

# NEWS BULLETIN

FROM:

FINANCIAL  
RELATIONS BOARD

RE: **Headwaters Incorporated**  
10653 South River Front Parkway, Suite 300  
South Jordan, UT 84095  
(801) 984-9400  
**NASDAQ: HDWR**

FOR FURTHER INFORMATION

**AT THE COMPANY:**

Sharon Madden  
Director of Investor Relations  
(801) 984-9400

**AT FINANCIAL RELATIONS BOARD:**

Tricia Ross  
Analyst Contact  
(310) 407-6540

**FOR IMMEDIATE RELEASE:  
SEPTEMBER 28, 2004**

## **HEADWATERS INCORPORATED AND DEGUSSA AG ESTABLISH JOINT VENTURE TO DEVELOP AND COMMERCIALIZE DIRECT SYNTHESIS HYDROGEN PEROXIDE**

**SOUTH JORDAN, UTAH, SEPTEMBER 28, 2004 – HEADWATERS INCORPORATED (NASDAQ: HDWR)**, today announced that it has signed an agreement with Degussa AG, located in Düsseldorf, Germany to establish a 50:50 joint venture to develop and commercialize direct synthesis process for hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>). The partnership aims to invest in mega facilities to produce low-cost hydrogen peroxide for chemical intermediates. High-volume producers will be able to use the H<sub>2</sub>O<sub>2</sub> from these facilities to produce intermediates such as propylene oxide (PO).

The “Degussa Headwaters” joint venture, which plans to complete process development by 2007, will be responsible for commercialization, and will build and operate manufacturing facilities. The first plant could be built in 2008. Shawn Abrams, Head of Degussa’s Active Oxygen’s business line, and Craig Hickman, President of Headwaters’ Technology Innovation Group, have a common vision: “Combining our activities in this joint venture will enable us to launch the process far sooner.” They stress that “Degussa Headwaters” is already well advanced in the development of direct synthesis of hydrogen peroxide.

Abrams explains the goal: “At the end of the day, we believe that our process will cut the cost of investing in large-scale H<sub>2</sub>O<sub>2</sub> production plants for PO by a third to a half.” Hickman continues takes up the point: “We expect our process to produce the lowest-cost hydrogen peroxide for high-volume chemical synthesis routes.” The joint venture is a new step for Headwaters, as Hickman explains: “This will be our first experience with a long term joint venture, combining our nanocatalyst technology with the development and commercialization expertise of a world class specialty chemical company. As PO and other chemicals are produced from H<sub>2</sub>O<sub>2</sub> in the future, we believe demand for this environment-friendly oxidation agent will increase significantly.

- more -

Both companies have been working independently on direct synthesis for a number of years. Degussa's contribution to the joint venture includes its extensive expertise as one of the world's largest hydrogen peroxide producers with present capacity of 550,000 metric tons per year. Headwaters is an industry leader in nanocatalysis, so the partnership will be able to capitalize on its strong knowledge of catalysis for direct synthesis reactions. Its proprietary technology includes the NxCat™ nanocatalyst, a heterogeneous precious metal catalyst with high selectivity, high productivity and stability. Hickman continues, "Decisive advances in nanocatalysis and our process knowledge will enable our partnership to develop what we believe may be the world's most cost-effective H<sub>2</sub>O<sub>2</sub> process." The new process is to be tested and optimized for bulk production in the pilot plant at Degussa's site in Hanau-Wolfgang, Germany.

The new direct synthesis method, which uses a catalyst to react hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>) to form only hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>), is to be scaled up for industrial use. Degussa has been producing hydrogen peroxide for many years using a proprietary anthraquinone process. The aqueous H<sub>2</sub>O<sub>2</sub> generated by this process is mainly used to bleach paper and pulp. The new direct synthesis H<sub>2</sub>O<sub>2</sub> is not seen as an alternative for this sector. It gives hydrogen peroxide dissolved in low concentrations of methanol, which can be used directly in the production of PO. "Compared with the anthraquinone method, direct synthesis has enormous advantages for the PO process," explains Abrams. He also believes that direct synthesis H<sub>2</sub>O<sub>2</sub> could be used for other production processes in the future, such as caprolactam, phenol and epichlorohydrin.

