental, through its subsidiary OxyChem, owns and operates eight U.S. chloralkali plants and holds a 76 percent interest in OxyVinyls LP which has two additional U.S. chloralkali

plants. The large majority of chloralkali plants produce chlorine and caustic soda (sodium hydroxide or NaOH); however, some chloralkali facilities produce chlorine and KOH (potassium hydroxide or caustic potash). OxyChem produces KOH at its chloralkali facilities in Delaware City, Delaware; Mobile, Alabama; and Muscle Shoals, Alabama. OxyChem is the largest producer of KOH in the United States.

- 3. OxyChem owns 50 percent of Armand Products Company ("Armand"), a joint venture with Church & Dwight. Armand produces potassium carbonate ("potcarb") and potassium bicarbonate at a facility in Muscle Shoals, Alabama that is operated by OxyChem and located next to OxyChem's Muscle Shoals chloralkali facility. Armand is the largest producer of potcarb in the United States. Most of Armand's production is of the solid form of potcarb, known as APC or anhydrous potassium carbonate.
- 4. Respondent Occidental is, and at all times relevant herein has been, engaged in commerce, as "commerce" is defined in Section 1 of the Clayton Act, 15 U.S.C. § 12, and is a corporation whose business is in or affecting commerce as "commerce" is defined in Section 4 of the Federal Trade Commission Act, 15 U.S.C. § 44.
- 5. Respondent Vulcan Materials Company ("Vulcan") is a corporation organized, existing, and doing business under and by virtue of the laws of the State of New Jersey, with its headquarters and principal place of business located at 1200 Urban Center Drive, Birmingham, Alabama 35242.
- 6. Respondent Vulcan's chemicals business consists of three chloralkali plants and related assets. Vulcan's plants are located in Port Edwards, Wisconsin; Geismar, Louisiana; and Wichita, Kansas. In addition, Vulcan and Mitsui & Co. Ltd. are joint venture partners in a second chloralkali plant and an ethylene dichloride plant in Geismar, Louisiana. Vulcan produces KOH and potcarb at its Port Edwards, Wisconsin facility and sells these chemicals to customers in the United States. Vulcan produces the second largest volume of potassium hydroxide and potassium carbonate in the United States.
- 7. Respondent Vulcan is, and at all times relevant herein has been, engaged in commerce, as "commerce" is defined in Section 1 of the Clayton Act, 15 U.S.C. § 12, and is a corporation whose business is in or affecting commerce as "commerce" is defined in Section 4 of the Federal Trade Commission Act, 15 U.S.C. § 44.

B. THE PROPOSED TRANSACTION

8. On October 12, 2004, Respondents announced that they had entered into an agreement whereby Occidental, through its subsidiary OxyChem, would purchase Vulcan's chemical business, including Vulcan's three plants and related transportation and distribution assets and assume certain liabilities. Included in the transaction is the Vulcan-Mitsui joint venture at Geismar. The purchase price is \$214 million plus certain contingent future payments, projected to equal

approximately \$145 million. Throughout this Complaint this transaction is referred to as "the proposed transaction."

C. THE RELEVANT MARKETS

- 9. For the purposes of this Complaint, the relevant product markets in which to analyze the effects of the proposed transaction are research, marketing, manufacture, and sale of (1) potassium hydroxide (also known as KOH); (2) potcarb; and (3) anhydrous potassium carbonate or APC.
- 10. KOH is a chemical made by the electrolytic decomposition of potassium chloride brine into chlorine and KOH. It is the most commonly used intermediate form in which inorganic potassium chemicals are manufactured. KOH is the raw material for the production of many potassium chemicals, such as potassium carbonate, potassium permanganate, citrate, acetate, cyanide, benzoate, iodide, and sorbate.
- 11. Potcarb is the highest volume potassium chemical produced using KOH. It is produced through the carbonation of KOH. End uses for potcarb include nutrition supplements for dairy cattle, video glass for television and computer monitors, other specialty glass, potassium silicates, fertilizers, gas processing, industrial intermediaries, photographic development processes, detergents, and food products.
- 12. Potcarb can be produced in liquid or solid form. The solid form is known as anhydrous potassium carbonate or APC. The majority of total potcarb production in the United States is of APC. APC requires a more sophisticated production process and greater capital investment than does liquid potcarb production. Most APC users cannot economically substitute liquid potcarb for APC.
- 13. The relevant geographic market in which to assess the impact of the proposed acquisition is no broader than the United States. Competition is national in scope, with U.S. producers of the relevant products marketing and selling their products to customers throughout the United States. Imports of the relevant products are limited. The potential for increased imports is limited by transportation costs and by customer requirements for security and timeliness of supply.

D. MARKET STRUCTURE

a. KOH

14. The market for KOH is highly concentrated. In 2004, there were three producers of KOH in the United States: OxyChem, Vulcan, and ASHTA Chemicals ("ASHTA"). In that year, production by OxyChem and Vulcan accounted for over 80% of total U.S. production and capacity.

