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TECHNOLOGY DEEP DIVE:  
**Rapid biosolids  
drying** | 28

HOW WE DO IT:  
**Covering up to stop  
chlorine losses** | 40

## Doing Good by Doing Well

Brandon Huston  
Wastewater Treatment Plant Superintendent  
Albert Lea, Minn.

TO BRANDON HUSTON, THE CAREER IS ABOUT  
PROTECTING AND CREATING A BETTER WORLD

18

IN MY WORDS:  
**Cybersecurity is  
everyone's job** | 34

# contents **April 2024**

- 6 **LET'S BE CLEAR: THE THREE-FOOT RULE**  
Exhibitions and conferences display lots of technology and offer many courses. But the greatest learning opportunities might be in the seats beside you.  
**By Ted J. Rulseh, Editor**
- 8 **@TPOMAG.COM**  
Visit daily for exclusive news, features and blogs.
- 16 **HEARTS AND MINDS: ONLINE EDUCATION**  
A website first envisioned as a venue for explaining wastewater treatment to board members became a powerful medium for more comprehensive public outreach.  
**By Sandra Buettner**
- 26 **SUSTAINABLE OPERATIONS: AN UNDERGROUND SUCCESS**  
The California city of Santa Monica captures stormwater, mixes it with wastewater and treats it for aquifer recharge and potable reuse.  
**By Steve Lund**
- 28 **TECHNOLOGY DEEP DIVE: RAPID BIOSOLIDS DRYING**  
A turbo dryer proven for decades in many industrial applications in the U.S. and worldwide is being introduced to the wastewater sector.  
**By Ted J. Rulseh**
- 34 **IN MY WORDS: CYBER THREATS: ARE YOU PREPARED?**  
The water and wastewater sectors are targets for a variety of cyberattacks. Some simple measures can go a long way to protecting critical operations.  
**By Ted J. Rulseh**
- 36 **PRODUCT FOCUS: PROCESS CONTROL, INSTRUMENTATION AND LABORATORY EQUIPMENT**  
**By Craig Mandli**
- 40 **HOW WE DO IT: CHLORINE-SAVING COVER-UP**  
A Florida clean-water plant significantly cuts losses from its chlorine contact chamber by shading it with a low-profile fabric screen that limits heat and UV exposure.  
**By Ted J. Rulseh**
- 41 **CASE STUDIES: PROCESS CONTROL, INSTRUMENTATION AND LABORATORY EQUIPMENT**
- 42 **PRODUCT NEWS**  
Spotlights:  
Water - Radar level sensor streamlines management processes  
Wastewater - Knife gate valve a fit for wastewater applications  
**By Craig Mandli**

## top performers



10 **WASTEWATER OPERATOR: FAREWELL TO THE COMFORT ZONE**  
Manuel Dos Santos overcame a learning disability to become his clean-water plant's go-to guy and an award-winning lead operator.  
**By Stormy Shafer**

18 **WASTEWATER OPERATOR: DOING GOOD BY DOING WELL**  
To Brandon Huston, wastewater treatment is about not just protecting the environment, but creating a better life for humankind.  
**By Ted J. Rulseh**

**cover story**

ON THE COVER: Brandon Huston, wastewater treatment plant superintendent in Albert Lea, Minnesota, looks at his job as more than a career. It's fair to say he considers it a calling: "I always had a desire to help the environment. I feel like we're doing something good for humankind. We're solving diseases. We're removing pollutants from the rivers. We're working with industries and benefiting them as well."  
(Photography by Brad Stauffer)

30 **WASTEWATER PLANT: LESSONS FROM COACHING**  
At the clean-water plants in Moline, high performance is all about teamwork. And that team includes members of the public.  
**By Jim Force**

- 44 **EXAM STUDY GUIDE**  
**By Rick Lallish and Drew Hoelscher**
- 44 **INDUSTRY NEWS**
- 46 **WORTH NOTING**  
**People/Awards; Events**

**coming next month:** May 2024 FOCUS: **ACE Pre-Show Issue / Annual Company Directory**

» Let's Be Clear: Strategies for success on licensing exams » TOP PERFORMERS – Wastewater Plant: Hanover Park (Illinois) Sewage Treatment Plant #1 | Wastewater Operator: Dale Grudier II, Suffolk County, New York | Water Operator: Horacio Palacios, Las Cruces, New Mexico » How We Do It: Cutting chlorine losses in Bradenton, Florida » In My Words: Innovation in plant energy systems » Sustainable Operations: Exploring heating with effluent in Duluth, Minnesota » Hearts and Minds: West Basin Municipal Water District Water Detectives » Technology Deep Dive: Auger Monster ALT from JWC Environmental

