

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF PENNSYLVANIA
PITTSBURGH DIVISION**

UNITED STATES OF AMERICA,	)	
1401 H Street, NW	)	
Suite 3000	)	
Washington, DC 20530	)	
	)	
Plaintiff,	)	
	)	Civil Action No. <u>03-521</u>
v.	)	
	)	
SGL CARBON AKTIENGESELLSCHAFT	)	Filed: April 15, 2003
Rheingastrabe 182	)	
D-65203 Wiesbaden, Germany	)	
	)	Judge: Conti
and its subsidiary	)	
	)	
SGL CARBON LLC	)	
8600 Bill Ficklen Drive	)	
Charlotte, North Carolina 28269	)	
	)	
	)	
Defendants.	)	

VERIFIED COMPLAINT

The United States of America, acting under the direction of the Attorney General of the United States, brings this civil action to obtain equitable and other relief against the defendants named and allege as follows:

1. The United States seeks to prevent the proposed acquisition of Carbide/Graphite Group's ("C/G") remaining assets by defendants SGL Carbon Aktiengesellschaft ("SGL AG") and its United States subsidiary, SGL Carbon LLC ("SGL") pursuant to an Asset Purchase Agreement ("Agreement") submitted by defendants for bankruptcy court approval.

2. C/G and SGL are two of the only four manufacturers capable of producing quality 18" diameter and larger graphite electrodes ("large graphite electrodes") for sale in the United States. If the proposed acquisition is permitted, SGL and its two other competitors will control a significant percentage of the North American large graphite electrode market.

3. SGL AG is one of several manufacturers that participated in a conspiracy to fix the prices and allocate markets for graphite electrodes worldwide in the 1990s. SGL's acquisition of certain assets of C/G substantially increases the opportunity for the remaining dominant players to coordinate to raise prices to the detriment of consumers. In addition, given the small number of competitors, higher prices, lower quality and service, and less innovation are likely to result if the C/G assets are not operated by an independent, significant competitor. Absent the acquisition by SGL, C/G Electrodes Acquisition, LLC ("C/G Electrodes") would acquire and re-open the assets and commence head-to-head competition between SGL and C/G. For these reasons, the proposed acquisition threatens to harm customers in the United States that buy large graphite electrodes, ultimately to the detriment of consumers.

I. JURISDICTION AND VENUE

4. This action is filed by the United States under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, to prevent and restrain the defendants from violating Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

5. SGL AG is a foreign corporation which is found and does business within the Western District of Pennsylvania through its wholly-owned United States subsidiary, SGL. Venue is proper in this District pursuant to 15 U.S.C. § 22 and 28 U.S.C. §1391(d).

6. SGL produces and sells graphite electrodes and related products affecting and in the flow of interstate commerce. This Court has subject matter jurisdiction over this action and jurisdiction over the parties pursuant to Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. §§ 1331 and 1337(a), and 1345.

II. THE DEFENDANTS

7. SGL AG is, and was at all times relevant to this Complaint, a corporation organized and existing under the laws of the Federal Republic of Germany with its corporate headquarters in Wiesbaden, Germany. SGL AG has sales and manufacturing facilities in Europe, North America, China, Singapore, and Brazil. SGL, located in Charlotte, North Carolina, is SGL AG's North American headquarters. SGL has graphite electrode manufacturing facilities in three U.S. cities: Ozark, Arkansas; Morganton, North Carolina; and Hickman, Kentucky. SGL AG reported net worldwide revenues of \$1.087 billion in fiscal 2001, including \$546.6 million in graphite electrode sales in fiscal year 2001.

III. THE PROPOSED TRANSACTION

8. C/G filed for voluntary Chapter 11 bankruptcy in September 2001 in the bankruptcy court for the Western District of Pennsylvania. The graphite electrode business was originally scheduled to be auctioned on October 16, 2002. The "stalking-horse" bidder for C/G's assets at that time was the only bidder at the auction, but was unable to close the deal. As a result, a new auction was scheduled for April 15, 2003. The "stalking-horse" bidder for the April 15, 2003 auction is C/G Electrodes, which is not a competitor of C/G.

9. SGL entered into an agreement to acquire the St. Marys, Pennsylvania graphite electrode manufacturing facility and certain pieces of equipment located at the Niagara Falls, New York graphite electrode manufacturing facility from C/G, a debtor-in-possession, for approximately \$7 million subject to final bankruptcy court approval on April 15, 2003 in the United States Bankruptcy Court for the Western District of Pennsylvania.

