

## NEW Water's Solids Handling Facility Nears Construction Kick-Off

*97% of Public Bids Complete; Total Capital Cost Updated to \$169 Million*

*R2E2 Project Update – June 2015*

NEW Water's new solids handling facility, known as Resource Recovery and Electrical Energy, or R2E2, is preparing for the construction kick-off, which is slated for late summer 2015.

NEW Water is a wholesale provider of wastewater treatment services to 18 municipal customers throughout Northeast Wisconsin, and has been operating 24/7/365 since 1931.



*3D rendering of new solids handling facility, R2E2*

NEW Water has received 97% of the public bids for contracts on the R2E2 Project, which will replace the existing solids handling facility. A new facility is needed to: meet stricter environmental regulations, address the needs for increased capacity, and to replace aging infrastructure. Furthermore, the new project harnesses resource recovery of both nutrients and gas for cost savings, and environmental benefit.

"R2E2 represents a new attitude in viewing what's sent to us as a resource to be recovered, rather than a waste to discard," says Tom Sigmund, Executive Director of NEW Water.

The total capital cost of the R2E2 Project had been estimated to be \$147 million in 2011 dollars; with 97% of project bids now completed, engineers have updated this to \$169 million. Due to lower interest rates this year, NEW Water will be able to borrow the money for less than had been projected – the end result equates to about the same user charge rate increase as had been expected: about 9-10% increase over 2015. This means the average household will pay about \$1.60 more per month for NEW Water services in 2016 than in 2015. As NEW Water is a wholesale provider of wastewater services to 18 municipalities, municipalities pass additional costs for their own operations, maintenance and other costs for their portion of the wastewater collection system onto their customers.

The total project cost difference is attributed to an increase in construction materials and labor costs, engineering costs, and additional needed project elements (nutrient recovery [\$6-7 million], anaerobic zones in aeration basins [\$3 million], septage receiving [\$1 million], for a total of \$10 - \$11 million). In addition to allowing NEW Water to continue to provide nonstop services to the community, R2E2 also will add several hundred construction and manufacturing jobs to the local economy.

In 2011, NEW Water embarked on the process to select the best approach to a new solids handling facility. A Stakeholder Advisory Committee comprised of external stakeholders, and NEW Water staff, selected the design, which involves building two anaerobic digesters that break down biodegradable material in the absence of oxygen, and reduce the volume of material to be processed. In addition, the digesters will produce a methane gas, which will be captured and used to produce electricity. NEW Water's energy costs are estimated to be reduced by 50% in the first year of operation, resulting in an estimated savings of more than \$2 million. Furthermore, a reduction of greenhouse gas emissions is estimated to be about 22,000 metric tons per year, the equivalent to removing about 15,000 vehicles from the road.

R2E2 also will feature a nutrient recovery process that will create a fertilizer for commercial sale. Approximately 1,000 tons per year of a phosphorus rich fertilizer will be recovered, representing about \$400,000 of revenue. The new project will be able to accept different types of wastes directly, such as dairy, sugar, and food processing waste-which NEW Water cannot do today, and would otherwise be spread onto nearby fields or land-filled. By accepting different wastes, digester energy production can be increased by 50% or more; providing a consistent and environmentally friendly disposal outlet.

Final completion date of the project is slated for August, 2018.

"The new solids handling facility will allow NEW Water to continue to provide safe, reliable, around-the-clock treatment services customers have come to expect," says Mr. Sigmund.

Late summer 2015, NEW Water will be hosting and publicizing an "R2E2 Open House" open to the public.

*For more information about R2E2 and NEW Water, please visit: [www.newwater.us](http://www.newwater.us)*