

MINUTES

AMRCC Alternative Materials & Energy Resources Work Group

July 8, 2009

Cedar Valley TechWorks

Waterloo, Iowa

DRAFT

Members Present: Chair, Sam McCord, MCG BioComposites; Mike Birkinbine, HNI Corporation; Cary Darrah, TechWorks; Steve Devlin, Center for Industrial Research and Service (CIRAS); Hailey Jiang, Pella Corporation; Terry L. Johnston, TechWorks; Chris Manning, Weitz Industrial Services Group; Scott McCoy, Innovative Injection Technologies; Jay Olson, Deere & Company; Dean Reck, MCG BioComposites; Eric Renteria, Green Line Armor; Jeff Rose, University of Northern Iowa; and, Elliott Smith, Iowa Business Council.

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Welcome & Introductions

Alternative Materials & Energy Resources (AM&ER) Work Group Chair Sam McCord called the meeting to order at 9:32 a.m. Mr. McCord and Cary Darrah introduced and welcomed Waterloo Mayor Tim Hurley, who gave a few remarks about the economic development efforts of Waterloo and the Cedar Valley in the areas of advanced manufacturing and bio-related business.

Following the mayor's departure, Mr. McCord reminded AM&ER members that anything discussed in this venue is considered public disclosure and cannot later be held out as proprietary or privileged.

Mr. McCord then introduced new members Steve Devlin with the Center for Industrial Research and Service (CIRAS) at Iowa State University and Chris Manning with Weitz Industrial Services Group.

Presentation - Green Line Armor, Eric Renteria, CEO

Sam McCord introduced **Eric Renteria**, President of Green Line Armor based in West Burlington, Iowa. The company has developed a bio-based encapsulating bumper for the end of pallets. Mr. Renteria said there are over 2,000 pallet companies in the United States, though competition worldwide is causing them to "drop like flies." Forty percent (40%) of all hardwood trees cut in the U.S. are used to make traditional wood pallets, which have a typical use-life of 18 months.

Green Line Armor pallets merge the durability of plastic with the strength of wood into one product, affording protection for the part of a pallet that is damaged most often. A plastic pallet by itself is not strong enough; however, employing a protective plastic cover over the wood makes the pallet extremely durable. A single Green Line pallet saves 38.4 trees and 90,000 nails per year. Australia is home to the largest pallet company in the world. Green Line seeks to oust them from their number one position in the coming years.

Mr. Renteria noted that Green Line is two years and one million dollars into product development of their new pallet. He reviewed a few commercialization challenges the company is currently facing:

Market Research

- difficulty gathering marketing data
- difficulty protecting intellectual property in early stages

Testing

- available skills and resources not promulgated
- prohibitive costs
- difficulty protecting intellectual property in early stages
- prototyping

Financing

- protecting intellectual property rights

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- lack of marketing data
- chicken and egg re: funding market research, testing, assets, grants, SBA loans
- personal investment
- Government assistance re: SBA & local loans, stimulus, earmarks

Another challenge Mr. Renteria identified is the fact that there are no companies in the United States that manufacture screws needed by Green Line. Screws have a six month lead time shipping from China. One container load of screws (2.7 million screws) lasts approximately four months --- therefore, given the shipping lead time Green Line must deal with, the company must order container loads of screws well in advance of when they will actually be needed, i.e., one must place faith that the pallet market generally, and Green Line's sales efforts specifically, will remain strong and vibrant.

Mr. Renteria pointed out that Green Line pallets have a 10-year warranty, and stated his belief that the key to a successful company is standing behind your product.

Elliott Smith asked how many individuals Green Line Armor employs. The company currently has a contractual manufacturing relationship with ISS, employing 30 individuals. Mr. Renteria is the only actual employee of Green Line Armor. He projected that if everything goes as planned, Green Line Armor will eventually have approximately 1,000 employees.

AM&ER Focus, Mission, Goals, Etc.

Sam McCord led the discussion on the focus of the AM&ER Working Group, noting at the outset that he would like the group to discuss capitalization issues faced by start-up companies. Noting that the nature of the bio-industry has changed/evolved significantly over the last two years, Mr. McCord sought feedback on the following definition of "biomass" that the old AMRCC Biomass Work Group (BWG) utilized, asking if the term is still relevant:

The definition of Biomass:

- *Biomass is any organic material that is available on a renewable or recurring basis.*

Jeff Rose felt that the group should focus, instead, on defining "bio-materials" and "bio-products." **Steve Devlin** said that using "organic" in the definition could lead to difficult, confusing interpretations of the term. **Jay Olson** questioned using the term "biomass" altogether, and suggested adopting the American Standard for Testing Materials terms. Mr. McCord proposed striking the previous definition of "biomass," the vote for which was unanimous from those in attendance.

