



The Fertilizer Institute

Nourish, Replenish, Grow

Testimony of

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**President**

**The Fertilizer Institute**

Before the

**U.S. Senate Appropriations Interior and Related Agencies  
Subcommittee**

Regarding

**The High Price of Natural Gas  
and its Impact on the U.S. Fertilizer Industry**

**DESCRIPTION OF TESTIMONY**

A description of The Fertilizer Institute and an outline of the impact of high natural gas prices on its member companies and their farmer customers.

**October 25, 2005**

## **Introduction**

Mr. Chairman and members of the subcommittee, I am Ford B. West, president of The Fertilizer Institute (TFI). On behalf of TFI, I appreciate the opportunity to testify before the Senate Appropriations Interior and Related Agencies Subcommittee regarding “The High Price of Natural Gas and its Impact on the U.S. fertilizer industry.” Furthermore, I would like to thank you Mr. Chairman for scheduling this important hearing and for your leadership in addressing this critical issue impacting the U.S. plant food industry, its many local retail agribusiness outlets and the farmers and livestock producers they serve.

TFI is the leading voice of the nation’s fertilizer industry, representing the public policy, communication and statistical needs of fertilizer producers, retailers and transporters. In addition to energy policy, issues of interest to TFI members include the environment, international trade, security, transportation and worker health and safety.

## **Fertilizer and Energy**

The United States needs reliable and plentiful supplies of natural gas to produce nitrogen and meet critical agriculture and food production needs. Natural gas is the fundamental feedstock ingredient for the production of nitrogen fertilizer and represents 70 to 90 percent of the production cost of one ton of anhydrous ammonia – the building block for most other forms of commercial nitrogen plant nutrients. The nitrogen fertilizer industry accounts for approximately three percent of the total natural gas consumed in the nation.

## **The National Impact**

The current U.S. natural gas crisis is exacting a heavy toll on America’s nitrogen fertilizer producers and the farmer customers they supply. The resulting negative financial impact on the North American fertilizer industry is unprecedented and threatens to irreversibly cripple the U.S. nitrogen fertilizer manufacturing industry, which supplies approximately one-half of U.S. farmers’ nitrogen fertilizer needs. America’s food security, and by extension, our national security will be jeopardized if action is not taken to address our country’s current natural gas crisis.

## **Impact of High Natural Gas Prices**

Due to the U.S. natural gas crisis, the cost of nitrogen fertilizer production has reached an all-time high forcing many U.S. plants to shut down. Jobs are being exported to China, Russia, the Middle East and the Caribbean, as U.S. farmers are becoming increasingly dependent on foreign sources of fertilizers.

As a world market commodity, fertilizer prices are determined much like the prices of most agricultural commodities. The fact that fertilizer is a commodity means that supply and demand factors in major markets around the world impact the price U.S. farmers pay for fertilizer. The prices paid by farmers for the major fertilizer materials reached the highest level on record during the spring of 2005.

## Nitrogen

Anhydrous ammonia is the source of nearly all the nitrogen fertilizer produced in the world. Ammonia is produced by combining nitrogen with hydrogen. The nitrogen is obtained from the atmosphere, while the hydrogen is obtained from natural gas. At today's gas prices, the cost of natural gas accounts for 70-90 percent of the production cost of ammonia. Thus, when U.S. natural gas prices increased significantly beginning in the year 2000, the cost of domestically produced ammonia also rose significantly. Average U.S. ammonia production costs doubled from 1999 to 2003, the latest year for which data are available, and are sure to have increased again in 2004 as natural gas prices have continued to rise.

While fertilizer producers can try to pass along these cost increases, the commodity nature of the business and competition from producers in nitrogen exporting countries, with access to lower priced gas, limits this option. As a result, a rise in U.S. natural gas prices causes producer margins to shrink. Eventually, margins turn negative as gas prices continue to increase. Consequently, companies are forced to reduce production, temporarily idle, or even permanently close plants depending on the specific economic situation they face.

