

Golden Triangle Business Roundtable

Minutes

May 18, 2004

Walter Almon welcomed members, plant managers and special guests.

Legal Report – John Durkay reported that the overtime regulations bill has been stalled. John stated that a new statute could be seen after the election but not before.

Safety Report – Pat Avery reported that the Safety Committee is working on site audits. A large number of contractors have been nominated for awards this year. Pat asked the plant managers for more people to help with the audit process. The audit teams should complete the audit process by the end of July in preparation for the 13th Annual Safety Awards Banquet on Tuesday, August 31, 2004.

Program:

George Talbert with Texas Air Research introduced Dr. Jack Hopper the Dean of the College of Engineering, a Professor in the Chemical Engineering Department and also the Director of the Texas Hazardous Waste Research Center at Lamar University.

Dr. Hopper addressed the group starting with some background information concerning economic development for Southeast Texas. The Beaumont Economic Development Foundation commissioned TIP Strategies, Inc. to write a report for them on economic development to access the regions challenges and opportunities and analyze industries for high potential and prepare specific recommendations. That report in draft form came out in December 2003.

The Beaumont Enterprise article headline was “Consultants see advanced materials as a diverse option with the Chamber and Lamar University as the essential element for attracting materials research.” Dr. Hopper immediately started promoting the College of Engineering in economic development.

Composite materials, what are they? There are two types particle and fiber materials. There are short fibers or continuously long fibers called FRP or Fiber Reinforced Polymers. Fibers and Polymer resin are the two components and there are three types of reinforcing fibers glass, carbon, and ceramic. The resin matrix is generally a polyester, vinylester or epoxy. The process is completed by taking fibers and imbedding them in a polymer matrix and the end result is a composite laminate. Columns, beams, and connectors are made from composites. There are many opportunities for composites. Some stand-alone structural projects are cooling tower systems, pedestrian bridges, industrial buildings and wastewater treatment plants. Advantages for using composites are that they are non-corrosive, and can be made with the strength of steel with flexibility. Dr. Hopper showed slides of highways, and bridges built with composite materials.

When was this industry born? In 1940 the composite idea was born and started being manufactured in the 60's and in the year 2000 millions of pounds of the product was

being sold. This product is used in transportation, construction, marine and corrosion industries.

Dr. Hopper stated he is following up with presentations to numerous groups and organizations. TIP recommended development of an advanced materials cluster. First promote advanced materials research. Then strengthen Beaumont's workforce and educational programs. Finally support recruitment and expansion of related firms and pursue financial funding incentives.

What can a university bring to economic development? The first thing is intellectual capital. They provide the seeds, ideas and products. What can Lamar University offer? Lamar offers the initial vision for advanced materials research and a beginning core of the technical talents in this area of composites. Several of the colleges at Lamar will participate in this project. There are seven research centers in the College of Engineering. Several have the potential to provide economic capital. It is a collaboration of the Colleges of Engineering, Sciences and Business in Economic Development.

The number one strategy is to promote advanced material research. The goal is to create a center of excellence at Lamar. Required actions are to pursue a national center of excellence program in advanced materials and related research and explore cooperative research between local industry and Lamar University. Structural and multi-functional materials composites are Lamar's focus.

Dr. Hopper introduced Dr. Robert Yuan, Director of the Green Composite Research Center at Lamar University. Dr. Yuan has thirty-five years of experience in structural composites. Lamar is building a racing wheel for the physically challenged out of composites. If successful they will get funded. These university centers are normally placed where unemployment is high and the average salary is low. Air quality modeling, air emissions and fuel cell centers are three other areas of economic development. Dr. Li, Dr. Chen and Dr. Ho are working in these three areas of development. Lamar University is in a position to be a catalyst for economic development in this region. Dr. Hopper and Dr. Yuan fielded questions from the group.

Meeting Adjourned