



Zeeland startup cashes in on requirement to clean up water at construction sites

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By **Myron Kukla | The Grand Rapids Press**

ZEELAND — An environmental startup company is turning dirty and contaminated water at construction sites into clean water that it says won't hurt Michigan lakes and streams.

Founded in 2010, Interface H2O LLC has designed a boxcar-sized water cleaning unit called WaterMatrix which can treat up to 900,000 gallons of water a day, filtering out sediment and suspended solids.



Matt Gade | Muskegon Chronicle

Interface H2O LLC's WaterMatrix unit cleans water at construction sites.

"It used to be you could let dirt-filled runoff from construction sites pour or be pumped into the rivers and streams along with anything else that was in the water," said James Smits, one of three partners in the firm.

"With the implementation of the Phase II Clean Water Act, water from construction sites has to be cleaned up before being returned to natural water systems," said Smits who has been in the environmental consulting business since 2002.

Smits, CEO of Frontier Systems environmental company, John T. Price, owner of Price and Co. erosion and environmental materials sales company, and Dennis Gebben, 68, a retired environmental engineer, put their heads together to design a portable water treatment and filtration system for construction projects.

The three partners came together through their association in the industry and have invested two years and about \$200,000 in developing the filtering system.

"We all contributed to the design of the WaterMatrix and are using our individual skills in getting the word out on the water filtration applications," Price said.

The WaterMatrix uses flocculants to attach to material and sediments and solids in water for filtering what, in layman's terms, would be water one couldn't see through into clear water. In industryspeak, it takes water from

800 Nephelometric Turbidity Units — a unit of measure for water clarity — down to 40 NTU or less.

“It’s a pretty impressive system and did what it was supposed to do,” said Tim Sweet, project manager for E.T. MacKenzie Co. of Lansing, which used the WaterMatrix on a job to replace a sewer line beneath the Red Cedar River for the Williamsburg Water Treatment Plant.

“They built a new, bigger system to meet our requirements cleaning the water as we dug out the old pipe. The swiftness of Red Cedar presented all kinds of problems for them, but they took the construction water from well over 140 NTU down to under 10 NTU,” Sweet said.

Right now, Interface H2O is cleaning contaminated groundwater at the former tannery site in Whitehall, which is being turned into a residential condominium building.

“We’re doing environmental remediation on the land and excavating the soil below the water table. We hired them to dewater the excavation and clean out the sediment so it can be run through the waste water treatment plant,” said Charlene McGue, project manager for Horizon Environmental of Grand Rapids.

Gebben said the WaterMatrix is also taking out small amounts of chrome and mercury, which were used in the tanning process, from the turbid water.

Interface H2O currently leases out its equipment for \$300 to \$700 a day plus a gallon processing charge of basically \$1 per 100 gallons.

While getting the new business off the ground, the Smits and Price continue to operate their other businesses.

“Despite all the lakes and water we have in the state, Michigan is not in the forefront of pressing for compliance as much as some other states,” Gebben said.

The company is planning to market Interface H2O through the Michigan sales organization of Price and Co., which is already marketing to construction, environmental remediation and other environmental firms.

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