

MINUTES

AMRCC Alternative Materials & Energy Resources Work Group

August 19, 2009

Innovation Injection Technologies

West Des Moines, Iowa

DRAFT

Members Present: Chair, Sam McCord, MCG BioComposites; Barry Butler, University of Iowa; John Cerny, Deere & Company; Cary Darrah, TechWorks; Steve Devlin, Center for Industrial Research and Service (CIRAS); Steve Dust, Cedar Valley Alliance; Chris Manning, Weitz Industrial Services Group; Scott McCoy, Innovative Injection Technologies; Jay Olson, Deere & Company; Dean Reck, MCG BioComposites; Eric Renteria, Green Line Armor; Dave Roederer, Iowa Chamber Alliance; Jeff Rose, University of Northern Iowa; and, Elliott Smith, Iowa Business Council.

Guests Present: Bill Anderson, JER Envirotech International; Dirk Arends, Innovative Injection Technologies; Bob Janeczko, Innovative Injection Technologies; Joshua Janeczko, Innovation Injection Technologies; and, Ed Trueman, JER Envirotech International.

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Welcome & Introductions

Alternative Materials & Energy Resources (AM&ER) Work Group Chair Sam McCord called the meeting to order at 9:40 a.m. Bob Janeczko welcomed attendees to Innovative Injection Technologies and gave a brief company background and plant tour.

Following the tour, 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 introduced Bill Anderson and Ed Trueman of JER Envirotech International, guests of MCG BioComposites.

Review of AM&ER Meeting - 7.8.09

Sam McCord asked if the group is still comfortable with the definition of "biomass," the group goal, and the "Who We Are" statement established at the July 8, 2009, AM&ER meeting. Mr. McCord read the "Who We Are" statement for the group:

"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."

John Cerny queried how "alternative materials" is being defined, wondering if it includes "bio-based" materials. **Eric Renteria** noted that the definition of "alternative materials" is bound to change as new processes and composite substances develop over time. Mr. McCord stressed that the challenge with definitions is to be focused yet remain open to new possibilities and opportunities. The group agreed to keep the AM&ER Work Group definitions discussed at the July meeting.

AM&ER Moving Forward

Sam McCord reviewed the comments of AM&ER members submitted via e-mail regarding what the group hopes to gain from this initiative, noting that he'd still like to receive responses from everyone in the group. Mr. McCord shared a few of the responses. These focused on promoting bio-based products to help build business, advancing bio-based business development in Iowa, impacting business climate in the state,

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removing government as a barrier to growing Iowa businesses, and gaining networking opportunities. A comprehensive recitation of comments was e-mailed to the AM&ER Work Group. **Cary Darrah** summarized that everyone in the group is involved for different reasons, with a bit of overlap.

As for bio-based education and research efforts in Iowa, Mr. McCord noted that Regent schools should intimately involved and promote a bio-based curricula, as there are currently very few undergraduate or graduate degrees focused on bio-composites. Cedar Valley TechWorks is currently working with the Regent schools and community colleges to promote and create basic curriculum for various programs in bio-composites to address these needs. **John Cerny** stressed that student interns or recent graduates working with bio-composite companies need a certain base level of education. Such knowledge will drastically reduce the learning curve and accelerate the orientation process for these individuals.

Elliott Smith asked where the three Regent schools are currently re: materials research. **Jeff Rose** said that while the Community College system does a great job of developing the plastics industry, Regent schools do not focus coursework in this area nor is there any momentum or synergy among them to engage in partnerships with entities like TechWorks. **Bob Janeczko** said there are numerous schools around the United States that have majors in bio-renewables and plastics, but not many in Iowa. Mr. Rose said one hurdle is finding faculty that are interested in plastics research. Another is acquiring suitable research equipment on a timely basis at a reasonable price.

Sam McCord asserted a "chicken or the egg" situation exists, i.e., while manufacturing companies need a production facility to roll product out the door they also need, simultaneously, a state-of-the-art laboratory so that research can be conducted. **Cary Darrah** said TechWorks is working closely with the Iowa Department of Economic Development (IDED) to get an incubator accelerator program going to address these needs.

Steve Devlin said that Iowa State currently has a Masters and PhD. program in bio-renewable management, though most graduates do not choose careers in bio-renewables following graduation. **Barry Butler** noted that starting new academic programs in today's economic climate is often cost prohibitive. He suggested instead to "blend in" bio-renewable programs with existing programs.

Sam McCord asked how AM&ER can effectively impact identified needs re: research and education. **ACTION ITEM:** **Steve Devlin** suggested having the Regent schools and Cedar Valley TechWorks identify point persons to develop/coordinate an education component re: alternative materials research.

Eric Renteria is interested in putting financial support behind the research programming initiative at TechWorks. **ACTION ITEM:** It was suggested AM&ER members compile a list for the Regent schools and TechWorks identifying what the fundamental fields of study should be that address the needs of this group.

Barry Butler noted the toughest aspect of research is moving it out of the laboratory to create jobs. Basic research is often questioned, with assertions that it doesn't have real-life applications. More and more companies are asking for the real application of research and pushing for translational research before agreeing to put forth funding. **John Cerny** said that research is a very time consuming activity, and shared his experience with the Soybean Council, stating it took 2.5 years to get his research into the right hands.

Steve Devlin questioned the purpose and goal of the AM&ER Work Group. **Sam McCord** reiterated the "Who We Are" statement and the AM&ER Work Group goal, which is *"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."*

Scott McCoy stated that AM&ER companies and educational institutions need to align with and understand what each other are doing, moving forward together with a coordinated focus. Students can learn design and material research by engaging in actual on-site business case studies.

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Bob Janeczko said the "holy grail" is plastics and bio-based material that can be injection molded. **Dean Reck** stressed the importance of differentiating between bio-resins and bio-composites, as there is an important difference between the two.

Jeff Rose stressed that that everyone must be aware of what consumers are demanding which, more often these days, is a less expensive product with a "green push." Consumers are often willing to pay more for a "green" product. Companies and engineers need to be aware of this.

Eric Renteria said he sees three major goals for the AM&ER Work Group going forward:

1. Strengthen contacts and relationships with State government to improve business climate in Iowa
2. Increase and diversify AM&ER Work Group membership
3. Create a foundation to finance projects and initiatives

Sam McCord encouraged AM&ER Work Group members to contact him or Elliott Smith with new member suggestions. **ACTION ITEM:** **Dave Roederer** proposed inviting a representative from IDED to participate in the next meeting. Mr. Smith will invite Karen Merrick and/or Mark Laurenzo from the Department to participate at the next meeting. Mr. McCord agreed that the finance issue is important, and suggested dedicating an entire meeting in the future to discussion it.

ACTION ITEM: Sam McCord and Elliott Smith will attempt to develop a one-page summary/charter document for the AM&ER Work Group. **ACTION ITEM:** Group members also requested a membership list and a target member list. Messrs. McCord and Smith will work to develop these prior to the next meeting.

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, October 7, 2009, at Cedar Valley TechWorks in Waterloo. It will focus on approving the AM&ER Charter and identifying three initiatives that will help drive/steer financing by the yet-to-be-developed AM&ER WG Foundation. 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 11:53 a.m.

Respectfully submitted,
Elliott G. Smith

9.4.09

Upcoming Meeting

October 7, 2009

Cedar Valley TechWorks, Waterloo

9:30 a.m.