



## NEWSLETTER

Editor: Cindy Sigafus

## Comments from the Chair and the Prez



**John Malchine**  
Board Chairman & CEO

Since this is the last newsletter of 2004, John and Gary felt it important to recognize the positive things that have happened to this industry this year, namely:

#### **The U.S. Ethanol Industry Hits another Monthly Production Record**

The U.S. ethanol industry is setting new production levels month after month, driving forward to produce nearly 3.5 billion gallons this year. Currently 81 ethanol plants are operating across the country and approximately 19 more are under construction. The American Petroleum Institute estimates 30% of America's fuel will contain ethanol in 2004.



**Gary Kramer**  
President & General Mgr.

#### **Costly Oil Propels Ethanol and Biodiesel in 2004**

With crude oil hitting historic highs, the demand for ethanol has reached unprecedented levels. Discretionary use of ethanol has dramatically increased to extend gasoline supplies that are sometimes in short supply. This additional use of ethanol is helping to keep ethanol demand high in spite of new production coming on line.

#### **President Bush Signs Critical Ethanol Tax Measures Into Law**

The 2004 JOBS bill contains important tax provisions designed to enhance and extend the ethanol tax incentive through 2010. The VEETEC portion of this bill resolves the Highway Trust Fund issue by eliminating any impact of the ethanol program on the Highway Trust Fund. It provides new flexibility as to how the incentive is claimed and will make new markets for ethanol, including E-85 and E-diesel. Indeed, the JOBS bill is in many respects the most pro-ethanol legislation since the Clean Air Act Amendments of 1990.

#### **Wisconsin Legislature to Consider Mandatory Ethanol Blending in 2005**

John Malchine, along with a broad coalition of other ethanol supporters has prepared legislation which is expected to be introduced during the 2005 legislative session. If enacted, mandatory blending of ethanol in Wisconsin would be expanded to the entire state. Currently only non-attainment areas in and around Milwaukee are required to use ethanol. The legislation is being promoted as good for the environment, good for energy independence and good for Wisconsin corn producers.

#### **New Breakthrough in Ethanol Process Technology**

Companies that produce enzymes for the ethanol industry are now reporting a significant breakthrough in the development of a new generation-type enzyme that attacks and digests starch molecules without the need for cooking and liquefaction at the beginning of the process. This is expected to result in a significant reduction in the total amount of energy needed to process ethanol. Other benefits from this technology include reduced infection, higher starch conversions to ethanol, higher amounts of protein in distillers. The front end of the ethanol production process will be forever changed as we now know it.

#### **Seed Corn Industry Partners with Ethanol Industry to Improve Production Process**

Monsanto and Pioneer Seeds have both established programs to emphasize the planting of highly fermentable starch varieties of corn. Both companies have identified within their own product lines the varieties that have shown up to 10% more ethanol per bushel of corn. Over time, ethanol yields from specific varieties will continue to increase as genetic selection continues.

#### **Ethanol Shows Promise as Renewable Source of Hydrogen for Fuel Cells**

The Renewable Fuels Association recently released a paper highlighting the potential synergies for ethanol and fuel cells. Ethanol is easily stored and dispensed in the current fueling system and generates fewer greenhouse gas-forming emissions than conventional fuels. Tests have demonstrated that ethanol is more efficient to reform than gasoline to provide hydrogen for fuel cells.



**Erik Huschitt**  
Commodities Manager

Put the exclamation point behind and underline the finish of a huge crop! I hope you can all take the time to count your blessings for what a remarkable crop Mother Nature has given us this year.

The USDA's November report estimated this year's corn crop to average 160.2 bushels per acre. The market is slowly recovering from the shock of the size of these yields and will soon get to guess what next year's will look like. I choose the word "guess" carefully. As mentioned in prior newsletters, the job of predicting how many bushels we get to work with becomes more and more volatile as the range of yields become wider and wider. Does anyone know what normal is? Is normal 160.2 bushels per acre or 129.3 bushels per acre? This is the variation we have seen just over the last few years and equates to a difference of close to 2.5 billion bushels. What happens if you throw in a real weather threat or another bumper crop? If anyone knows the answer please forward it to the office. Until then we will keep our discipline of preserving profit and extending protection while the opportunity presents itself.

BSE is working hard to explore the genetic traits of high fermentable corn varieties. We will be running some interesting trials this winter and will share the results with you as they become available.

The ethanol market has remained very strong thanks in part to an historically high energy market. BSE continues to look for business well into next year. The ethanol market is anxiously awaiting some key decisions to be made in Atlanta to see if we can add some significant additional blending demand. Stay tuned.

I hope you all have a great Holiday Season. Thanks to all of you for the opportunity to be a part of this great company located in this wonderful community of Monroe.



**Jacob Duke**  
Plant Manager

At Badger State Ethanol we've seen our second summer arrive and depart. Cooler weather marks the arrival of new crop corn. It's always nice to finish grinding the bottom of the bins and get into some new corn. Cooler weather also eases the demands placed on the plant's cooling system. More capacity in the cooling system gives us more margin for cooling fermenters without using the backup chilling system. Cooler weather also provides less favorable conditions for infectious organism growth in the plant.

WINBCO is still hard at work constructing Badger State Ethanol's fourth fermenter. We expect the tank to be completed on November 16. As soon as the tank is completed the contractors can begin extending the building, and Topp's Mechanical will finish the installation of the heat exchanger, pumps and piping associated with the fermenter. With a little bit of luck the project should be completed by late November or early December. We're all anxious to see the benefits that this vessel will provide to the plant.