Jay Olson asked about using the term "alternative" vs. "renewable" in the group's name. **Steve Devlin** said the current focus is on alternative production materials and the need to communicate that, in Iowa today, this is what's being researched and incorporated into manufacturing processes. The hope/expectation is that eventually alternative, renewable, non-petroleum based production materials will become the norm in manufacturing rather than the exception. **Elliott Smith** noted that using the term "alternative" connotes a continuing, forward looking perspective of the group and, by implication, includes the term "renewable." **Jeff Rose** agreed, stating that the group title does focus on the future.

Sam McCord stressed that the focus of the AM&ER Work Group should remain flexible enough to draw-in new members from various alternative materials and renewable energy industries. He added that a goal for the group should be to become a go-to resource for individuals/companies needing assistance. **Cary Darrah** stated that AM&ER can be THE resource and go-to entity for alternative materials/start-up issues (research, funding, commercialization, etc).

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Chris Manning suggested emphasizing the non-petroleum based aspect of the group's alternative materials focus. **Mike Birkinbine** felt that by including "bio-material" in the group name it becomes more descriptive and relevant to Iowa. **Terry Johnson** said that "bio" carries with it too many misunderstood connotations. **Eric Renteria** respectfully disagreed, saying consumers tend to think they understand what "bio-based" means. The challenge, as stated by **Sam McCord**, is for the AM&ER focus to be broadly encompassing yet also definitive.

Sam McCord reiterated that a goal for the day is to get a better understanding as to what this group's goals, objectives, etc. are going to be. Discussion then turned to the old BWG "Who We Are" statement:

The Biomass Working Group – Who We Are:

- *A collaborative consortium sponsored by the Iowa Business Council to incorporate academic and industrial innovation utilizing biorenewable materials in industrial products and their applications.*

Following discussion, those in attendance agreed upon the following AM&ER "Who We Are" statement:

"A collaborative consortium sponsored by the Iowa Business Council to incorporate academic and industrial innovation utilizing bio-based materials and renewable energy resources in products and their applications."

Mr. McCord then read the BWG goal to the group:

Biomass Working Group goal:

- *To make Iowa a leader in bioproduct materials, engineering, and advanced manufacturing.*

In lieu of the old statement, Mr. McCord suggested creating a goal unique to the AM&ER. The decision was made to change the "Biomass Working Group goal" to an "AM&ER Mission Statement," stating as follows:

"To make Iowa the recognized leader in development and utilization of bio-based materials and renewable energy resources through education, engineering, commercialization, and advanced manufacturing."

Sam McCord stressed that AM&ER seeks to become a resource for Iowa companies and, if a matter brought forward is difficult to resolve, resources exist within its membership to find answers. If AM&ER members strive to help each other, everyone involved will benefit. **Cary Darrah** noted that another benefit of this group is hearing presentations, e.g., Green Line Armor, to learn of the challenges companies face.

Eric Renteria brought forth an alternative "Who We Are" statement. The group decided to consider Mr. Renteria's version as the AM&ER "Vision Statement." It states as follows:

"The bio-based material and alternative energy working group is a coalition of Iowa-based business leaders, academic institutions, and government groups who serve as a resource for Iowa business."

Mr. Renteria also suggested an alternative "Mission Statement" for the group:

"To make Iowa the recognized leader in bio-based materials and alternative energies in order to advance the development, commercialization, and application of these materials; we will promote education, government relations, and business development."

Sam McCord suggested selecting three goals for the upcoming year. The following were recommended:

- Establish and promote relationships with state and local government entities
- Facilitate commercialization opportunities
- Promote collaboration between Member organizations

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Moving Forward

Cary Darrah suggested that AM&ER members submit responses to the "Moving Forward" portion of the agenda before the next meeting:

- **Moving Forward**
 - What do Work Group participants hope to gain from this initiative?
 - What suggestions are there for research or education components re: AM&ER production, the Green Initiative, etc.?
 - Target audience, topics, format, desired outcome, cost, collaboration?
 - AMRCC Web site, AM&ER page – how best used?
 - http://amrcc.com/en/alternative_materials_energy_resources_work_grp/
 - Other candidates for membership?
 - Action items?

Ms. Darrah suggested that answers be e-mailed to Elliott Smith by close of business on July 31, 2009.

Other Business

The next meeting of the AMRCC Alternative Materials & Energy Resources Work Group is scheduled to convene at 9:30 a.m. on Wednesday, August 19, 2009, at Innovative Injection Technologies (i2tech), 2360 Grand Avenue, West Des Moines. A meeting agenda will be distributed in advance.

Adjournment

With no further business to come before the AMRCC Alternative Materials & Energy Resources Work Group, Sam McCord entertained a motion that the meeting adjourn. By group consensus, the meeting was adjourned by Mr. McCord at 12:15 p.m.

Respectfully submitted,
Elliott G. Smith

7.16.09

Upcoming Meeting

August 19, 2009

9:30 a.m.

i2tech, West Des Moines