# Doing Good by Doing Well

TO BRANDON HUSTON, WASTEWATER TREATMENT IS ABOUT NOT JUST PROTECTING THE ENVIRONMENT, BUT CREATING A BETTER LIFE FOR HUMANKIND

STORY: **Ted J. Rulseh** | PHOTOGRAPHY: **Brad Stauffer**

**B**randon Huston looks at wastewater treatment as more than a career. It's fair to say he considers it a calling. "I always had a desire to help the environment," says Huston, wastewater treatment plant superintendent in Albert Lea in Southern Minnesota. "I feel like we're actually doing something good for humankind. We're solving diseases. We're removing pollutants from the rivers. We're working with industries and benefiting them as well."

Huston has been with Albert Lea (population 18,000) since he started as an intern 25 years ago. After four years in his current position he was named the 2023 Outstanding Class A Operator of the Year by the Minnesota Wastewater Operator Association.

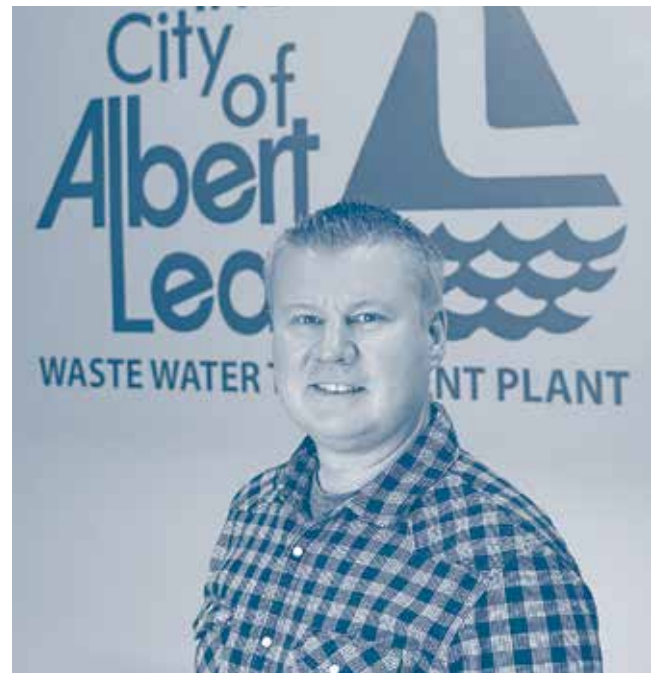
Huston is proud of steps he and his nine-member team have taken to improve the treatment plant; he looks forward to a major upgrade expected to unfold over the next several years. He reports to Steven Jahnke, director of public works and city engineer.

The wastewater treatment plant team includes Dustin White, foreman; Matthew Larson, lab technician; and operators Matthew Jensen, Doug Yotter, Travis Rauenhorst (also backup lab technician), Cavit Wobschall, Parker Hanna and Nick Finholdt.

## FARM CONNECTIONS

Huston grew up on a farm half an hour west of the Albert Lea plant, where he took advantage of an internship program after high school. "I always wanted to work in testing water or work for the DNR testing rivers," he says. "The internship opened up. I fell in love with the industry and have been with it ever since."

He was hired as a part-time operator the day he graduated from Riverland Community College with an associate degree in environmental technology. He then worked eight years as a full-time operator and 10 years as a lab technician (the last two



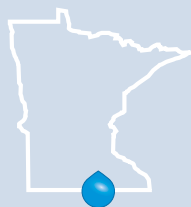
Brandon Huston, wastewater treatment plant superintendent in Albert Lea, Minnesota, received the 2023 Class A Wastewater Operator of the Year award from the Minnesota Wastewater Operator Association.

also as foreman) before being promoted to plant superintendent. He holds a Class A (highest) Wastewater Operator license.

Huston's farm background gave him insights toward finding qualified people for his team, which over the years lost experienced operators to retirement: "We look for people who have

“ I want our plant to look like a park. ... I want to show the public and the city management that we’re caring for their investment.”

