

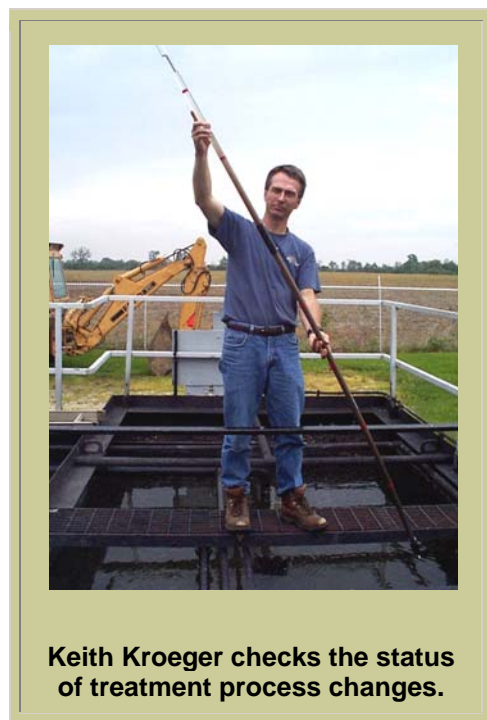
Compliance Assistance Unit Helps Communities Get Back on Track

Each year, the Division of Surface Water's [Compliance Assistance Unit](#) (CAU) provides individualized technical assistance to wastewater treatment facilities throughout Ohio. CAU staff perform about eight to 12 full-week system evaluations per year. They also make thousands of phone calls, perform one or two day follow-up visits and reply to questions by e-mail to help operators improve treatment capabilities and ensure protection of Ohio's water resources.

The goal of the program, established by the Clean Water Act, is to bring noncompliant or under-performing wastewater treatment systems back into compliance with their discharge permits at little or no capital cost to the community. Ohio EPA's go-to guys are Jon van Dommelen and Keith Kroeger.

"This program is unique because Ohio EPA staff members step out of the enforcement role to serve as facilitators," said Ohio EPA Director Christopher Jones. "The goal is to provide one-on-one assistance, innovative ideas, and cost-saving measures that will help communities help themselves. This self-help leads to long-term improvements to the environment."

Before the project formally begins, Ohio EPA CAU staff visit with the community's officials and plant operators to determine if the community will commit to the project and to correcting problems or needs. A team of evaluators then spends a full week at the facility collecting data and addressing factors that limit performance. As the program progresses, Ohio EPA makes follow-up visits to provide training or solve particular problems.



South Webster, Ohio *"It was a miracle."*

In South Webster, Ohio, a newly constructed plant was not working as promised and discharging improperly treated wastewater. Residents and officials were frustrated that, although the user rates had increased substantially to pay for the new plant, they weren't getting what they paid for. If a solution could not be found soon, the community faced large penalties and enforcement action.

"We weren't familiar with the operation of this type of plant and were having a lot of problems with high ammonia levels," said Dave Vance, of Certified Operations and Maintenance Systems, Inc., the operator of the plant. "Bob Little of the Southeast District Office suggested that we bring Jon and Keith in to see if they could help, and boy did they."

CAU staff visited the plant, bringing along top-notch equipment that allowed them to get immediate test results on the wastewater contents and effectiveness of treatment process modifications.

"One advantage that we have is access to some specialized equipment that quickly returns results as we're testing various operational changes," said van Dommelen. "Most communities cannot afford these tools. By teaming up with us, they are able to take advantage of them while increasing their knowledge and experience so they are more comfortable continuing with changes after we return to Columbus."



van Dommelen reviews test results and answers e-mail from the road.

With assistance from CAU staff, South Webster came into compliance within one week. The plant is now operating as designed and Vance is spending less time working at the facility.

“It definitely cut down on my workload now that I can go out to monitor the plant rather than spending time trying to get it to operate correctly,” said Vance. “I think I’ve learned more about process control by working on this with Jon and Keith than I have in the 15 years I’ve been in the business. It’s just amazing how they were able to not only get the plant working correctly but also give us suggestions on how to simplify things to make our jobs easier.”

Randy Nickles, owner of Certified Operations and Maintenance Systems, Inc. agrees. “They really turned us around - it was a miracle what they were able to do in such a short time.”

Marietta, Ohio

“It is just amazing.”

In Marietta, Ohio, plant operators were spending thousands of dollars on chemicals to try to achieve compliance with their permit. However, this “band-aid” approach was not working and the community was facing possible fines and enforcement from Ohio EPA.

“We had been contacting experts to try to find a solution but nothing seemed to work,” said Christy Leckrone, chemist at the Marietta wastewater plant. “Every time we tried something new, we would have to wait 10-14 days to see if it worked. If it didn’t, the plant could be in real trouble by the time we were able to try something else.”

van Dommelen and Kroeger met with plant operators and lab workers to review past trends and operating processes. They were able to isolate the problem and develop a solution that involved total elimination of chemical use.

