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at Nieman Plumbing **Page 28**



A Nieman Plumbing crew prepares a site to receive a septic tank.

From Sink to Septic

Advanced onsite systems provide a profitable and growing niche for a full-service plumbing company near Cincinnati

By Doug Day

After nearly 30 years of performing plumbing and septic system installations, Nieman Plumbing Inc. — Complete Plumbing Service joined the Ohio Onsite Wastewater Association.

Nieman Plumbing Inc.
— Complete Plumbing
Service, Cincinnati, Ohio

VICE PRESIDENT: A.J. Nieman
FOUNDED: 1974
EMPLOYEES: 80
SERVICES: Full-service plumbing,
including onsite system installation



It happened after Vice President A.J. Nieman became convinced that it was time to get more serious about changes in the industry — notably growth in alternative treatment systems. That happened in 2002 when a new county inspector began encouraging more modern methods to improve onsite treatment around Cincinnati.

It didn't take long for Nieman to see that he had done the right thing by joining OOWA. "At the first meeting, I realized I might as well position myself to be in the right place at the right time, because advanced treatment is the way it's all going to go," he says. "You might as well be ready for it."

The company earned certification as an installer in 2004, and all crew members received their qualifications in 2005 through OOWA's three-day course, which covers basic onsite design and installation, soil characteristics, surveying, and the keeping of accurate field notes.

"If you're an installer, you just want

to get out there, get it done, get it in, and get it inspected," says Nieman. "But there are many things that go along with that."

Another step

Becoming certified is just another step forward for the company, some of whose 80 employees weren't even born when the seed for the firm was planted by Nieman's grandfather. Today's company was formed as Drew Nieman Plumbing Inc. in 1974, when Nieman's father, Drew, left his father-in-law's successful plumbing company to start his own, home-based business with one backhoe and three employees.

Today, Nieman Plumbing is a \$10 million plumbing firm with an onsite system business that has seen steady growth. With new onsite technologies, a growing population, and more attention to the environmental impact of waste management, Nieman sees no end to that growth.

The company has learned to give

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— A.J. Nieman

customers everything they need instead of letting them get away to another company. "We've always been a complete plumbing service, and septic tanks are a pretty big part of the Cincinnati market," he says, noting that onsite systems are very common, even in suburban Cincinnati. "So it's something we have to do in order to provide our customers with the best service."

Inside plumbing for homes and businesses is the mainstay of the firm, but it also installs septic systems and

water, sewer and natural gas services.

"Most plumbers won't go out to fix a broken septic line or fix a fire hydrant," Nieman says. "They come to me, and I'll do the whole job and give them one price. They know I'll give them a fair price because I've been in business for years."

Growth track

The company's expansion started just four years after its founding when Drew Nieman added a shop to his home. In 1988, the shop and offices were moved to a new location. Two more offices were added in 1990. That's about the time A.J. Nieman graduated from Holy Cross College and became one of 10 employees in his father's company.

With business nearly doubling, a major expansion in 1994 added three

more offices, a 5,000-square-foot addition to the warehouse, and a mechanic's bay. To increase storage space, the company built a free-standing metal pole building in 1997.

In 2004, the company celebrated 30 years in business with a name change to Nieman Plumbing Inc. — Complete Plumbing Service. It now has more than 20,000 square feet of office and warehouse space and a fleet of 50 trucks with a full-time mechanic. In 2005, the firm received the Innovative Family Business of the Year award from the Goering Center for Family and Private Business.

The company, working mainly in four counties in the Cincinnati area, installs about 20 onsite systems per year and does septic system repair. All told, onsite system work accounts for about \$500,000 a year in sales — 5 to 10 percent of the total.

"The systems we install are labor intensive," Nieman says. "You need a lot of people or you're not going to do many per year. You have to run them pretty efficiently in order to make it work." Digital dispatching and office technology help him do that.

Company Vice President A.J. Nieman displays his award for the 2005 Innovative Family Business of the Year.



Joining forces

Nieman managed the company's



"We get a lot of challenging systems — systems that others pass up."

— A.J. Nieman

Gravel is placed in an excavation where a septic tank is to be installed.

outside plumbing crews from 1990 to 1998. Needing more time to do estimating and to run the service department, he turned over the crew management to Gene Koehler, who also grew up in the local plumbing business.

Koehler ran his dad's business for seven years before joining Nieman 20 years ago. He now manages seven, two-person outside crews, plus a few laborers and two subcontractor companies. "They're the guys who do it," says Koehler. "They do it in the winter, go out and fight the zero-degree temperatures. It's hard."

The crews are cross-trained to handle virtually any onsite task, though each crew has its own specialty. "Some have done more at-grade mounds, one crew might do more intermittent sand filters, and one might be accustomed to doing drip irrigation or Bio-Micronics systems," Koehler observes.

The outside crews sometimes help inside crews, especially when the weather is rough. The company doesn't



Hamilton County General Health District supervisor Chris Griffith and public health sanitarian Joe Leever inspect an electrical installation done by a Nieman crew.

Nearly Paperless

From digital faxing to computerized dispatching, Nieman Plumbing Inc. — Complete Plumbing Service has embraced office technology as much as it has the technology of advanced onsite systems. "We're not paperless," says Vice President A.J. Nieman, "but we're working on it. We'll be close."

All faxes are distributed by e-mail through a computer system that receives the document and converts it to a PDF file. Instead of a copier, the office has a multifunction business machine that can copy, fax, scan and e-mail documents.

Nieman says that is especially helpful for site drawings, which can be scanned and e-mailed to customers. The digital files give the customer a record of the system, and the company can easily store a permanent record of its work.

Nieman's uses a computerized dispatching system for the inside plumbing crews, each of which gets 10 to 12 calls a day. The system sends job information to their cell phones,

tracks labor and material, and is used to invoice each work order.

Outside crews tend to be in one location all day, so they don't need dispatching services. They are, however, included in the dispatching software because it aids in billing and tracking. "I can track what I paid for the job and how many hours down to the hundredth of an hour," says Nieman.

The system automatically adds each employee's overhead costs and figures the total cost of the labor. "Our job is to sell labor," explains Nieman, "and that's always been the hardest thing to track."

When it comes time to estimate a new project, the data allows him to create an accurate estimate in as little as 10 minutes. "If you've done 20 jobs, you can take out the top two and bottom two and get a good average to see where you need to be," Nieman says. "You're not always going to be 100 percent when you're estimating outside work, but you have to be in the plus more than you are in the minus."



Running the Gamut

Systems installed by Nieman Plumbing Inc. — Complete Plumbing Service in recent years are much more complicated than systems of just a few years ago. Among systems the company has installed are:

Orenco fiberglass processing tank:

- With lined intermittent sand filter to discharge
- With unlined intermittent sand filter to discharge
- With hillside drop boxes and shallow trench lines to discharge

- With millennium at-grade mound system — no discharge

Orenco fiberglass processing tank:

- With AdvanTex pod and pressurized leach bed
- With AdvanTex pod and at-grade mound system
- With AdvanTex pod and intermittent sand filter
- With AdvanTex pod and above-grade sand filter
- With AdvanTex pod and no secondary treatment system

Streamkey systems:

- Pre-cast concrete — drip irrigation mound
- Pre-cast concrete (FAST treatment system from Bio-Microbics installed in tank) with drip irrigation mound
- Pre-cast concrete — drip irrigation plowed into the earth
- Rochester fiberglass processing tank with FAST treatment system to discharge

Nieman Plumbing's full-service operation includes 50 service trucks of various types.

lay people off when business in one area is slow. "We just find something else for them to do," Nieman says.

The onsite system installation fleet includes a 590SL Case backhoe, a John Deere 310D backhoe, two Takeuchi TB045 mini-excavators, four Bobcat skid-steer loaders, a single-axle dump truck, a video inspection truck, a Ditch Witch 410SX vibrator plow and a Vermeer V150 large trencher.

Two crew leaders are electricians by trade, and that comes in handy with the advanced systems the company builds. "You need a fair knowledge of electrical in order to install these systems, or you're going to have to hire an electrician," Nieman says. "It's a lot better having them on staff so we can keep the job moving along much faster."

Focus on the new

While the company repairs and replaces onsite systems, Nieman prefers new installations. "In the Cincinnati area, you still have a lot of traditional septic tanks with a leachfield, or old-style sand filter systems," he says.

In the past, communities weren't very willing to extend sewer service to new subdivisions and weren't very aggressive at getting septic system users to hook into sewer systems that were extended to areas with failing septic. The counties now get involved whenever a property is sold.

Nieman agrees with the counties' efforts because it's easier to get someone to pay for a new septic system when selling a house than to get a new owner to do it. He cites his grandmother as an example. Years ago, she had five children, but they grew up and moved away. After her husband passed away, she stayed in her house for

another 15 years. "That septic system was working just fine for grandma," Nieman says.

Problems come when a new family moves in. "Boom! The whole system explodes, and it's going to cost the new owners \$15,000 or \$20,000 to replace it," he says. "That's hard to stomach. They don't want a new septic system, and they don't understand why they need it." To stay out of trouble with the county, they'll put a new system in, but as Nieman has experienced, they may not want to pay for it.

It works better dealing with people building new homes. "With new construction, I'm working off draws, working through a builder, and I know he has the money budgeted," he says. "It's a lot easier to collect when everyone is happy."

More complex

At the same time, new systems are getting more complicated as homes are built on land ill suited for conventional septic systems, and as regulations get stricter. In the 1980s, Nieman says, systems involved pre-cast concrete tanks and a few dosing tanks, leach lines, and some hillside drop boxes. At the time, aerobic systems were being installed, but Hamilton County, where the firm does most of its work, required a permit only for installation, not operations. "No one was monitoring the systems, and a lot of them became non-functional," Nieman says.

In the 1990s, he recalls, most of the systems being installed were non-mechanical, such as pretreated aerobic systems with discharge lines, intermittent sand filters or leach lines and pre-cast holding tanks with secondary treatment and sand filters.

Nieman says the new century brought the largest technological advancements he has seen, with submersible pumps, electronic control, processing tanks, and other innovations. "We have installed intermittent sand filters discharged directly into streams, or other times through shallow-trench leach lines to streams, collector lines and storm sewers," he says.

"We have also done a direct absorption system, where we installed a pump station inside the intermittent sand filter and pressurized drip tubing inside a shallow trench half-pipe with no discharge. That system was probably one of the first of its kind in Hamilton County. We get a lot of challenging systems — systems that others pass up."

With all the advances of the past five years, Nieman sees no end to change. A new onsite regulation proposed in Ohio last year addresses soil loading rates and the design elements of different systems. It also mandates certification of installers and septage haulers, continuing education and bonding for practitioners, and equipment testing for an approved list of vendors.

The proposed rules place more emphasis on the maintenance of systems, education of system owners, and competency standards for installers and other professionals. They include standards for soil and site evaluation, identification of risk factors related to limiting conditions of soil, and evaluation of drainage and hydrogeology that may affect water resources and public health.

If approved this spring as expected, the regulations will set performance standards for watertight tanks, pre-treatment, effluent quality and land application of septage. Public comment on the regulations closed a few months ago, and final action is scheduled for April or May.

"There's no reason to fight it," says Nieman. "We can never be certain what impact our waste has on the water table and the rest of our environment." He agrees with the new regulatory direction and sees it as consistent with the goal of the plumbing industry — to protect the health of the nation. ■