Water technology companies presenting to the Legislative Water Commission on 6/22, in order of appearance

## Lenz Consulting, LLC

Since 2012, Lenz Consulting has been advising public, private and non-profit clients that are pursuing publicprivate partnerships, fundraising, real estate, entrepreneurship, and business incubation initiatives. Lenz also provides strategic planning, executive management, new venture creation, and executive coaching services. Lenz Consulting specializes in industry sector analysis including: water technology, robotics, medical devices, and biosciences.

The principal was a co-founder of the BioBusiness Alliance of Minnesota and the Minnesota Angel Network, both of which are now part of LifeScience Alley.

Lenz Consulting is currently engaged in several water technology initiatives. Greater MSP (the Minneapolis Saint Paul Regional Economic Development Partnership) engaged Lenz Consulting to analyze the development of a water technologies business cluster in Minnesota and to chair the 2015 Minnesota Water Technology Business Summit planning committee. The Nature Conservancy also hired Lenz Consulting to build the business case for a \$20 million water fund, initially funded by Ecolab. In addition, the Value of Water Coalition engaged Lenz Consulting to help raise national interest and support for investments in our country's water infrastructure.



Many people recognize <u>Pentair</u> through its partnership with the Minnesota Twins in developing Target Field's innovative Rain Water Recycle System, saving nearly 2 million gallons of water annually. Only five years younger than the Twins, Pentair was founded in Minnesota in 1966 and has evolved from its early paper and portable electronic tool businesses to become a \$7 billion company with 30,000 employees around the globe. Since 2004, it has become a water business leader, with technologies for:

- Advanced purification, filtration and desalination to make safe, clean water more available and affordable for all uses
- Reducing, recovering and reusing water, and helping ensure the water is clean when returned to the environment
- Recovering energy in the treatment of wastewater
- Dewatering, floodwater, and flow management
- Seed-to-table delivery of food, from irrigation and chemical application at the crop stage through production of food and beverages

Pentair has adopted a corporate social responsibility focus with a goal of getting more food, energy, and efficiencies from each drop of water.

## **3**M Science. Applied to Life.™

Headquartered in Maplewood but with employees in 70 countries, <u>3M</u> started in 1902 to harvest corundum. Last year, 3M scientists and researchers earned the company its 100,000th patent! Scotch<sup>®</sup> tapes, Post-it<sup>®</sup> Notes, and Scotch-Brite<sup>™</sup> pads may be household names, but today's 3M is responsible for 60,000 products that advance every company, enhance every home, and improve every life. One-third of its sales in 200 countries are from products that were invented within the past 5 years. 3M's Water Infrastructure Division helps its customers proactively address their water infrastructure challenges, from long-term protection of new assets to maintenance and rehabilitation of aging infrastructure. They provide:

- protective coatings for water and wastewater pipes and tanks and equipment
- pipe linings
- infrastructure location and marking assets
- purification filtration solutions including self-cleaning filters, di-electric oil filtration, and disposable filter cartridges for process water and pre-reverse osmosis applications

3M's sustainability efforts include understanding its full supply chain water footprint, reducing water consumption in its operations, improving water quality, and developing innovative solutions for its customers by balancing water use, complying with regulatory requirements, implementing systematic and prioritized conservation practices, and reporting usage.



## GE Power & Water Water & Process Technologies

GE expanded to include water technologies in 1999. They created a manufacturing presence in Minnetonka when they purchased Osmonics in 2003. Today <u>GE Power & Water, Water & Process Technologies</u> operates in 130 countries. Their 8,000 employees use advanced technologies to solve the world's most complex challenges related to water availability and quality, increased productivity, cost reduction, and environmental regulations. A sample of their services includes:

**Equipment Solutions** 

- Advanced ultrafiltration, membrane bioreactor, reverse osmosis membranes, and membrane chemistries to provide virtually any quality and quantity of water needed
- Thermal products such as crystallizers, brine concentrators, and mobile evaporators that provide zero liquid discharge solutions
- · Mobile fleet and water outsourcing capabilities for flexibility for water treatment
- Tough-to-treat applications such as unconventional-fuels-produced water, steam-assisted gravity drainage, and mining
- Analytical instruments for measuring water quality

Chemical and Knowledge Management Solutions

- Cooling and boiler water technologies that enable customers to protect their assets
- Remote monitoring and diagnostic solutions

In addition to GE's ecomagination initiatives, they use various technologies to help customers develop water sustainability solutions, including water recycling and reuse.



Trusted systems. Resourceful thinking.

<u>Tonka Water</u> was founded in Minnetonka in 1956 as Tonka Equipment Company to design and manufacture water treatment systems. Since then, this privately held business has installed over 2,200 water treatment systems across North America, ranging in size from 50 gpm to 50 mgd. Tonka Water serves several markets including: municipal treatment, government systems, tribal communities, private water companies, industrial water processing and mining/oil/gas applications.

The expertise of over 60 employees has resulted in effective applications for tertiary water filtration, surface and groundwater treatment, environmental remediation, industrial process projects, and water reuse/reclamation/reinjection projects. From engineering design to manufacturing to installation and commissioning to continuous system support, Tonka Water staff assist in the design, development and execution of treatment processes. Its systems include a broad line of treatment equipment for processes that remove arsenic, radium, total dissolved solids, disinfection byproduct precursors, and color.

Tonka Water custom designs each system and contracts for the manufacture of the tanks and vessels by trusted fabrication shops. Tonka Water's supply chain includes over 550 Minnesota companies. Most of the internal components of its systems are manufactured and assembled at Tonka Water's facilities in Plymouth, MN, and Tonka Water coordinates the procurement and delivery of the total system.



Founded in 2003, <u>Creative Water Solutions</u> is a Minnesota-based water treatment company that uses a species of Sphagnum moss found in wetland bogs in New Zealand and Minnesota. This sustainable, green, patented water treatment system:

- Absorbs water and oil
- Binds positively charged ions to soften water
- Removes organic contaminants and inhibits their formation
- Reduces chemical, water and energy usage
- Reduces corrosion and scale
- Prolongs equipment life with less maintenance

Product applications include:

- Residential and commercial pools and spas and ponds and fountains
- Industrial cooling towers, boilers, steam boilers, wastewater systems, and spray injector systems

The company has sales in the U.S., United Kingdom, Italy and India, and is also a supplier to 3M for multiple industrial site trials. It expects to receive approval for drinking water applications from the National Science Foundation in August.