

IN THE MATTER OF

THE DOW CHEMICAL COMPANY

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

Docket C-3785. Complaint, Feb. 20, 1998--Decision, Feb. 20, 1998

This consent order requires, among other things, the Michigan-based chemical company to divest, simultaneously with its acquisition of Sentrachem, Limited, a South African chemical company, the Hampshire Chemical Company's chelant business to Akzo Nobel N.V., which imports small volumes of chelants into the United States.

Appearances

For the Commission: *Morris Bloom, Joseph Krauss, Howard Morse and William Baer.*

For the respondent: *Robert Schlossberg and Peter Halle, Morgan, Lewis & Bockius, Washington, D.C. and Scott R. Pennock, in-house counsel, Midland, MI.*

COMPLAINT

Pursuant to the provisions of 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, having reason to believe that the Dow Chemical Company's proposed acquisition of the South African company, Sentrachem Limited ("Sentrachem"), including its U.S. subsidiary, Hampshire Chemical Corporation ("Hampshire"), would violate Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45, and would violate Section 7 of the Clayton Act, as amended, 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:

I. THE RESPONDENT

The Dow Chemical Company

1. Respondent Dow is a corporation organized, existing and doing business under and by virtue of the laws of Delaware, with its office

and principal place of business located at 2030 Dow Center, Midland, Michigan. In 1996 Dow had worldwide sales of approximately \$20 billion.

2. Dow produces chemicals, plastics, and agricultural and consumer products. Through its Chemical Division, it is the leading producer in the U.S. of aminopolycarboxylic chelating agents, also known as chelants.

3. At all times relevant herein, Dow has been, and is now, a corporation as "corporation" is defined in Section 4 of the Federal Trade Commission Act, 15 U.S.C. 44; and at all times relevant herein, Dow has been, and is now, engaged in commerce as "commerce" is defined in Section 4 of the Federal Trade Commission Act, 15 U.S.C. 44, and Section 1 of the Clayton Act, 15 U.S.C. 12.

II. THE ACQUIRED COMPANY

4. Sentrachem, a South African company, develops, manufactures, and markets a number of different commodity and specialty chemical products. In 1996 Sentrachem had worldwide sales of approximately \$1 billion. Sentrachem competes in the U.S. chelant market through its U.S. subsidiary, Hampshire, a Delaware corporation, with its principal place of business in Lexington, Massachusetts. In 1996, Hampshire's sales were approximately \$200 million.

III. THE ACQUISITION

5. On or about August 5, 1997, Dow announced a cash tender offer to acquire all of the shares of Sentrachem for approximately \$425 million.

IV. THE RELEVANT MARKET

6. One relevant line of commerce in which to analyze the proposed acquisition is the research, development, manufacture, and sale of chelants, which are chemicals used to inactivate iron, calcium, copper, magnesium and other metal ions in water solutions. Chelants are used in cleaners, pulp and paper, water treatment, photography, agriculture, and food and pharmaceutical applications. Chelant customers use chelants because they are high quality metal ion control chemicals that are cost effective across a wide variety of applications. Chelants are an extremely small part of the customer's overall product or processing costs. Because of the time and cost associated with researching and qualifying an alternative to chelants,

customers do not reformulate away from chelants. There are no economic substitutes for chelants to which customers would switch in response to a price increase in chelants.

7. The United States is one relevant geographic area within which to analyze the likely effect of the proposed acquisition on competition in the chelant market. Chelants produced overseas are not economic substitutes for most chelants sold in the United States, particularly those diluted in water, because shipping costs are high and there are too many uncertainties and delays inherent in long distance shipping. Imports of chelants are less than 4 percent of U.S. consumption.

V. CONCENTRATION

8. Based on 1996 dollar sales, Dow and Hampshire are the two leading of only three producers of chelants in the United States, with a combined market share of over 70 percent. The U.S. chelant market is highly concentrated as measured by the Herfindahl-Hirschmann Index ("HHI"). The proposed acquisition would increase the HHI by more than 2,800 points to more than 6,100 points.

