

Good Science Versus Watchful Regulation

By Marie Elium



WASTE WATER
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If someone told you that technology exists to remove grease from restaurant waste, or turn septic sludge into garden-friendly compost, most people would think that was a logical and ecologically friendly method to deal with liquid waste.

And if that very same technology saved money by reducing landfill costs, then all the better, right?

On the surface, the years-old technologies that have brought those results to the marketplace seem like a wonderful confluence of technology and need. Yet, manufacturers of the equipment face sometimes skeptical regulatory agencies who either know little about the innovations or do not particularly care to learn.

First, a review. No one can dispute that a market exists for composted dewatering and degreasing byproducts. Dewatering is the process in which solid material from grease traps or septic systems, for example, is removed through evaporation, filtration or another separation process.

Sometimes the grease removed from traps or other holding tanks can be reused, not for food purposes, but to produce energy. Remember the gimmicky restaurant oil fueled car of news stories? That is one example.

The economic incentive for dewatering and grease handling equipment is compelling. Landfills and municipal wastewater plants strictly regulate the type of waste they will accept, and disposal costs can be staggering. In some areas, city sewage plants do not accept grease trap waste because it can interfere with the delicate biological processes on which the facilities rely.

That aside, the cost of transporting waste to disposal sites is high – especially when landfills are far away. Fuel costs can quickly eat into profits.

A handful of companies have been working on ways to meet marketplace demands, but they continue to struggle with a patchwork of regulations that vary from state to state and county to county. In some places, regulators simply are not familiar with the relatively new technologies. Othertimes, officials cannot decide which regulations to use – those that govern water or those that oversee sewage.

Sometimes, the issue never gets that far. Manufacturers and those who use the equipment said they often encounter overly complicated and unnecessarily lengthy permit processes. They encounter regulators do not know anything about the systems and are not willing to learn. Others lumber through using regulations that do not address advancements in the technology. A few genuinely are interested in the process and educate themselves by attending seminars such as those sponsored by the New England Interstate Water Pollution Control Board. The information at the so-called “grease symposiums” may ultimately lead to better understanding – and more applicable regulation – in the industry.

John Derham of Atlantic Dewatering said New England Interstate agency is a good resource for people on all sides of the issue because of its informative workshops and array of related resources.

The 60-year-old organization is a non-profit agency that serves Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont by educating the public and professionals about water quality issues.

Derham, who founded Atlantic Dewatering Services, oversees sales and equipment for the Clayton, North Carolina company. Atlantic Dewatering specializes in the management of solids generated by municipal, industrial and agricultural

wastewater and water treatment systems.

He said education could go a long way to streamline the permit process.

"From the regulators side, certainly it can be very time consuming and it varies from location to location. The incentive to pass permits for third party processes can be arduous because it's very undefined, it's an emerging intermediary processing facility for a lot of different materials," DeRham said.

He continued, "In some states, the debate is if it should be controlled from the water side or sewage side. In some locations, you get overlapping and conflicting regulations. In some states they try to keep it with the wastewater treatment side."

The reason is easy to understand.

"As soon as you process it and take grease out and turn grease into a different form it then becomes a solid waste and has to be disposed of in a

landfill or a composting facility or you find a way to recover the energy value of the grease," he said.

Another issue is establishing an incentive for a dewatering or grease handling facility, especially when permits are difficult to secure.

"If there's no incentive, why go through the permit process and dump it at the wastewater site?" he said. "When diesel fuel goes up, the need to cut travel costs rises and there's a natural incentive for alternatives and that's when you get into the permit process."

The overall health of the economy has not helped, either.

"Some of our customers have had delays or have had to renegotiate financing. The financial environment is more fluid than it has been but I think that things are evening out more. The regulatory trends don't seem to be getting easier. It is very locally based. Some support innova-

tion and some are ambivalent and look at how this fits into their area or state (regulations)."

JW Massey, owner of the Texas-based Aqua-Zyme, is blunter.

"Regulators are the only problem with dewatering," Massey said. "The equipment is good; it's heavy duty, it lasts 10 to 15 years. The only problem is getting permits."

Aqua-Zyme makes and manufactures dewatering equipment that allows users to process waste efficiently and quickly.

"Our 30-yard box will process 25,000 gallons in two hours. If you wait 24 hours, you can dispose of it at a landfill. Sludge from sewer plants takes two to three weeks to dry. With our dewatering box, it's two hours."

Massey is frustrated that regulations have not kept up with technology, and said many officials seem reluctant to learn about the dewatering process.

"The regulators have no experience with dewatering so they create regulations. They should have to visit sites that have the equipment in place so they can see the difference between drying beds and dewatering equipment," he said.

When it comes to dewatering, seeing is believing – and it generates converts, Massey said.

"What we're doing is so simple, but if the regulators say no there's nothing you can do about it. In Texas, it takes 15 to 18 months to get a permit. In three months they ought to have it done."

In some states, dewatering and composting byproducts are treated with the same regulations that govern hazardous waste, and that is not fair, he maintains.

"When they're composting and dewatering (the operators) are making money on both ends because there's no landfill in between. They can keep grease trap waste out of the landfill. People want the dewatering equipment," he said.

Aqua-Zyme has 47 customers currently waiting for permits for dewatering systems. As soon as they get them, the equipment will be shipped. Just when that will happen depends on the area, and how well the regulations have addressed the technology demands.

Robert Lamarche is responsible for national sales and product management for Juggler, of Labrie Environmental Group.

The Juggler is a patented pumping and liquid/solid separating system for grease traps and septic tanks. Its chemical-free system returns an almost completely solid-free liquid that does not disrupt the bacterial balance in treatment systems.

Lamarche said that over the past 10 years he has seen regulators become much more interested in the process.

"This technology wasn't available 10 years ago. Once (the regulators) understand how our Juggler system works they get excited. We need to adjust their regulations to accommodate the new technology," he said.

"We've had so many studies done on our process and they show that it cuts our carbon footprint by 50 percent."

Lamarche said some regulators embrace the technology and realize the innovations are an advancement in the field. As others in the industry have noted, however, without updated regulations the technology can be difficult to sell.

"It makes new technology very, very difficult to introduce to the marketplace," he acknowledged.

DeRham of Atlantic Dewatering, hopes that as regulators better understand the watering process and adjust regulations accordingly, the permit process will become more streamlined.

"The process can be very expensive and time consuming and that can dissuade some people and they get project fatigue," DeRham said.

"It's project by project, location by location. Some people have very good relationships with their regulators and that definitely smoothes the process. It can be a very long sales cycle. The easiest thing to do in this business is sell equipment; the hardest thing is to get a facility up and operating in a time frame that's economically viable."