10. C/G is a corporation organized and existing under the laws of the state of Delaware with its corporate headquarters and principal place of business in Pittsburgh, Pennsylvania. C/G manufactures graphite electrodes at two facilities, one in St. Marys, Pennsylvania and the other in Niagara Falls, New York. The company realized \$64.5 million in graphite electrode sales in fiscal year 2001.

11. SGL plans to close the transaction as early as April 16, 2003.

IV. TRADE AND COMMERCE

A. RELEVANT PRODUCT MARKETS

12. There are two primary technologies for steel making: electric arc furnace steel production (called mini-mill production) and basic oxygen furnace steel production (called integrated steel production). Electric arc furnace steel production uses heat generated by electricity to melt raw materials, primarily scrap metal, and refine it into steel. Graphite electrodes are a critical input into electric arc furnace steel production. Graphite electrodes are also used in ladle furnaces for refining steel and to re-melt steel in foundries.

13. Graphite electrodes are large columns of virtually pure graphite used in electric arc furnaces ("EAF"). EAF steel production requires temperatures as high as 5000° Fahrenheit

to melt scrap metal or other raw materials and refine them into steel. The heat is provided as electricity passes through the graphite electrodes and creates an electric arc. EAFs typically use three columns of electrodes at one time. Each column typically consists of three electrodes jointed together. On average, one of the nine graphite electrodes is fully consumed every 8 to 10 operating hours.

14. Graphite electrodes range from 3 inches to 32 inches in diameter. The trend in electric arc furnace operation is to design EAFs to use higher levels of electricity, which necessitates the use of larger diameter electrodes. The larger the diameter of the electrode, the more electricity it is able to conduct. A majority of graphite electrodes sold are 24 inches in diameter and all electrodes used in the newest EAF technology, direct current (“DC”) furnace technology, use electrodes that are at least 24 inches in diameter. In contrast, ladle furnaces, which do not melt steel but keep the steel in molten form, typically use smaller diameter graphite electrodes.

15. Steel manufacturers using mini-mill production are not likely to shift to integrated steel production in the event of a small but significant nontransitory price increase for graphite electrodes. The choice of technology is made at the design stage, when the manufacturer decides between integrated steel and mini-mill production methods. Increasingly, manufacturers choose mini-mill methods, which now produce more than half of the steel manufactured in the United States. Mini-mill operators and competitors alike state that there are no commercially viable substitutes for graphite electrodes used in electric arc furnaces.

16. C/G and SGL have competed in selling a wide range of electrode sizes to the United States steel manufacturers using EAFs. In particular, C/G and SGL have produced graphite

electrodes that are 18, 20, 22, and 24 inches in diameter (hereinafter collectively referred to as “large graphite electrodes”). Each one of these sizes is a separate product market because the sizes are not substitutable for each other. Once a steel-maker decides to construct a mini-mill, the EAF is designed for a particular diameter/length graphite electrode. Conversion of the EAF to accept a different size is costly relative to the cost of graphite electrodes. Therefore, it is unlikely that a mini-mill would convert its EAF in response to a small but significant and nontransitory increase in price for graphite electrodes in the 18, 20, 22, or 24 inches in diameter sizes.

17. The size of the graphite electrode also determines the quality demanded by consumers. Smaller-sized electrodes (smaller than 18 inches in diameter), such as those used in ladles, do not need to be of the highest quality because they have a lower current carrying capacity, and thus do not generate the same intense heat as the large electrodes. Lower quality electrodes are more likely to break, which requires that the furnace be shut down and that the electrode be fished out of molten steel. Another significant distinction between higher and lower quality graphite electrodes is the number of pounds of graphite consumed per ton of steel produced.

18. The manufacture and sale of graphite electrodes that are, respectively, 18, 20, 22, and 24 inches in diameter, constitute lines of commerce and relevant product markets within the meaning of Section 7 of the Clayton Act.

B. RELEVANT GEOGRAPHIC MARKET

19. SGL and C/G, two of only four manufacturers capable of producing quality large graphite electrodes, have competed with one another throughout North America. SGL manufactures graphite electrodes at facilities in the United States for sale in the United States. C/G,

until quite recently, has manufactured graphite electrodes in the United States for sale in the United States.

