

Kalkaska Expands Treatment Plant

The following is an excerpt from an article in Michigan Contractor & Builder Magazine, December 6, 2003 issue, detailing an expansion to Kalkaska's, MI wastewater treatment plant:

A \$5.5-million contract for the expansion of Kalkaska's wastewater treatment plant was expected to be completed this past fall. It will provide capacity for sewer users and eliminate groundwater contamination caused by partially treated sewage that leaked from the village's existing wastewater treatment lagoons. The existing mechanical treatment plant used two oxidation ditches with denitrification before discharging effluent to the ground. The new system utilizes one of the existing lagoons as a discharge basin avoiding the expense of building a new disposal system. Gosling Czubak Engineering Sciences, of Traverse City, Michigan, designed the upgraded system. The general contractor for the upgraded project was Spence Brothers, of Saginaw, Michigan...

Synargo Midwest, Inc. of Houston, Texas, was the subcontractor responsible for removing the bio-solids from the lagoons, prior to decommissioning the lagoons. Synargo used a power take-off (PTO) driven Houle lagoon pump. Prior to removing the bio-solids, the lagoon pump was used to pump down the effluent water on top of the lagoon. The lagoon pump was also used for the liquid bio-solids removal.

Another pump used was a positive-displacement trash pump. The trash pump can reach remote areas. The trash pump can extract water from smaller areas that the lagoon pump can't reach. Mark Miller, operations director for Synargo Technologies, Inc., said Synargo rents pumps on occasion.

"Sometimes we need pumps that are larger than what we own. We will also rent for a specific situation when we don't have a pump that meets our needs," Miller said.

"For instance, you may have a large amount of water to discharge where a lagoon pump is not practical. So, instead of trying to discharge it with a 3-inch or 4-inch trash pump, you get a 6-inch trash pump. We would rent that."

Miller said that Synargo Midwest, Inc., typically rents pumps for specific projects and for short time periods...



The treatment plant's new 45-foot by 16-foot-tall clarifiers are shown under construction.



Synargo Midwest, Inc., uses a Thompson pump to handle dewatering near the clarifier construction.