VI. ENTRY CONDITIONS

9. Entry into the chelant market would not be timely, likely, or sufficient to deter or offset the adverse effects of the proposed acquisition on competition. A new entrant would have to build both a chelant production plant and a plant to produce hydrogen cyanide ("HCN"), a key input in the production of chelants, which would take over two years and entail large fixed, and mostly sunk, costs. In addition to the time to construct these facilities, a new firm must secure the environmental permits to produce HCN, a toxic substance. In order to recoup its investment, a new entrant would need to obtain a market share at least as large as that held by any of the current domestic producers, which would be difficult because of the significant amount of chelant sales that are subject to long term supply agreements. All these factors make entry into the U.S. chelant market unlikely.

VII. EFFECT OF THE PROPOSED MERGER ON COMPETITION

10. The proposed acquisition would substantially lessen competition or tend to create a monopoly in the U.S. chelant market, because, among other things:

- a. It increases concentration substantially in a highly concentrated market;
- b. It eliminates actual, direct, and substantial, competition between Dow and Hampshire;
- c. It facilitates the unilateral exercise of market power by the merged firm; and
- d. It will likely result in increased prices for chelants.

VIII. VIOLATIONS CHARGED

11. The proposed acquisition by Dow of all the shares of Sentrachem, described in paragraph five, 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.

Commissioner Azcuenaga and Commissioner Thompson not participating.

DECISION AND ORDER

The Federal Trade Commission ("the Commission"), having initiated an investigation of the proposed acquisition by The Dow Chemical Company ("Dow"), through its wholly-owned subsidiary, Dow South Africa Holdings (Pty) Ltd., of the entire issued share capital of Sentrachem Limited ("Sentrachem"), which in turn owns Hampshire Chemical Corporation ("Hampshire"), and having been furnished thereafter with a copy of a draft of complaint which the Bureau of Competition proposed to present to the Commission for its consideration and which, if issued by the Commission, would charge respondent with a violation of Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45, and a violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. 18; and

The respondent, its attorneys, and counsel for the Commission having thereafter executed an agreement containing a consent order, an admission by the respondent of all the jurisdictional facts set forth in the aforesaid draft of complaint, a statement that the signing of said agreement is for settlement purposes only and does not constitute an admission by respondent that the law has been violated as alleged in such complaint, and waivers and other provisions as required by the Commission's Rules; and

The Commission, having thereafter considered the matter and having determined that it had reason to believe that the respondent has violated the said Acts, and that a complaint should issue stating its charges in that respect, and having thereupon accepted the executed consent agreement and placed such agreement on the public record for a period of sixty (60) days, now in further conformity with the procedure prescribed in Section 2.34 of its Rules, the Commission hereby issues its complaint, makes the following jurisdictional findings and enters the following order:

1. Respondent Dow is a corporation organized, existing and doing business under and by virtue of the laws of the state of Delaware, with its office and principal place of business located at 2030 Dow Center, Midland, Michigan.

2. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondent, and the proceeding is in the public interest.

ORDER

I.

It is ordered, That, as used in this order, the following definitions shall apply:

A. "*Commission*" means the Federal Trade Commission.

B. "*Respondent*" or "*Dow*" means The Dow Chemical Company, its directors, officers, employees, agents and representatives, its predecessors, successors, and assigns; subsidiaries, divisions, and groups and affiliates controlled by Dow, and the respective directors, officers, employees, agents, representatives, successors and assigns of each.

C. "*Sentrachem*" means Sentrachem Limited, a South African company, with its principal place of business at 5 Protea Place Sandown 2196, 2146 Sandton, Republic of South Africa.

D. "*Hampshire*" means Hampshire Chemical Corporation, a wholly-owned subsidiary of Sentrachem Limited, with its principal place of business at 55 Hayden Avenue, Lexington, Massachusetts.

E. "*Akzo*" means Akzo Nobel N.V., a company located in The Netherlands, with its principal place of business at Velperweg 76, 6800 SB Arnhem, The Netherlands, and its subsidiary Akzo Nobel Chemicals Inc.

F. "*Acquisition*" means the acquisition by Dow, through its subsidiary, Dow South Africa Holdings (Pty) Ltd., of the entire issued share capital of Sentrachem Limited.

