



Village of Blissfield, MI Sludge Reduction

Background

The impact that the PrO2 has on the community is significant. This machine has the ability to decrease the amount of taxpayer dollars that would typically be needed to operate and/or upgrade the infrastructure of traditional Waste Water Treatment Plants. In discussing these benefits with Jim Wonacott, Village Administrator for the Village of Blissfield, the vast capability of the PrO2 system was realized, "Our wastewater system is like many others in the state; the process itself ends with the collection of sludge."

"This sludge is aerated and decanted before final collection and transport to farms for 'fertilization'" explained Wonacott. "Prior to two years ago our village had seen the water demand increase over the previous 10 – 15 years; most of which can be attributed to the addition of the Ethanol plant." This increase produced 1.4 to 1.5 million gallons of sludge per year and was not a situation that the Village's waste system could efficiently process.



Applications

The Village arranged for a trial of the PrO2 system, and within two weeks the portable system was installed.

Objectives

In 2012, Wonacott and the Village began looking over the available options to assist in solving this problem. "We had no other options; we found ourselves to the point where we were running out of storage space for the sludge, our dates for waste transportation to the farms were too far out for us to continue to store the sludge" stated Wonacott. The Village was being faced with hauling 420,000 gallons of sludge to the farm; they decided they needed to make a move.

Results

In just a few days the PrO2 system enabled the Village to be able to aerate the sludge and decant more water from it. The system was effective to the point where the final shipment of sludge ended up being around 300,000 gallons.

After seeing what the system was capable of, the Village decided to move forward with the purchase of the PrO2 and has since achieved their initial goal of a 50% reduction in sludge.

Wonacott feels there is still room for improvement and that they may be able to achieve an annual 75% reduction. Currently the Village is processing around 820,000 gallons of sludge a year; which is a huge decrease from the 1.2 – 1.3 million gallons just a few years ago.

Projected volume of sludge based on existing system and previous years volume (in gallons)

420,000

29%

Actual volume of sludge after using the PrO2

300,000