20. Virtually all large graphite electrodes purchased by mini-mill operators are produced in plants located in North America. There is a small number of graphite electrode manufacturers outside North America that make large graphite electrodes, but those manufacturers do not make large graphite electrodes of the quality that is required by the U.S. steel manufacturers using mini-mill production. Those U.S. steel manufacturers have purchased large-diameter electrodes mostly from SGL, C/G, and their two competitors. U.S. mini-mill operators would not switch to suppliers outside of North America in the event of a small but significant and nontransitory price increase.

21. North America is a relevant geographic market for large graphite electrodes within the meaning of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

C. ANTICOMPETITIVE EFFECTS

1. SGL AG Price Collusion on Graphite Electrode Sales

22. In the late 1990s, the Department of Justice's Antitrust Division conducted an investigation into worldwide price-fixing and market allocation by virtually every graphite electrode manufacturer, including SGL AG. According to the charges, SGL AG and others began to fix prices and allocate the volume of graphite electrodes in the United States and elsewhere from at least as early as 1992 and continuing until at least June, 1997. The investigation culminated in guilty pleas by several graphite electrode manufacturers including SGL AG and its Chief Executive Officer, Robert J. Koehler. SGL AG and Mr. Koehler agreed to pay fines of \$135 million and \$10 million, respectively. Mr. Koehler currently serves as Chairman of SGL AG's Executive Committee.

23. SGL AG and its CEO were charged with participating in meetings and conversations in the Far East, Europe, and the United States in which the prices and volume of graphite electrodes sold in the United States and elsewhere were discussed; agreeing during those meetings to increase and maintain prices of graphite electrodes; agreeing to allocate among the conspirator companies the approximate volume of graphite electrodes to be sold; agreeing to divide the world market among themselves and to designate on a region-by-region basis, including the United States, the conspirator who would fix the price that the others would follow; agreeing to restrict the conspirator companies' respective capacities for producing graphite electrodes; agreeing to restrict non-conspirator companies' access to certain graphite electrode manufacturing technology; discussing methods to conceal the agreement, including the use of code names by the corporate conspirators; exchanging sales and customer information to monitor and enforce the agreement; and issuing price announcements and price quotations in accordance with the agreements reached.

24. During the conspiracy, prices of graphite electrodes increased by at least 40-50% in the United States through the series of collusive price increases. As a result of SGL AG's price fixing and market allocation agreements with its competitors, steel makers paid noncompetitive and higher prices for graphite electrodes used in manufacturing steel products that are integral to a variety of business and consumer items.

2. Harm to Competition

25. C/G and SGL are two of only four firms that have manufactured and sold large graphite electrodes in North America. C/G and SGL have competed with one another on price, service, and innovation in all markets for large graphite electrodes. The proposed acquisition will eliminate competition in North America for the sale of large graphite electrodes and will likely lead to higher prices, lower quality and service, and less innovation in North America in violation of Section 7 of the Clayton Act.

26. Competitive harm will likely occur in at least the 22 and 24 inch product markets. In 2001, C/G had approximately 34.4% and SGL had approximately 14.6% of the market for graphite electrodes 22 inches in diameter. C/G's and SGL's two remaining competitors controlled the remaining 51% of the market. There were no other imports of the 22 inch size electrode into the United States in 2001. If SGL is allowed to acquire C/G, SGL and its two remaining competitors will control 100% of the 22 inch graphite electrodes sold in the United States.

27. In 2001, C/G had approximately 14.9% and SGL had approximately 11.3% of the market for graphite electrodes 24 inches in diameter. C/G's and SGL's two remaining competitors controlled approximately 66.4% of the remaining market. If SGL is allowed to acquire C/G, SGL and its two remaining competitors will control approximately 94.4% of the 24 inch graphite electrodes sold in the United States.

28. Using a measure of market concentration called the Herfindahl-Hirschman Index ("HHI"), defined and explained in Appendix A, combining C/G and SGL in the 18 inch diameter U.S. graphite electrode market would substantially increase the already high level of market

concentration. Based on 2001 sales, the HHI for the 18 inch diameter U.S. graphite electrode market is currently approximately 2261. After the proposed acquisition, the HHI level would increase by roughly 1308 points, resulting in a post-merger HHI of approximately 3570.

29. Using the Herfindahl-Hirschman Index, combining C/G and SGL in the 20 inch diameter U.S. graphite electrode market would substantially increase the already high level of market concentration. Based on 2001 sales, the HHI for the 20 inch diameter U.S. graphite electrode market is currently approximately 2265. After the proposed acquisition, the HHI level would increase by approximately 798 points, resulting in a post-merger HHI of roughly 3063.