Badger State Ethanol has experienced a couple of milestones over the last few months. On October 30, we set a one day production record of 148,388 gallons! In late November we accomplished another milestone in creating in excess of 1,000,000 gallons in one week!

As part of on-going training, four members of the maintenance department are participating in a PLC (control system) class that is offered through the local technical college. Bruce Cox from ICM is scheduled to perform a three day training session at the end of the month. We have new operators, maintenance personnel and safety personnel scheduled to attend this training which provides the background necessary to run the ICM design in the most effective manner.

With the exception of a few minor operational glitches the last few months, BSE has been relatively trouble free. We hope to continue in that fashion.





## Laurie Cannova

Safety Director/Administrative Assistant

I can not believe how fast this year has gone by. We just finished up a three day scheduled shut down. Once again we had many contractors here and had a lengthy "to do" list. Everyone did an excellent job making sure the tasks were done safely.

Training continues at BSE. Our Maintenance Department had the opportunity to attend courses in NFPA 70E Arc flash training and awareness, and Electrical Safety and Basic Electricity. BSE purchased an AED (Automatic External Defibrillator) and will provide CPR and AED training this month. As regulations change our training requirements increase. We will continue to monitor all regulations to maintain compliance.

We had an opportunity to work with Green County Emergency Management (GCEM) in preparing a round table event in September at the EMS Station in Monroe. This event is in preparation for a full scale emergency response scenario for 2005 to take place at BSE. We worked with GCEM, Wisconsin Southern Railroad (WSOR), Local Emergency Responders, and the city of Monroe. Several employees from BSE participated in this proactive approach to emergency preparedness.

We held respirator training and fit testing in October and we have scheduled Confined Space: Entrant/Attendant/Supervisor training for November. Looking at 2005 we are scheduling Confined Space; Rescue & Rope Techniques, refreshers in the Grain Handling Standard as well as continued monthly training and awareness. The safety committee will be examining the facility to ensure compliance, plant safety as well as new approaches to training, implementing, and documentation. They will continue to evaluate methods for measuring safety program effectiveness. Some committee members are scheduled to attend a Job Safety Analysis (JSA) course in Madison next year.

On the other end of the spectrum we recently worked with Blackhawk Technical College at the 2004 Farm Technology Days at Bloomer, Wisconsin. The booth was located in the "Energy Theme Tent." Through the efforts of both groups we were able to inform state and national audiences how we have worked to create a program that can be used by other organizations. BSE was also able to explain the ethanol process and how ethanol improves state and national economies, and benefits to agriculture.

Farm Technology Days was a four day opportunity for positive information exchange and public awareness. Partnering with Blackhawk Technical College has been a very positive experience for BSE. In 2007 this event will take place in Green County.

This marked the third consecutive year that Badger State Ethanol exhibited at World Dairy Expo (WDE) in Madison, WI. Exposure at WED helps BSE to gain footholds into new national and international markets for the distillers' grains. In addition, much information is gained about the public perception of the ethanol industry.



We hope you have a safe and Happy Holiday Season!



## Andy Phillips

This issue's employee feature

Andy "Flips" Phillips has worked at Badger State Ethanol since September 2002 when he started as a grain handler. After being promoted to Plant Operator in March 2003, he is now a Class 1 Operator.

"Flips" grew up on a dairy farm near Cedarville, IL and now grain farms with his father. He also is a member of the Cedarville Volunteer Fire Department and the BSE Safety Committee.

An avid tractor pull fan, he enjoys driving truck and operating machinery in his spare time.

Andy likes the flexible work schedule at BSE, but also states, "Coming from a farm background, I like the fact that Badger State is an ag-oriented, new, developing technology".

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is progress; working together is success*

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**Jim Leitzinger**  
**Controller & CFO**

Jim Leitzinger is the "numbers cruncher" at Badger State Ethanol. As the Controller/CFO since July 2002 he has had primary responsibility for finding a suitable provider for health care coverage, implementing a 401-K retirement savings plan, pre-tax flexible spending program and life and disability coverage. These incentives make BSE a very attractive employer.

Change was the constant as inventory and accounting systems developed. Due to Jim's input, Badger State has one of the few fully integrated inventory and accounting systems in the ethanol business. He says, "If it doesn't get recorded, it doesn't exist".

Jim, as custodian of the company's assets, has a multitude of duties in a day including finance and cash flow maintenance to payroll and more. The company has saved thousands of dollars of interest by financing improvements and additions with the operating cash flow. We have paid for the RTO, fifth centrifuge, blower skid and housing for the CO2 plant and the fermenter addition without adding to our debt. Jim has been an integral part of adding to the plant's efficiency and the positive bottom line.

As an Edgewood College graduate and CPA, Jim came to BSE with controller experience, the last of which was with the City of Freeport, Illinois as Director of Finance. He and his wife live in Shullsburg, Wisconsin. They have four children. Jim says, "I love this area of the country and consider myself fortunate to be a part of this opportunity called Badger State Ethanol."

Jim is quoted as saying, "As we approach our year end, I see a year where our plant appeared to come into its own. This is a year that did not include the amounts of production incentives that we received the prior year and yet we are looking at a bottom line that will compare favorable to last year. I look forward to future communications and seeing all of you at our next annual meeting".



**Merry Christmas**