- 15. In 2005, Olin Corp. entered the domestic KOH market. Olin partially converted half of its chloralkali facility in Tennessee to be able to produce either KOH or caustic soda. With the addition of Olin's KOH capacity, the combined KOH capacity of OxyChem and Vulcan is approximately 70% of total U.S. capacity. It is expected that Olin's production in 2005 will represent a small portion of total U.S. production.
- 16. As measured by capacity, including Olin, the proposed transaction would increase the Herfindahl-Hirschman Index ("HHI") of concentration in domestic KOH by over 1300 points to over 5000.

b. PotCarb

- 17. The market for potcarb is highly concentrated. There are four producers of potcarb in the United States: Armand, Vulcan, ASHTA, and Na-Churs/Alpine Solutions. ASHTA and Na-Churs produce only liquid potcarb. Armand and Vulcan together accounted the great majority of potcarb produced in the United States in 2004 and controlled over 80% of total capacity. Imports of potcarb account for less than 2% of total potcarb sales.
- 18. If the proposed transaction is consummated, OxyChem will own the potcarb production assets of Vulcan. Because of the relationship between Armand and OxyChem, they are not independent competitors and their capacity and production are considered jointly for concentration analysis.
- 19. The proposed transaction would increase the HHI for potcarb, as measured by capacity, by over 1800 points to a postmerger HHI of over 7000 points.

c. APC

- 20. The market for APC is very highly concentrated. Armand and Vulcan are the only two producers of APC in the United States. Together they accounted for all of the APC produced and over 95% of the APC sold in the United States. ASHTA also owns a facility that can produce APC; however, the company idled the facility at the end of 2002.
- 21. For APC, the proposed transaction would increase the HHI for production to 10,000 points, an increase of over 2000 points. Taking into account the available capacity of ASHTA's idled APC facility, the transaction would result in an HHI of over 8500 and an increase of over 2000 points.

E. COMPETITION

22. KOH and potcarb are commodity products. The majority of customers have no preference based on product composition for KOH or potcarb from a particular manufacturer, although customers may require products of differing granularity.

- 23. OxyChem and Vulcan are direct competitors in the sale of KOH in the United States. Many KOH customers obtain bids or quotes from both companies and use competition between them to obtain better pricing.
- 24. OxyChem, through Armand, and Vulcan are direct competitors in the sale of potcarb and APC in the United States. The companies compete with one another to supply customers with potcarb and APC, often participating in competitive bidding processes to be a particular customer's supplier of potcarb and/or APC.

F. ENTRY CONDITIONS

- 25. New entry will not be timely, likely, or sufficient to constrain OxyChem from exercising market power if the proposed transaction is consummated. To constrain OxyChem sufficiently, entry or expansion would have to be of a size and scope that would replicate the competitive impact of Vulcan.
- 26. New entry will not be timely, likely, or sufficient in the KOH market. Prior to Olin's entry into the KOH market in 2005, the most recent entrant into the KOH market had been Vulcan, which entered the market in the mid-1980s, also through conversion of caustic soda capacity at an existing chloralkali plant. Only caustic soda production facilities using mercury cell or membrane technology are suitable for conversion to KOH for the U.S. market. These production technologies account for less than 35% of U.S. caustic soda capability and a number of plants are too large to be viably converted to KOH production for the smaller KOH market. There are at least two caustic soda manufacturers with facilities theoretically suitable for conversion, in whole or part, to the production of KOH; however, it is unlikely that either of these would enter the KOH market, even if KOH pricing increases a small but significant amount as a result of the proposed transaction. *De novo* construction of a KOH facility is extremely unlikely and would not be timely. It would require a significant capital expenditure and take over two years to complete.
- 27. Entry into the potcarb market will not be timely, likely, or sufficient. The vast majority of potcarb customers in the U.S. require APC, the solid form of potcarb; therefore, a new producer of liquid potcarb would not be sufficient to replace the competition lost by the exit of Vulcan as a result of the proposed transaction. It is very unlikely a manufacturer without its own source of KOH would find it economically viable to invest in an APC production facility and compete with manufacturers with internal sources of product.
- 28. Market conditions in the potcarb market are not conducive to additional APC entry. There is excess APC capacity in the United States due to a decrease in demand over the past several years. Further, available KCl for use in KOH production is extremely tight due to increasing demand in the agricultural market and it is unlikely that increased supplies will be available at least over the next 12 to 24 months. Given the current market conditions and other factors, it is unlikely that either Olin or ASHTA would find it economically viable to enter the APC market within the next two years, even in response to a small but significant increase in price. Further, unless Olin were to make

the decision to enter relatively quickly, its putative entry would not be timely as it can take up to 2 years to construct an APC facility.

G. EFFECTS OF THE PROPOSED ACQUISITION

- 29. The effect of the acquisition may be substantially to lessen competition and to tend to create a monopoly in the relevant markets in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18, and Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. § 45, in the following ways, among others:
 - a. It will substantially increase concentration in the markets for KOH, potcarb and APC;
 - b. It will eliminate Vulcan as the most significant competitor in the KOH market and the only significant competitor in the potcarb and APC markets; and
 - c. It will lead to a reduction in competition and an increase in the likelihood that OxyChem and Armand will increase prices in the markets for KOH, potcarb, and APC.

H. VIOLATIONS CHARGED

- 30. The proposed transaction between Occidental and Vulcan violates Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. § 45.
- 31. The proposed transaction between Occidental and Vulcan, if consummated, would violate Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. § 45, and Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

WHEREFORE, THE PREMISES CONSIDERED, the Federal Trade Commission on this second day of June, 2005, issues its Complaint against said Respondents.

By the Commission.

Donald S. Clark Secretary

SEAL: