INDUSTRIAL VACUUM LOADING





Iowa's Environmental Management Services thrives on major vacuum loading challenges

By Scottie Dayton

eeing the opportunity to fill a niche then accepting the risk and starting a business in 1992 — took Kelly Conger on a remarkable journey. His industrial cleaning company, Environmental Management Services Inc. in Davenport, Iowa, was soon responding to service calls in Wisconsin, Minnesota, Nebraska, Missouri and Illinois.

The young company quickly expanded from decommissioning gasoline and paint storage tanks to planned outages at limestone mines and coal-fed power plants, non-hazardous industrial waste transportation, 24-hour emergency response, confined space rescue attendance and precious

metals reclamation at aluminum and copper plants. Each new area usually required more equipment and the personnel to run it.

Profile

Environmental Management Services Inc.

Davenport, Iowa

Owners: Kelly Conger and Brad Reed

Founded: 1992 Employees: 23

Services: Industrial maintenance and cleaning, waste solutions,

non-hazardous waste transporting and emergency response

Service area: 300-square-mile radius of Davenport

Affiliations: Iowa Better Business Bureau, Small Business Bureau

Web site: www.ems-inc.biz

IOWA

BUILDING THE REP

Decommissioning storage tanks is dangerous work, and Conger didn't skimp on proper training and refresher courses. That responsibility and working many hours in the field didn't leave much time for sales. "It's easy to overlook sales when things go well," says Conger. So he hired Brad Reed in 1997 to expand the EMS customer base.

Reed, now vice president and minority-owner, sought contractual work in the power plants, which required vacuum loaders. Conger bought a standard M-Class Supersucker from Super Products LLC. The unit has an 18-cubic-yard debris tank and 6,000 cfm/28 inches of vacuum pump.

Completing some annual outages takes four to six weeks running three vacuum loaders around the clock. "Besides helping us financially, those jobs enhance our reputation in the other plants," says Conger. "From the moment we're inside, we look for other ways to help the customer. That approach led to cleaning oil-water separators, jetting dust from lines, and every type of maintenance work in between."

The company also specializes in confined space rescue attendance. Certified crews

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meter the air, look for potential trip or overhead hazards, and follow lock-out tag-out procedures. Should an injury occur, EMS immediately provides first aid if needed.

"The business really snowballed once we got into power plants 10 years ago," says Conger. "The second turning point was moving from a rural location to Davenport five years ago, putting us closer to our customers and reducing response times."

EMS also is involved in outages at mines that crush limestone, removing 20 feet of lime dust from the 60- by 37-foot silos. "We run three Supersuckers 24/7 for 16 days or more, hauling some 500 tons of material," says Conger. "Mine and power plant outages often occur simultaneously, engaging all our vacuum loaders. That's when we rent an additional machine such as a Guzzler. If other calls come in, the office guys take it into the field."

The most recent addition to the EMS fleet is a 2008 Volvo with 3,500-gallon carbon steel tank and NVE 747 CCW blower built by Advance Pump and Equipment, Peosta, Iowa.

Since Reed started, the company's customer list has doubled, partly through developing the precious metals accounts. One example is the copper plant in Cedar Rapids, 82 miles away. Milling pennies produces slag.

What doesn't move down a flume to the facility's wastewater treatment plant for processing is vacuumed by the Supersuckers for recycling. Slag also adheres to the flume, which EMS cleans annually.

"We haul used coolants and oils from the treatment plant, too," says Conger. "During planned outages, we clean the sludge from those tanks.

WORKING SAFE

EMS also approached a natural gas company, which became its biggest industrial pumping client. Groundwater in the wells holds the gas in place until needed. Once the heating season arrives, the water is pumped off and held in storage tanks. "We empty the full tanks daily with our 5,000- and 6,550-gallon vacuum tankers, hauling continuously



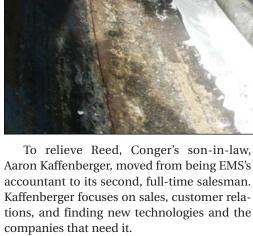
Top photo: Jeff Conger positions the 3,500-gallon International vacuum truck with aluminum tank at a site in Moline, Iowa. At right, Chris Kullas vacuums excess water and fuel from inside an underground storage tank that was dug up and pressure washed. Above, Conger assists Kulla as he exits the tank.

before production eases in April or May," says

The gas company also has many small wells dispersed throughout the county, and EMS uses three vacuum trucks in the 3,000gallon range to bring water from those wells back to the main plant. The trucks run around the clock.

The paperwork required for such operations is overwhelming, and Conger, still heavily involved in company safety, and others were feeling the pressure. To relieve it, they hired Conger's son-in-law, Adam Schmidt, who became the company's safety director, materials buyer, and equipment maintenance person.

Schmidt coordinates the initial 40-hour HAZWOPER training, 10-hour Occupational Safety and Health Administration construction safety and health training, courses in first aid and CPR, and Mine Safety and Health Administration training for the Mining Safety Organization. With everyone working long, hectic schedules, Schmidt and Conger are considering a two-day weekend dedicated to annual safety training, hands-on scenarios, and equipment operation.



DRY ICE BLASTING

One technology Kaffenberger found was dry ice blasting. A salesman demonstrated the unit, and its advantages were obvious. Since the ice evaporates, corralling and disposing of contaminated runoff isn't an issue. The dry material left behind is swept up and thrown in a Dumpster. Covering electrical boxes is unnecessary, as is worrying about metal rust-

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OF WATER."

Kelly Conger

Carlos Rush (left) uses a 1,500-gallon jetter to wash down the inside of a lift station in Eldridge, lowa, as Norry Lawver vacuums up the waste. At right, Lawver adjusts the controls to EMS's 3,500-gallon Volvo vacuum truck with steel tank.

have to dispose of," says Conger. "Using dry ice makes bidding a lot easier. We pay 19 cents a pound for dry ice compared with 50 to 65 cents a gallon to dispose of water."

As soon as the dry ice blasting machine

arrived, EMS put it to work cleaning foodcutting tables and machines, drills and other mechanical equipment, and paintcovered conveyor belts. The dry ice arrives in 300-pound blocks that are fed into the hopper. An air compressor forces the pulverized ice through the blasting machine and out a nozzle at 3,700 psi. Special nozzles and hoses come with the equipment from Cold Jet LLC in Loveland, Ohio.

EMS's toughest dry ice blasting job was cleaning solidified asphalt off piping and the floor inside 40- by 100-foot in diameter vertical holding tanks. When emptied, 6 to 8 inches of hardened material remained. Cleaning

was done in winter, as the brittle material broke up easier under a jackhammer. A door in the side of the tank enabled workers to transport the chunks to a waiting frontend loader that dumped them into a roll-off box.

"We cleaned two, 3-million-gallon tanks and three, 40,000-gallon tanks in four months,"

A strong benefits package encourages employee loyalty

One slogan of Environmental Management Services Inc. in Davenport, Iowa, is "Our people make the difference."

Most of the workforce has been with the company for at least seven years; many employees have a decade or more seniority, according to owner Kelly Conger.

One reason for the loyalty, Conger believes, is that EMS focuses heavily on families, offering two family excursions a year, trips to ball games, a golf outing, Christmas party, and company picnic. "My theory is to surround myself with good people," says Conger. "Once I have them, they are my most important commodity because they make my company a success."

Besides providing health insurance, sick days, 401(k) plans and Christmas bonuses, employees earn bonuses based on performance at planned outages or as safety awards.

"If we can go through an outage without anybody getting hurt, then those people deserve something for that," says Conger, whose company had only one mishap since its inception in 1992. The company caters breakfast at its monthly safety meetings, and the Employee of the Month receives a bonus and his own parking spot.

"It's surprising how much the guys enjoy just a pat on the back," says Conger. "Showing that I appreciate them and the work they do makes their jobs meaningful. If the company is a success, so are thev."

MORE INFO:

Advance Pump & Equipment 877/557-7867

www.advancepump.com

Cold Jet LLC

800/337-9423 www.acoldjet.com

Guzzler Mfg. Inc.

815/672-3171 www.guzzler.com

Super Products LLC

262/784-7100 www.superproductscorp.com says Conger. "The temperature inside some tanks was too warm, making the asphalt gummy and hard to peel off the floor. It was back-breaking, intense labor."

Potential customers for dry ice blasting include a printing company, robotic company, office equipment manufacturer, and spark plug factory.

"Aaron arranges an extensive ice blasting demo, and that usually gets us the job," says Conger. "Once customers catch wind of the technology, they ask for it more and more."

CLEANING UP

New EMS hires are told what the company expects from them, and what customers expect from the company. "We put it in their minds that customers come first," says Conger. "What they want, we will provide. Our guys have been just great doing that."

Recently, EMS sometimes has a hard time responding to calls because the crews are overloaded. Consequently, the company is hiring more people, buying new trucks, and replacing some old ones.

One unexpected variable was the heavy snows of this past winter. They kept emergency response teams racing to I-80 to clean up diesel fuel spills from overturned semitractor trailers. When warmer weather arrived, crews returned to hydroexcavate the contaminated soil in small areas, or excavate larger areas. They throw an emulsified detergent on the road to lift the fuel to the surface, then vacuum it up.

Conger is optimistic about the company's future, as vacuum work increases daily due to Mine Safety and Health Administration regulations. EMS is constantly at coal-fired energy plants, too, as frequent cleanings enable their refined equipment to run more efficiently.

"Quarries and mines must eliminate their dust issues, and that has doubled the time we spend there," he says. ■