Russell rebounds 
It's full steam ahead for town that hit bottom

By TIM UNRUH
The Salina Journal

RUSSELL -- Gary Hobbie has grown accustomed to reaching for his blue safety helmet.

The welcome fixture in his green sport utility vehicle is a sign of progress in this small town.

"It's good when a city manager keeps a hard-hat nearby," he said before joining another tour of Russell's Industrial Park just northeast of town.

Hobbie doesn't mind leaving the paperwork at City Hall for an occasional afternoon stroll through the growing U.S. Energy Partners compound, where local corn and grain sorghum become ethanol, and gluten is extracted from wheat.

And that's just the beginning.

"I enjoy telling what's going on here," said Hobbie, who has served the city for 27 years. "I love being involved in this, the cohesiveness and the little synergies we share."

It is an integrated empire that has produced and reproduced 60 jobs for the area economy that was socked by a crude oil depression in the 1990s and the King of the Road recreational vehicle manufacturer that nearly vanished in spring 2001.

Russell's population exceeded 6,500 in the 1970s and 1980s. It's at 4,800 today, but thanks to the recent value-added grain boom, the slide has ceased.

"We're expecting growth," Hobbie said, "but we got the decline shut off first so we could get some increase."

Integrated solutions

Today, a plume of white steam rises from the stack at the ethanol plant that has been producing an average of 122,000 gallons of denatured (5 percent gasoline) ethanol each day from 50,000 bushels of grain. Hobbie calls it "Russell's wind sock."

Opened in October 2001, the plant is "on track" to produce 42 million gallons this year.

Workers, some dressed like scientists, others like farmers, keep the plants going around the clock.

At the ethanol plant, laboratory technician Jolene Ridgley monitors the sugar levels in the fermenting mash. It looks like a breakfast cereal but smells like a brewery.

"It's very interesting," she said. "It's a living organism. You never know what to expect."

Next door is a city-owned 15-megawatt power plant, one of two that is capable of producing all of Russell's needed power. The exhaust from two natural gas turbines heats water, producing steam that drives the ethanol plant.

About 400 yards west is the U.S. Energy Partners wheat processing plant, formerly the Heartland Wheat Growers plant mostly owned by Farmland Industries. It closed in June 2001 and opened again in May after it was purchased by U.S. Energy Partners.

It will make 2.1 million pounds of gluten (the stuff that makes your hot dog bun hinge) a year. Leftover starch is used in the ethanol plant.

Workers in the wheat laboratory bake loaves of bread to test the gluten's volume against the standard. The naturally occurring protein "adds volume to bread mixes," said Barbara Elliott, Hays, quality control manager in the wheat lab.

"As long as we outperform the control, then it's acceptable for shipping," said Regis Weiss, wheat processing plant manager.

Every pallet of gluten, which contains 76 percent protein, is sampled for protein content, moisture and granulation (particle size).

"We target 767 percent protein," he said. "We figure we have a little leg up on the competition."

Each pallet contains 2,500 pounds of gluten, and the plant is shipping 51 to 68 pallets a day.

"That's about all we can do," Weiss said. "We're running full bore right now."

Co-products from the ethanol plant, the spent grain or stillage -- what is left over after fermentation -- becomes a high-protein, high-fat animal feed. The firm soon will break ground to build a feed mill. U.S. Energy Partners is considering making food for catfish, shrimp and pets.

The mill will add approximately 20 jobs.

Carbon dioxide, the substance that puts the fizz in soft drinks and is used to make dry ice, is produced on a one-to-one basis with ethanol. U.S. Energy, in a partnership with Louisiana-based EPCO, began marketing the carbon dioxide -- Tony's Pizza in Salina is a major customer -- in September, adding two full-time workers and a number of transport drivers.

"We're looking down the line to do a study to use pressurized CO2 to charge the oil fields again. It's a neat idea," said Ron Dunbar, ethanol plant manager, instead of pumping saltwater into the wells to force out more crude oil. "You don't have to use saltwater. It's a much more environmentally friendly way of doing it."

U.S. Energy Partners has other plans for the compound, but it's too early to discuss them.

"We want a full-sized industrial park," he said, "so we're going to look into other opportunities to value-add."

Meeting ethanol demand

With the number of ethanol plants that have sprung up in the farm belt in recent months, Dunbar said supply is meeting demand and "now there is almost a little bit of a glut."

But that is due to change, thanks to the California mandate to switch to 100 percent ethanol-blended gasoline by January 2004.

"That's going to be a major market. It will end up taking a huge amount of ethanol," he said. "I think this market and this industry are going to continue to grow."

But it's not going to be a wide-open market forever, and many factors can contribute to its success and/or failure. Dunbar advises communities interested in entering the game to "do your research and be aware of what's going into it."

Case in point: the 2002 drought in much of Kansas that slashed production and caused commodity prices to shoot up. While there is no current supply problem in the Russell area, U.S. Energy Partners has a plan in place to import grain by rail.

"Iowa and South Dakota are showing bumper crops," he said. "They're actually putting more (grain) on the ground than they ever have before."

With a rail system in place, U.S. Energy Partners could assure a constant flow of grain to its plants in Russell.

Hobbie said the grain would be imported only during periods of short local supply.

"The locally grown milo can be purchased and transported less expensively than outside of the region," Hobbie said. "The only reason they go outside of the market is when they have to supplement the lack of supply of milo in this area."

Russell on the move

Hypotheticals aside, development is occurring here.

A number of occurrences have contributed to Russell's climb. The city built a new wastewater treatment plant in the mid-1990s, providing the capacity for the new industries.

Hobbie points to the August 2000 explosion at the downtown power plant that brought about an attitude change.

"That is really what facilitated all these things," he said. "Having to replace a power plant is the biggest issue that made people step up to the table and start discussing things a little more seriously."

If the carbon dioxide project proves successful, Hobbie said some of the drilling companies will return to Russell.

"We still have several firms here, and they're drilling new wells," he said. "I think we've hit our bottom, and we've started back up."

* Reporter Tim Unruh can be reached at 823-6464, Ext. 137, or by e-mail at sjunruh@saljournal.com.