

**FOR IMMEDIATE RELEASE**  
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### **Norit Clean Process Technologies at the IFAT ENTSORGA**

As an important player in the global water purification market, Norit will have a prominent presence at the IFAT ENTSORGA, an international trade fair for water, sewage, refuse and recycling that runs September 13-17 in Munich, Germany. The Norit stand will feature several strategic innovations for potable and wastewater filtration, advanced pump technology, and biogas upgrading systems that are results of the company's Efficient Performance Technology program geared towards developing solutions that "do more with less". Norit's IFAT participation is a key activity on the company's decisive path to launch clean process technologies that offer maximum performance without compromising the environment and its customer's financials.

Norit X-Flow's potable and wastewater filtration solutions include the latest generation **Norit Aquaflex™**. The new Aquaflex is the best performing ultrafiltration (UF) water treatment system on the market as it provides superior separation performance at a considerably lower total cost of ownership for drinking water applications as well as wastewater polishing applications to support the rapidly advancing wastewater reuse requirements.

With the new **Norit Airlift™ Megablock MBR system** Norit X-Flow launches a new order of magnitude in the global Membrane BioReactor (MBR) market. Megablock sets a new scale in wastewater treatment since it delivers over 50 percent more and cleaner water per m<sup>2</sup> of membrane surface than any other MBR system in the world. Megablock is a compact, modular municipal wastewater purification system that combines biological treatment with UF membrane separation. The flexible design features self-sustaining modular segments that can easily be clamped together into blocks when extra capacity is required. Megablock is fully automated, no need anymore for manual intervention. In addition, the membranes are placed in a dry and clean environment that allows them to quickly be accessed without compromising the health and safety of plant workers.

Norit Nijhuis will present its extensive pump range for potable water, water transport and wastewater applications. To obtain optimum overall system performance and the lowest life-cycle cost for each specific application Norit Nijhuis modifies the pump design to meet the requirements of each individual system.

One example of this is Norit Nijhuis' development of a **fish-friendly pump** in collaboration with FishFlow Innovations. When in operation, this pump allows 100 percent of the eels and at least 97 percent of the fish to pass through it unharmed. The pump has, even with the necessary fish-friendly alterations, a minimum operating efficiency of 80 percent. In most situations the pump can be made to fit into an existing pumping station and extension of the electrical installation is usually not necessary. This keeps the replacement costs to a minimum.

Activated carbon plays a key role in helping customers to meet the 5<sup>th</sup> Water Frame Work Directive. Extensive studies and laboratory tests have resulted in the development of innovative carbon solutions such as the **1-STEP® Filtration Technology**, which are currently tested at several pilots in Europe. Norit Activated Carbon will present the first results from some of these pilot plants during a lecture at IFAT ENTSORGA 2010 FORUMS Hall 4, Tuesday 14<sup>th</sup> September - 13.00-13.30 hrs.

In addition to the wide range of water treatment solutions, the Norit Group will showcase its solutions for **purifying biogas and upgrading it into biomethane** combining Norit's activated carbon and Norit Haffmans' innovative biogas upgrading system.

Thanks to this innovation biogas is becoming a green source, a viable alternative for fossil fuels, produced through an anaerobic fermentation process such as in agricultural biodigesters, wastewater treatment and landfills. Biogas is mainly a gas mixture of methane (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>) but can also contain a wide variety of contaminations such as sulphur and/or siloxane compounds. In order to recover CH<sub>4</sub> and CO<sub>2</sub>, the contaminants must be efficiently and cost-effectively removed. At the IFAT Norit Activated Carbon will explain the process to select the best activated carbon for each biogas application, the purification effectiveness and new activated carbon developments that reduce the environmental impact of biogas applications.

Norit Haffmans developed a biogas upgrading system that, after purification, divides the biogas into two separate streams - CH<sub>4</sub> and CO<sub>2</sub>. Through the Norit Haffmans biogas upgrading system 100 percent of the CH<sub>4</sub> can be upgraded resulting in the elimination of the environmentally-harmful 'methane slip' that is usually produced with the other current technologies. This results in a higher yield of the CH<sub>4</sub> product and no emission of the harmful CH<sub>4</sub> greenhouse gas. An additional advantage of Norit Haffmans' process is that the CO<sub>2</sub> by-product is recovered and can be sold, resulting in an additional income source.

"At Norit we know that doing more of the same is not enough," said Menno Holterman, Chief Growth Officer at Norit NV. "The water and wastewater challenges we face today are of global proportions and require solutions that offer genuine breakthroughs. The Norit team is excited to present our latest clean process technology solutions and discuss how we can help our customers improve performance while reducing their financial, physical and environmental footprints."

We look forward to meet you at IFAT ENTSORGA - Hall A3 - Stand no. 419/520

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### About Norit

The Norit Group develops and applies state-of-the-art purification technologies to help society, through our clients, meet environmental, health, and safety challenges, and work towards a sustainable future. Headquartered in the Netherlands,

Norit supplies consumables, components, systems, and solutions, based on proprietary technology to a variety of industries including the water, beverage, food, chemical, pharmaceutical, and marine industries. Almost 9 percent of the world's population - over half a billion people – already consumes water purified by Norit!