Abrams is convinced that the direct synthesis route to H<sub>2</sub>O<sub>2</sub> developed by the Degussa Headwaters joint venture, combined with the Degussa/Uhde technology for propylene oxide, will greatly reduce the cost of producing propylene oxide in the future. In 2001 Degussa and what is now Uhde GmbH, Dortmund, Germany, agreed to collaborate on the development of a new production process for propylene oxide. This method produces propylene oxide from propylene and hydrogen peroxide with the aid of a catalyst. The only by-product is water. Degussa has stated that it has no plans to become a volume producer of propylene oxide.

Major propylene oxide producers are already planning facilities that can produce at least 250,000 metric tons of propylene oxide a year. On this scale, each plant designed to use the new process would require annual H<sub>2</sub>O<sub>2</sub> production capacity of over 180,000 metric tons. Propylene oxide is a starting product for polyurethane, which is used in applications such as cushions and car seats. The market for PO currently exceeds five million metric tons a year and Degussa and Headwaters believe that its growth prospects are excellent.

### **About Headwaters Incorporated**

*Headwaters Incorporated is a world leader in creating value through innovative advancements in the utilization of natural resources. The Company is focused on providing services to energy companies, conversion of fossil fuels into alternative energy products, and adding value to energy. Headwaters generates revenue from managing coal combustion products (CCPs) and from licensing its innovative chemical technology to produce an alternative fuel. Through its CCP business, building products business, and its solid alternative fuels business, the Company earns a growing revenue stream that provides the capital needed to expand and acquire synergistic new business opportunities.*

## About Degussa

*Degussa is a multinational corporation consistently aligned to highly profitable specialty chemistry. In fiscal 2003, its 47,000 employees generated sales of €11.4 billion and operating profits (EBIT) of €878 million, making it Germany's third-largest chemical company and the global market leader in specialty chemicals. Innovative products and system solutions enable Degussa to play a valuable and indispensable role in the success of its customers, as summed up by our claim "creating essentials".*

## Forward Looking Statements

*Certain statements contained in this report are forward-looking statements within the meaning of federal securities laws and Headwaters intends that such forward-looking statements be subject to the safe-harbor created thereby.*

*Forward-looking statements include Headwaters' expectations as to the managing and marketing of coal combustion products and building products, operation of facilities utilizing alternative fuel technologies, the marketing of synthetic fuels, the receipt of licensing fees, royalties, and product sales revenues, the development, commercialization, and financing of new technologies and other strategic business opportunities and acquisitions, and other information about Headwaters. Such statements that are not purely historical by nature, including those statements regarding Headwaters' future business plans, the operation of facilities, the availability of tax credits, the availability of feed stocks, and the marketability of the coal combustion products, building products, and synthetic fuel, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding future events and our future results that are based on current expectations, estimates, forecasts, and projections about the industries in which we operate and the beliefs and assumptions of our management. Actual results may vary materially from such expectations. Words such as "expects," "anticipates," "targets," "goals," "projects," "believes," "seeks," "estimates," variations of such words, and similar expressions are intended to identify such forward-looking statements. Any statements that refer to projections of our future financial performance, our anticipated growth and trends in our businesses, and other characterizations of future events or circumstances, are forward-looking.*

*In addition to matters affecting the coal combustion products, synthetic fuel and building products industries or the economy generally, factors which could cause actual results to differ from expectations stated in forward-looking statements include, among others, the factors described in the captions entitled "Forward-looking Statements" and "Risk Factors" in Item 7 in Headwaters' Annual Report on Form 10-K for the fiscal year ended September 30, 2003, Quarterly Reports on Form 10-Q, and other periodic filings and prospectuses.*

*Although Headwaters believes that its expectations are based on reasonable assumptions within the bounds of its knowledge of its business and operations, there can be no assurance that our results of operations will not be adversely affected by such factors. Unless legally required, we undertake no obligation to revise or update any forward-looking statements for any reason. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this report.*

*Our internet address is [www.hdwtrs.com](http://www.hdwtrs.com). There we make available, free of charge, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our reports can be accessed through the investor relations section of our web site.*