“We aren’t using any chemicals now and have been in compliance for two months,” said Leckrone. “It is just amazing what they were able to accomplish. I never would have believed it.”

Recently, the plant again appeared to be experiencing problems. “We contacted Jon and Keith and they got back to us right away. It is so reassuring to know that, even though they are on the road so much they are always willing and ready to help when we need it,” said Leckrone.

Although the program generally focuses on operational improvements, Ohio EPA’s staff are also trained to recognize and recommend physical improvements that may be needed to bring a plant into compliance.

Middlepoint, Ohio

“They were very helpful.”

In Middlepoint, Ohio, the wastewater collection system was overloaded with “clean” water such as ground water or rain fall. Large amounts of clean water can damage pipes, cause overflows and basement flooding and reduce treatment capacity at the wastewater plant making costly upgrades necessary.

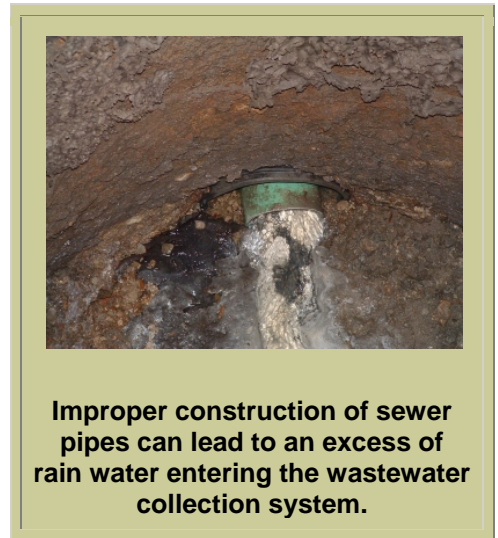
Although the community and its consultants had spent a considerable amount of time, money and effort to find and correct the problem, no solution had been found. "We had all kinds of engineers out here giving us suggestions on how to solve the problem," said John Anderson, Village Administrator. "We'd spent a lot of money but had no resolution to the problem."

During a meeting with Ohio EPA's Division of Surface Water in Columbus, village officials expressed their frustration at the lack of progress. Staff recommended that the community contact the CAU for help.

After visiting the community and investigating various aspects of the system, CAU staff were able to pinpoint areas that appeared to be contributing to the problem.

"They gave us some really good ideas and were very helpful and easy to work with," said Anderson. "Although we're still working with Jon and Keith, even if we stopped now we'd have a good grasp of the problem and be better able to work with our consultants to address the issues we've identified." The village is now beginning the process of repairing and replacing materials and system components and is hopeful they will finally see an end to their problem.

"Often, we can recommend process improvements that will save money and result in better treatment capabilities for the plant," said Kroeger. "However, as Middlepoint discovered, sometimes the only way to achieve compliance is to repair facilities. With our help, they are better able to understand what's needed and work with contractors to identify appropriate expenditures and project goals."



Champaign County, Ohio ***"They were saviors."***

Smaller communities, mobile home parks, school districts and business parks often rely on package plants to treat wastewater. These plants are predesigned based on individual needs. Although they are usually less complicated in terms of operation, they can cause just as much damage to the environment if not operated or maintained correctly. In addition, many facilities that use these plants do not have full-time operators, increasing the potential for problems.

In Champaign County, Ohio, Graham School District installed package plants to treat waste from the elementary and high schools. Because no one on the school district staff had experience with wastewater treatment, the district purchased a service contract from the package plant company.

"We didn't know anything about the plants and were relying on the manufacturer to help us ensure that they operated correctly," said Rodney Callison, maintenance technician for the school district. "Unfortunately, things weren't working out that way and we got a violation letter from Ohio EPA because we were discharging improperly treated wastewater."

Callison discussed his dilemma with a peer in Saint Paris, Ohio who recommended that he contact the Compliance Assistance Unit for help. "We made an appointment with Jon and Keith and when they came out they took me under their wing," said Callison. "They were saviors - we had the plants in shape in no time. It was amazing to me once I realized how much work we should have been doing to ensure that the plants operated correctly."

As a result of the help Callison received, he was encouraged to take the required courses and exam to receive his Class I operator license. "We have really gone from a reactive to proactive mode," said Callison. "Where before my only contact with the plants was a quick drive-by, now I spend 20-30 hours a week checking on the plants and actually enjoy the added responsibility."

The Graham School District plants are now operating so well, in fact, that CAU staff have taken numerous groups, including the Ohio Attorney General's office and local health departments, on tours of the facilities to show the benefits of proper operation and maintenance.

Although the unit is small, the amount of good they do during a year is astounding and far-reaching. The benefits of their assistance can be felt by community officials, residents and even neighboring communities.