

# Agreements signed for worldwide licensing of Paprican's polysulfide technology

## NORAM, Kvaerner Pulping AB, and Air Liquide to promote Paprilox™ worldwide

**Pointe-Claire, QC -- May 12, 2003:** Agreements were signed to-day at Paprican's Pointe-Claire Laboratory that will result in a new three-party consortium taking on the marketing and sales of Paprican's **Paprilox™** technology. The Agreements also provide for additional funding toward future research in the area of polysulfide pulping at Paprican.

NORAM Engineering and Constructors Ltd. is now the licensee for **Paprilox™** in the North American market, while Kvaerner Pulping AB will be the licensee in the rest of the world. Air Liquide will work with both licensees providing oxygen technology and marketing resources. A co-operative agreement was signed between NORAM, Kvaerner and Air Liquide to ensure a standardized product offering for **Paprilox™** around the world. The companies will also collaborate with Paprican under the Paprican Allied Industry Program in support of on-going development of **Paprilox™** and polysulfide pulping technology.

**Paprilox™** is an innovative, mill-proven technology for generating polysulfide, a chemical used to enhance pulp yield in the kraft pulping process. The **Paprilox™** process uses a combination of lime mud, manganese oxide, and oxygen to convert the white liquor in a mill's recaustization plant to orange polysulfide liquor. **Paprilox™** was developed by Paprican researchers, and implemented at Domtar Espanola, a Paprican Member Company mill.

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Paprican (The Pulp and Paper Research Institute of Canada) is a not-for-profit research and educational organization, founded in 1925. It operates research laboratories in Pointe-Claire, QC, and Vancouver, BC, as well as a technology transfer centre in Prince George, BC. Approximately 340 scientists, engineers and support staff work at these locations. For further information: Richard Berry, Program Manager, Paprican Chemical Pulping, 514-630-4131.

NORAM Engineering and Constructors Ltd is based in Vancouver B.C. and provides leading edge technology to the chemical, plastics and resources industries, worldwide. NORAM's pulp and paper technology includes chemical production, kraft mill odor control and wastewater treatment. NORAM specializes in the development, commercialization and supply of new processes and is a major shareholder in B.C. Research Inc. For further information contact Larry Tench, Product Manager, Paprilox Systems, 604-681-2030.

Kvaerner Pulping AB is a leading supplier of complete fiberlines, machines, process systems and service for the chemical pulp industry worldwide. The products are used for continuous cooking, washing, oxygen delignification, bleaching and recausticizing plants. Kvaerner Pulping AB with head office in Karlstad, Sweden, has sales and manufacturing facilities worldwide. For further information contact Stig Andtbacka, Product Manager, Paprilox Systems, phone +46 54 19 46 00.

Founded 93 years ago, Air Liquide Canada, is a specialist in industrial, medical and specialty gases, as well as welding products and equipment. Air Liquide Canada has over 120 locations across the country to serve its customers and is part of the Air Liquide Group, the global leader in industrial and medical gases with facilities in over 60 countries. The Air Liquide Group serves over 80 pulp and paper mills worldwide. Combining new technologies and services, Air Liquide offers gas solutions that contribute to the industrial performances of its customers and improve the environment. With over 30 years of strong partnership with the pulp and paper industry, Air Liquide Canada offers the industry a wide range of solutions for chemical recovery, causticization, bleaching, wastewater oxygenation and pH control. For further information contact Gord Homer, 604-606-4300.