Fertilizer Industry Grows Despite Safety Concerns

DAVID MERCER & RAMIT PLUSHNICK-MASTI, Associated Press

TUSCOLA, Ill. (AP) — In years past, Brian Moody's efforts to bring economic development to his small Illinois town focused on modest projects: merging an old hardware store whose owner was retiring with another shop to preserve 30 jobs or pointing artists to a vacant downtown building.

This June 6, 2013 photo shows the Koch Nitrogen Company in Enid, Okla. The company plans to add a new fertilizer production plant at this facility, part of a wave of new fertilizer plant construction and expansion being proposed across the United States. Newly abundant supplies of natural gas, a key fertilizer component, are behind plans that promise to bring jobs to mostly rural locations around the country. But they come as a deadly explosion at a fertilizer plant in Texas highlighted how dangerous some of the chemicals used to make fertilizer can be, and how inconsistently they're regulated. **(AP Photo/Sue Ogrocki)**

Now he has a bigger prospect. Cronus Chemicals wants to build a $1.2 billion plant on a nearby cornfield that would manufacture nitrogen-based fertilizer, a staple of the corn and soybean farms that fill the landscape around Tuscola, a community of 4,500 people about 160 miles south of Chicago.

Similar projects are being proposed across the nation, driven by booming demand for corn and newly abundant supplies of natural gas, a major component in fertilizer production. The plants promise thousands of jobs during construction and hundreds of full-time spots once they're up and running. And most of them would go in small, rural towns where economic development isn't easy.

"It's equally time-consuming and frustrating," Moody said, explaining that such promising job-creating opportunities are rare.

The wave of potential expansion comes with concerns. An explosion at a Texas fertilizer plant in April killed 15 people in the community of West, highlighting the dangers of such facilities and how loosely they're regulated.

But in communities like Tuscola, local officials say they're prepared to handle those risks. A large chemical plant already stands near the proposed fertilizer site.

"The fact is that whether these plants are going to be here or not, we have three major railroads that go right through the middle of this community," said Steve Ettinger, chief of the Tuscola Fire Department. "Those railroads on a daily basis move all kinds of threats."

Experts say conditions are ripe to bring fertilizer production back to the United States after an exodus to the Caribbean and elsewhere a decade or more ago, when high domestic natural gas prices drove many manufactures away.

Since then, new methods of finding natural gas — hydraulic fracturing, which uses high-pressure water and chemicals to break dense layers of rock, and horizontal drilling — have set off energy booms in parts of Pennsylvania, Texas and other states.

"It shouldn't be a surprise that there are a lot of people investing in the fertilizer business right now," said Pat Westhoff, an agricultural economist at the University of Missouri-Columbia.

Like Tuscola, most of the sites being considered are already home to other chemical facilities, which were drawn by the same rail lines and other industrial infrastructure that are attractive to the fertilizer industry.

Over the past two years, the trade publication Argus FMB North American Fertilizer has tracked about 20 proposed fertilizer projects in the United States and Canada, said Lauren Williamson, an Argus editor. Potential new plant locations include Indiana, Iowa, Illinois and North Dakota. Existing factories in Iowa, Louisiana and Oklahoma could be expanded.

Fertilizer is big business, especially in agricultural regions where farmers rely on nitrogen-based products. Profits for publicly traded fertilizer producers have averaged 20 percent or more over the last decade, according to Gary Schnitkey, an agricultural economist at the University of Illinois, about 25 miles north of Tuscola.

The plant proposed by Cronus Chemical promises about 2,000 short-term construction jobs and 150 permanent positions. That would make it the second- or third-largest local employer.

Agriculture is Tuscola's No. 1 industry, and the high profits of the past few years for corn and soybean farming have helped keep unemployment relatively low — just above 6 percent, well below the statewide rate that exceeds 9 percent.

Behind agriculture, tourism is a steady No. 2 industry. The town is built on the edge of Illinois' Amish country, drawing day-tripping tourists who flock to a homemade candy store and soda fountain.

But growth, as Moody said, doesn't come easily to small towns. So they compete.

Cronus has also found a site in Mitchell County, Iowa, and is seeking incentives from each state as it weighs options. In Illinois, lawmakers passed legislation that includes tax breaks for the newly formed company.

Since the Texas explosion, questions about the kinds of fertilizer the new plants would make and the chemicals that are used have become more important.

The volatile chemical ammonium nitrate fueled the disaster in Texas, and few of the new plants would use it. But many, including the Cronus plant, would use other potentially dangerous chemicals, like anhydrous ammonia, which can be used as a fertilizer on its own or serve as a component in other forms of fertilizer, like urea.

"People should learn from the incident at West," said Daniel Horowitz, managing director of the Chemical Safety Board, a federal agency investigating the Texas explosion. He believes rules need to be reviewed to prevent accidents.

Anhydrous ammonia is ubiquitous in farm country. It is flammable or explosive only in extreme circumstances, but an accidental leak could release a toxic chemical cloud that can drift for miles.

"You don't want to breathe it. It'll burn your lungs," Hettinger said.

Government oversight of such chemicals varies greatly from state to state.

In Illinois, the roughly 800 anhydrous storage sites are inspected annually. The six largest have few, if any, problems, said Jerry Kirbach of the state Agriculture Department's Bureau of Agricultural Products Inspection.

California requires plants be inspected once every three years.

However, in many states, including Texas, fertilizer plants are considered small polluters, and cash-strapped state environmental agencies conduct inspections only when a complaint is lodged.

Larry Robb is the emergency manager in Posey County in southern Indiana, where a firm owned in part by large Pakistani company, the Fatima Group, has proposed a $1.3 billion plant that's run into hurdles.

The state put an offer of incentives on hold over concerns that Fatima's overseas products wind up in explosives in Afghanistan. Since then, local officials have stepped in to help with financing.

Much like officials in Tuscola, Robb said he already deals with other local plants. They regularly report inventories of dangerous chemicals, but he acknowledges he's taking them at their word.

"Could they do something without reporting it? Of course," he said. "Is it likely to be

caught? That's a good question."

Still, he and other local officials hope the plant gets off the ground.

"We're optimistic that it will be built," Robb said. "We're looking at growth in our county."

___

Follow David Mercer on Twitter at http://twitter.com/davidmercerap [1] and Plushnick-Masti at https://twitter.com/RamitMastiAP [2] .

Source URL (retrieved on *03/07/2014 - 5:27am*):
http://www.chem.info/news/2013/07/fertilizer-industry-grows-despite-safety-concerns?qt-recent_content=0&qt-most_popular=1

Links:
[1] http://twitter.com/davidmercerap
[2] https://twitter.com/RamitMastiAP