As a result of the ongoing natural gas crisis in America, 21 nitrogen fertilizer (ammonia) production facilities have closed since FY1998/99 (July 1998-June 1999). Sixteen of those plants have closed permanently, representing a 20 percent drop in total production capacity, while five plants remain idle. Operating rates for the U.S. ammonia industry have also declined significantly from historical levels. The permanent and temporary closures in combination with the drop in operating rates have resulted in a 35 percent decline in U.S. ammonia production from 17.85 million tons of material in FY1998/99 to 11.70 million tons in FY2003/04. U.S. nitrogen imports have increased from 6.11 million tons in FY98/99 to 10.36 million tons in FY2003/04. As a result, U.S. ammonia production fell by over six million tons or 34 percent in only five years. Consequently, the U.S. fertilizer industry, which typically supplied 85 percent of its domestic needs from U.S. based production during the 1990s, now relies on imports for nearly 45 percent of nitrogen supplies.

In the past few weeks alone, three of the largest remaining U.S. nitrogen fertilizer producers have announced they are again shutting in or idling a significant portion of their facilities and reducing production by as much as 50 percent or more. Last week, TFI and a number of its nitrogen producing member company CEOs met with U.S. Department of Energy Secretary Samuel W. Bodman, as well as a number of key farm-state senators and congressmen. After describing agriculture's natural gas crisis situation, in all honesty I cannot say that we left any of those meetings encouraged about the short or long term energy future for our producers, retailers, farm customers or our nation. Energy conservation, renewable fuels and increased imports of Liquefied Natural Gas (LNG), while important, will not save this nation's nitrogen fertilizer industry from being forced to idle remaining U.S. production capacity because of cost pressures from high natural gas prices. Increasing U.S. supplies of natural gas in a significant manner and as soon as possible is the only way to avoid the further decline of the U.S. fertilizer industry and a nationwide economic disaster in farm country.

### **The Current Crisis Threatens Other Fertilizers**

Phosphate production is natural resource based and begins with the mining of phosphate rock. The United States is the world's largest producer and exporter of phosphate fertilizer. Thus increased global demand has been the driving factor behind the recent rise in phosphate fertilizer prices. However, significantly higher costs for major production inputs like ammonia produced with natural gas, and sulfur have also placed upward pressure on the prices of the major phosphate fertilizers. Average U.S. production costs for ammonium phosphates increased by 20 percent from 1999 to 2003, the latest year for which data are available, and are expected to have increased again in 2004 as ammonia prices have continued to rise.

### **Conclusion**

Mr. Chairman, allow me to relay recommendations, which we believe should be immediately included in federal energy legislation and policy. These recommendations include: opening additional federal lands and off-shore areas to oil and gas exploration and production, especially the lease/sale area 181 in the Gulf of Mexico and other coastal areas on the Outer Continental Shelf (OCS).

Currently, 85 to 90 percent of the OCS is off-limits to natural gas exploration due to a combination of congressional and state moratoria. Industry estimates suggest that the OCS contains gas reserves large enough to supply all current U.S. industrial and commercial needs for 40 years. Regarding "Lease Sale 181," the U.S. Interior Department estimates that the 6 million acre area contains natural gas reserves of 1.3 trillion cubic feet. TFI strongly believes that opening these areas to natural gas drilling is the fastest way to bring new natural gas to market and bring much needed relief to our industry and our nation's food producers.

Also, any federal policies that can be implemented to make it easier to get permitting and to build new LNG terminals in the United States as quickly as possible are vital. We believe these federal policy initiatives are critically important to the energy security, food security and national security of this nation.

Finally, TFI urges members of this subcommittee and all members of Congress concerned about the ongoing U.S. natural gas crisis, to contact Secretary Bodman and request the U.S. Department of Energy move quickly to promulgate rules and regulations for loan guarantees and investment tax credits for construction of coal gasification facilities as authorized by Congress in the recently enacted federal energy bill.

To conclude, allow me to again thank you Mr. Chairman and members of the subcommittee for your leadership in addressing the critically important issue of the high natural gas price in this country and its impact on the U.S. fertilizer industry and its farmer customers. Thank you for the opportunity to testify today.

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