

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION

C-E Minerals, Inc.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	CIVIL ACTION FILE
	)	
CARBO Ceramics, Inc.,	)	NO.: 1-11-CV-2574-JOF
	)	
Defendant.	)	

**Declaration of Thomas Parias**

My name is Thomas Parias. I am over the age of 18 and otherwise fit and competent to make this declaration, which is based on my personal knowledge and, where specifically indicated, my review of company records.

1. I have a master in science and executive engineering from the Ecole Polytechnique in Palaiseau, France, and a second master in science and executive engineering from the Mining School of Paris,

France. I am employed as a Project Manager by Imerys Oilfield Minerals, Inc., which is a subsidiary of Imerys U.S.A., Inc.

2. C-E Minerals, Inc., the plaintiff in this lawsuit, is another Imerys U.S.A. subsidiary. C-E owns a facility in Andersonville, Georgia for the mining, processing and sale of clay.

3. I have been integrally involved in the development and construction of a production line at C-E's Andersonville facility to produce lightweight ceramic proppants. These are small ceramic spheres used in the oil and gas service industry to facilitate the extraction of oil and natural gas.

4. Specifically, proppants are used in a process known as hydraulic fracturing, which consists of pumping fluid down a well at pressures sufficient to fracture the rock formation. Proppants are transported in the fluid to fill the fractures, "propping" them open after the pumping stops. The proppant-filled fractures serve as a permeable channel

through which oil or natural gas flows more freely, thereby increasing production.

5. For a number of years, C-E has possessed several advantages that would facilitate its entry into the business of manufacturing ceramic proppants. C-E has long produced a range of ceramic products from clay for use in industrial applications involving high heat and pressure. It owned a sizeable manufacturing and processing facility, equipped with large kilns, in proximity to substantial reserves of clay that could be used to make proppants or other “refractory” products (*i.e.*, products that maintain their structural integrity and strength under high temperatures and pressures). As well as its own assets and experience, C-E had access to the expertise and resources of the Imerys family of companies, which are world leaders in transforming mineral resources into specialty products for industrial and construction applications.

6. In addition to physical assets, clay reserves and manufacturing expertise, C-E and the Imerys companies also had access to the

substantial capital necessary to construct a proppants manufacturing line, something that could cost \$80-100 million dollars if done from scratch by a new entrant without the facilities and other advantages possessed by C-E and the Imerys companies. Such an investment likely would not generate positive cash flow for several years, which heightens the capital requirements.

7. Given its physical and financial resources, along with its proven processing capacity and expertise, C-E has for years had the potential to enter the market as a viable manufacturer of lightweight ceramic proppants. This was true in 2003 and at all times since.

8. By 2008, it had become clear that there was a large and unsatisfied demand for lightweight ceramic proppants in the United States. C-E constructed a production line at its existing facility in Andersonville, Georgia facility to manufacture that product using its nearby clay reserves. Barring some unforeseen development, this line will be in production well before year end, probably October.

9. My job responsibilities have included studying and understanding the available supply and demand for lightweight ceramic proppants by North American customers. The demand for lightweight ceramic proppants has grown substantially in recent years, as hydraulic fracturing has become a more prevalent means of enhancing oil and gas production. There have been shortages in the supply of lightweight ceramic proppants available for purchase by North American customers, resulting in multiple market price increases. This occurred in 2007 and 2008.

10. Market developments in 2009 shed light on the extent of the undersupply of proppants. While oil and gas extraction activity was dropping by more than 60% (based on rig counts), we did not see a similar drop in ceramic proppant sales. Instead, the volumes of lightweight ceramic proppants sold by Carbo Ceramics, Inc. (the largest manufacturer of that product) were down less than 10%.

11. In 2010, and 2011, we have seen renewed imbalances in supply and demand, as well as price increases, similar to those in 2007 and 2008. Based on all industry estimates and information, the shortfall in supply is currently increasing. Despite significant price increases, even the largest producer (CARBO) has sold out its inventories.

12. Due to these shortages, some oil and gas service companies have not been able to purchase the quantities of proppants they needed to compete for jobs requiring that product. Even large purchasers have very few sources of supply. My market research indicates that, even with the combined anticipated output of CARBO and C-E, demand for lightweight ceramic proppants will materially exceed supply for at least the next few years.

13. I have been involved in negotiating supply agreements with oil and gas service companies for lightweight ceramic proppants to be manufactured by C-E and sold by an Imerys company. We have three signed agreements at this time.

14. I have become aware of the non-competition provision in the June 2003 Raw Materials Supply Agreement between C-E and CARBO. C-E would suffer irreparable injury if it were prohibited under that provision from entering the proppants market until January 2014, instead of doing so now. All the revenues that C-E would have generated and all of the customer relationships, credibility, goodwill and market presence that C-E and its affiliates would have accumulated during those intervening years would be lost. I know of no way of recouping or even quantifying those losses.

15. Moreover, we are concerned about the risk that CARBO could use Paragraph 5 to discourage proppant customers from contracting to purchase proppants manufactured by C-E, suggesting that C-E could not lawfully honor its supply commitments. Again, if that occurs, I know of no way to prove or recoup the full losses we would suffer.

I declare under penalty of perjury and subject to 28 U.S.C. § 1746 that the foregoing is true and correct.

Executed on September 12<sup>th</sup>, 2011.

  
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Thomas Parias