30. Using the Herfindahl-Hirschman Index, combining C/G and SGL in the 22 inch diameter U.S. graphite electrode market would substantially increase the already high level of market concentration. Based on 2001 sales, the HHI for the 22 inch diameter U.S. graphite electrode market is currently approximately 2798. After the proposed acquisition, the HHI level would increase by roughly 1004 points, resulting in a post-merger HHI of approximately 3802.

31. Using the Herfindahl-Hirschman Index, combining C/G and SGL in the 24 inch diameter U.S. graphite electrode market would substantially increase the already high level of market concentration. Based on 2001 sales, the HHI for the 24 inch diameter U.S. graphite electrode market is currently approximately 2706. After the proposed acquisition, the HHI level would increase by approximately 337 points, resulting in a post-merger HHI of roughly 3042.

32. The conditions in the graphite electrode market are conducive to tacit and explicit coordinated interaction because the salient characteristics of the market have not changed appreciably since the 1990s price fixing and market allocation conspiracy. Thus, the proposed acquisition may facilitate coordinated pricing activity among SGL and its two remaining

competitors, which will increase the likelihood of anticompetitive price increases for large graphite electrodes.

33. Since the end of the conspiracy, customers have benefitted from pricing and innovation competition between C/G and SGL. With greater market concentration, SGL and its two remaining competitors will be better able to reach an agreement and detect and punish deviations that would undermine coordinated interaction. Detection and punishment of deviations ensures that coordinating firms will find it more profitable to adhere to the terms of coordination than to pursue short-term profits from deviating.

D. ENTRY

34. The barriers to entry in the large graphite electrodes market are high. There have been no significant entrants in the graphite electrode industry since 1950.

35. Entry into the large graphite electrode market by existing graphite electrode manufacturers would not be timely, likely, or sufficient to deter any exercise of market power resulting from the merger because producing large graphite electrodes requires highly specialized equipment and a significant capital investment.

36. Entry into the large graphite electrode market is not likely because it is costly relative to anticipated profits. Opening a new facility would require approximately a \$250 million investment and roughly 18 to 24 months.

37. There was no new entry into graphite electrode production during the price fixing and market allocation conspiracy during the 1990s. The cartel was successful in limiting entry by restricting non-conspirator companies' access to certain graphite electrode manufacturing technology.

V. VIOLATION ALLEGED

38. The transaction will likely have the following effects, among others:
- a. Competition generally in the manufacture and sale of large graphite electrodes would be substantially lessened;
 - b. Actual and potential competition between SGL and C/G in the manufacture and sale of large graphite electrodes in the United States and North America would be eliminated;
 - c. The prices of large graphite electrodes would likely increase in the United States and North America, and the quality and innovation of large graphite electrodes would likely decline.

Unless restrained, the proposed acquisition will violate Section 7 of the Clayton Act as amended, 15 U.S.C. § 18.

VI. REQUESTED RELIEF

39. Plaintiff requests:
- a. That SGL's proposed acquisition of C/G be adjudged and decreed to be unlawful and in violation of Section 7 of the Clayton Act;
 - b. That defendants and all persons acting on their behalf be permanently enjoined and restrained from carrying out the Agreement or from entering into or carrying out any agreement understanding or plan, the effect of which would be to combine the businesses or assets of the defendants;
 - c. That plaintiff be awarded its costs of this action; and
 - d. That plaintiff receive such other and further relief as the Court deems proper.

Respectfully Submitted,

FOR PLAINTIFF UNITED STATES:

_____/s/
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_____/s/
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Dated April 15, 2003

APPENDIX A

HERFINDAHL-HIRSCHMAN INDEX CALCULATIONS

"HHI" means the Herfindahl-Hirschman Index, a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of thirty, thirty, twenty, and twenty percent, the HHI is 2600 ($30^2 + 30^2 + 20^2 + 20^2 = 2600$). The HHI takes into account the relative size and distribution of the firms in a market and approaches zero when a market consists of a large number of firms of relatively equal size. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

Markets in which the HHI is between 1000 and 1800 points are considered to be moderately concentrated, and those in which the HHI is in excess of 1800 points are considered to be concentrated. Transactions that increase the HHI by more than 100 points in concentrated markets presumptively raise antitrust concerns under the Horizontal Merger Guidelines issued by the U.S. Department of Justice and the Federal Trade Commission. See *Merger Guidelines* § 1.51.