

The third segment of the fertilizer industry is nitrogen. Nitrogen from the air is combined with hydrogen under pressure to make ammonia, the building block for other nitrogen fertilizers. Natural gas is the major source of energy and hydrogen for ammonia production. Nitrogen fertilizers include liquid ammonia, urea, ammonium sulphate, ammonium nitrate and ammonium phosphate. The nitrogen component expanded in Alberta and Ontario in the 1970s and 1980s and world-class plants were built. Although a number of plants are presently idle, the Committee was told that this segment of the industry has been able to operate at a much higher level of design capacity than has the phosphate sector.

Nitrogen expansion was based on the premise of a continued favourable natural gas cost advantage which historically western Canadian producers have experienced. Although deregulation has contributed to a 25% reduction in the price of natural gas over the past year, sharply declining energy prices world-wide have removed the advantage Canadian nitrogen fertilizer producers hoped to enjoy in world markets.

It was not only the Canadian nitrogen industry which expanded during the same period. There was a general increase in fertilizer capacity world-wide so that overcapacity coupled with weak grain markets and reduced demand has caused a recession in the entire Canadian fertilizer industry.

The Canadian Fertilizer Institute, which collects information on the financial situation of the fertilizer industry each year, provided the Committee with a reasonably complete financial picture. Annual sales were \$1.7 billion in 1986, of which \$821 million worth was consumed in domestic markets and \$858 million worth was exported to the U.S. and offshore markets. For the second successive year, the industry has experienced a net-after-tax loss, which in 1986 amounted to \$124.9 million. All three segments registered decreased returns. In 1986, the number of employees in the basic fertilizer industry was 7,650, a decrease of about 350 from the previous year.

In an excess supply situation, selling prices of basic fertilizer are at historically low levels both in the U.S. and Canada relative to their cost of production, according to the industry. Without trade barriers, when domestic retail prices are not competitive, fertilizer can be imported as basic materials or finished mixed fertilizer at prevailing world prices. A farmer has the option of purchasing his material domestically or importing from U.S. sources. Figures provided by the industry for April 1986 showed some variations in retail price between western Canadian and northern U.S. locations by as much as \$20 per tonne. Urea and monoammonium phosphate were more expensive in Manitoba than in the U.S. Northern Plain states while these products were reported as less expensive in Saskatchewan than they were in markets directly south in the U.S. The most noticeable differences were retail prices for anhydrous ammonia which in April 1986 were higher in Alberta, Saskatchewan and Manitoba than they were in U.S. states just south of the border. In Manitoba, anhydrous ammonia was \$361 per metric tonne in April 1986 as compared to \$324 per metric tonne in the Northern Plain region of the U.S. Preliminary prices for 1987 show that although fertilizer prices are in some instances higher in Canada than in the U.S., there is a general downward trend on both sides of the border which in the case of anhydrous ammonia registered about a 9% reduction.

About 60% of North American ammonia production capacity is located in the area of the U.S., adjacent to the Gulf of Mexico. Imports also tend to enter the U.S. in this region, through the port of New Orleans. This makes the area a North American fertilizer price leader so that prices in any area tend to be based on the U.S. Gulf price, plus transport costs from the Gulf. Competition from these U.S. products moving through the Mississippi system tends to hold Canadian prairie prices to the U.S. Gulf price plus transport costs.

The Committee believes that better information about prices will enable farmers to shop around and procure the best buy in fertilizer materials. In a later section, the Committee makes a general recommendation about price monitoring and dissemination of price information.