G. "*Chelating agents*" means chemicals used to react with metal ions to form ring structures incorporating the metal ion within the molecule.

H. "*Chelant products*" means ethanoldiglycine sodium ("EDG") and diethanolglycine sodium ("DEG") and aminopolycarboxylic acids and salts, including, but not limited to, ethylenediaminetetraacetic acid ("EDTA"), diethylenetriaminepentaacetic acid ("DTPA"), hydroxyethylenediaminetriacetic acid ("HEDTA"), nitrilotriacetic acid ("NTA"), ethylenediaminetriacetic ("ED3A"), and the salts and nitrile precursors of EDTA, DTPA, HEDTA, ED3A, and any other chelating agents, but excluding propylenediaminetetraacetic acid ("PDTA").

I. "*Hampshire Chelant Products*" means all chelant products that have been, at any time in the two (2) years preceding the Acquisition, researched, developed, manufactured, distributed or sold by Hampshire in the United States or Canada, including, but not limited to, all projects in research and development by Hampshire that relate to improving existing or developing new chelant products, or improving processes for manufacturing chelant products.

J. "*Hampshire Non-Chelant Products*" means any product other than Hampshire Chelant Products, that have been, at any time in the two (2) years preceding the Acquisition, researched, developed, manufactured, distributed, or sold at the Lima Facility or Other Hampshire Facilities, including, but not limited to, all projects in research and development by Hampshire that relate to improving existing or developing new Hampshire Non-Chelant Products, or improving processes for manufacturing Hampshire Non-Chelant Products.

K. "*Hampshire Products*" means Hampshire Chelant Products and Hampshire Non-Chelant Products.

L. "*Lima Facility*" means Hampshire's Lima, Ohio manufacturing facility.

M. "*Other Hampshire Facilities*" means Hampshire's facilities located at Deer Park, Texas and Nashua, New Hampshire.

N. "*Akzo Lima Expansion*" means such improvements, additions, and expansions to the Lima Facility to produce no less than 175 million pounds per annum (on a solution pound basis) of chelant

products and to provide sufficient hydrogen cyanide ("HCN"), nitrile, and other raw material storage, chelant products warehouse space and related facilities, to enable the Hampshire Chelant Business to operate at sustained levels of output no less than 175 million pounds per annum (on a solution pound basis) of chelant products.

O. "*Akzo Lima Expansion Milestones*" means: (i) the submission by Akzo of complete applications for any and all federal, state, and local governmental permits that may be required to complete the Akzo Lima Expansion, within twelve (12) months after the date this order becomes final; (ii) the receipt by Akzo of all federal, state, or local governmental permits that are required to complete the Akzo Lima Expansion, within eighteen (18) months after the date this order becomes final; provided, however that if Akzo has not received approval or final disapproval of its permit application(s) within eighteen (18) months after the date this order becomes final, this second milestone shall be extended until Akzo receives approval or final disapproval for a period up to, but in no event longer than, twelve (12) months; (iii) the completion by Akzo of the structural steel installation required for the Akzo Lima Expansion, within twelve (12) months after permitting.

P. "*Dow's Competing Chelant Business*" means all assets, properties, business and goodwill, tangible and intangible of Dow relating to the research, development, manufacture, distribution or sale of chelant products, its employees, agents, representatives, and any other personnel assigned to such business, or to whom such persons report directly or indirectly.

Q. "*Dow's Contract Manufacturing Services*" means the Dow business unit engaged in the contract manufacture of chemical and polymer products and services for independent firms.

R. "*Hampshire Chelant Business*" means all assets, properties, business and goodwill, tangible and intangible, of Hampshire relating to the research, development and manufacture in the United States, and the distribution and sale in North America, of Hampshire Chelant Products, including, but not limited to:

1. All rights, title and interest in and to owned or leased real property at the Lima Facility (including completion of the current nitrile expansion project underway), together with its appurtenances, licenses and permits; but excluding real property at (i) the Other Hampshire Facilities; (ii) Hampshire's Lexington, Massachusetts facility; and (iii) Hampshire's Teeside, United Kingdom facility;

