Negative Economic Impacts of Titan Cement and Mine

Below are the comments Dr. Craig Galbraith presented at the June 2nd commissioners meeting addressing the flawed economic modeling for Titan' proposed cement plant. As Dr. Galbraith summarizes, low-tech, heavy polluting industries like cement plants often have a negative impact on growth, tax-base and local economies over time.

Craig S. Galbraith, MBA, PhD
Professor, Entrepreneurship and Technology Management
GlaxoSmithKline Faculty Fellow, Economic Development

Cameron School of Business
University of North Carolina
601 South College Road
Wilmington, NC 28403-3297
(910)962-3775

Dear Board of Commissioners:

As a background, I am Craig Galbraith, the senior Professor of Entrepreneurship and Technology, and GlaxoSmithKline Faculty Fellow in economic development at the Cameron School of Business at UNCW. I have written several books and over twenty scholarly articles on economic development.

In summary I am extremely concerned about the understanding of the economic impact of Titan Cement as previously presented to this commission. In particular, it has been reported that the 160 new jobs proposed by Titan would pyramid into 720 new jobs within the county, it would bring an additional $235million dollars of economic activity to the county, and it would result in an additional $20million of rental and dividend income to the county.

In economic impact and valuation analysis we have what is called the "sniff" test, and this simply does not pass the sniff test.

These extraordinarily high numbers were obtained by using a hypothetical computer model. However these hypothetical computer models have been generally shown to vastly overestimate the actual economic impact of a new manufacturing and production facility. This is because these models typically only look at two factors, when there are about 10 to 12 important factors that explain long term economic impact.

What are these problems?

1st : Unlike an existing firm, a new facility will almost always buy most of their initial inputs from outside the county region, thus negating a lot of economic benefit.

2nd : While there are certain positive aspects of plant location, such as increasing the

attractiveness of that location to other firms, increasing the benefits of labor pooling, and increasing knowledge transfer, these positive aspects are almost always restricted to high-technology and service type of industries, and not heavy manufacturing and production operations like Titan.

3rd : Of most critical concern, however, in the Titan Cement analysis is what is called ""dispersive forces." Dispersive forces are those forces that are associated with a new plant opening that actually over the long-run REDUCE economic activity. With a large new facility these include, a) increases in input costs, b) congesting existing infrastructure, c) perception that an area is favoring a certain type of economic activity, such as low technology or heaving manufacturing, d) crowding effects that discourage hurt other competitors, e) actual employment not living in the county, but rather living outside the county and "commuting in", and f) the disastrous economic impact of pollution

The actual long-term economic effect of new plant location decisions in the Southern States has been extensively studied. These studies are far more accurate than the hypothetical computer models in that they actually look at the long-term economic impact of real plant location decisions. After examination of hundreds of plant location decisions, the universal conclusions of these studies are:

A) On the average, locations of low-technology firms may actually "DECREASE" county-wide employment and long-term economic activity. In one recent important published study, the authors looked at 100 manufacturing new location decisions in Georgia. The research found that for each 100 new employees hired by the relocating production firm, after five years it resulted in a net gain of only 29 workers to the resident county. There are many other studies of the long-term effects of manufacturing plant locations that have similar conclusions. This would suggest that the 160 proposed employees of the Titan Cement would result in a net gain of **only 46 employees** (not the 720 suggested by Titan). This means that original analysis for Titan Cement overestimate the positive employment impact by as much as 15 times. Likewise, the positive estimates for Titan Cement for wages, salaries, and self-employment income are also vastly overestimated. And in potentially polluting facilities like Titan, there is almost certainly the potential for long-term economic contraction.

B) The studies have also shown that new low-technology or heavy manufacturing location results in a "DECREASE" in resident consumer spending and associated sales tax collection, since for each 100 workers hired, the county of the location loses on the average 72 residents. This finding would also tend to negate the Titan finding that "rental income" would go up; in fact, rental income and dividend income most likely will DECREASE."

C) The only industries that consistently generate "POSITIVE" economic effects at the county level are "high technology" "financial services" and some sectors of "communications and other services." This is because of the strong net positive

clustering effects of these industries, the spillover effects of higher wages and education, and the general perception that a county is moving toward "clean, high-value added" industry.

Properly performing economic impact studies is a complex process, and one that needs deep attention, particularly when so much is at stake.

For more on Dr. Galbraith, see link below from an article on WHQR's website about the economics of Titan Cement. A link to WHQR's website is:
http://www.publicbroadcasting.net/whqr/news.newsmain?action=article&ARTICLE_ID=1462766&sectionID=1