**BRANDON HUSTON**



## Brandon Huston

Albert Lea, Minnesota

**TITLE:**  
Wastewater Treatment Plant Superintendent

**EXPERIENCE:**  
25 years in the industry

**AWARDS:**  
2023 Outstanding Class A Operator of the Year,  
Minnesota Wastewater Operator Association

**CERTIFICATIONS:**  
Class A Wastewater Operator, Class D Drinking  
Water Treatment, Type 4 Biosolids Application

**EDUCATION:**  
Associate degree, environmental technology,  
Riverland Community College

**GOAL:**  
Continue improving treatment performance, keep  
the plant and grounds looking sharp

Huston, shown with Dustin White, wastewater foreman, makes team members’ safety a top priority.

“When I took over we only had four licensed operators. My goal is to have everybody licensed.”

**BRANDON HUSTON**

mechanical aptitude and some type of mechanical experience, and we train them from within.

“Maybe they’re a farm kid, or they’re in some type of maintenance program within their facility. Basically we’re looking at, ‘What have they built?’ ‘What have they taken apart?’” Job openings are posted on Indeed, on the city website, in the local newspaper and with wastewater professional associations.

New hires are first trained in safety. “I want them to understand how the plant all works,” says Huston. “I send them out with one of our seasoned operators or our foreman. They need to know where the lockout/tagout equipment is, where all the PPE is stored.”

For basic wastewater training, Albert Lea provides online courses through Suncoast Learning and Sacramento State University. New operators can study during the year they spend gaining the hands-on experience required for a Class D license. Before sitting for the exam, they take a preparatory course offered by the Minnesota Pollution Control Agency at various locations.

### EMPHASIS ON LICENSING

Huston insists that all plant team members become licensed. “We used to have separate maintenance and operator positions,” he says. “When I took over



The team at the Albert Lea Wastewater Treatment Plant includes, from left, Parker Hanna, wastewater operator; Dustin White, wastewater foreman; Nick Finholdt, wastewater maintenance/operator; Brandon Huston, superintendent; Cavit Wobschall, wastewater operator; Matt Larson, lab technician; and Matt Jensen and Travis Rauenhorst, wastewater operators.

we only had four licensed operators. My goal is to have everybody licensed so they can be put on for weekends and take the workload off of just four individuals.



Huston, right, named Outstanding Rookie Operator of the Year by the Minnesota Wastewater Operator Association, works with Cavit Wobschall to calibrate dissolved probes using a Hach SC200 controller.

“It also takes away issues with, ‘That’s not my job.’ Everybody does maintenance. There’s no complaining. I want our guys to feel good about their jobs and know they have accreditation for what they’re doing.” Team members receive a pay boost for each license level they attain.

As a result, says Huston, “We have a wonderful crew. A lot of my success is based off what they’ve done for us. They’re awesome at what they do. They have a good work ethic. When they do well, I do well.

“We have morning meetings every day for 10-15 minutes, and I make sure everybody communicates. We go over a weekly synopsis of all the things we’re likely to see happen, and then each individual operator is assigned tasks. And I get updates on things happening in the plant that they say need to be fixed.

“My goal is first and foremost to fix anything that’s a safety issue. If we find issues with gas, or electrical, or pinch points, or you name it, we try to resolve those right away.” A company called SafeAssure provides a variety of safety training and each year performs a simulated OSHA inspection that ends with a list of recommendations.

## CONSISTENT COMPLIANCE

The Albert Lea plant (9.85 mgd design, 3.3 mgd average) in most years receives one of the Facility Operational Awards presented annually by the MPCA for permit compliance. Influent is screened before it enters the force main that delivers it to the plant. The flow first passes through a Hycor Waterlink grit classifier (Parkson Corporation) and then primary clarifiers using Eimco drives (Ovivo).

The activated sludge process (Hoffman blowers) includes nitrification and clarification (Ovivo drives) followed by sand polishing filters (also Ovivo). After UV disinfection (Fischer-Porter), the final effluent discharges to the Shell Rock River.

Waste activated sludge is thickened by dissolved air flotation (Ovivo) before being sent to the anaerobic digesters (Ovivo). The digested material passes through rotary drum thickeners (Vulcan) before storage for application to cropland close to the plant. The city has 1,186 acres permitted, 81% of it owned by one farmer. A contractor pumps the liquid biosolids from a storage lagoon by way of a 6-inch hose directly to the fields for injection into the soil.

## UPGRADES ON THE WAY

Huston looks forward to a series of upgrades to cost about \$80 million spread over several years. The improvements will include a new pretreatment building a vortex grit removal system and grit classifier, biological and chemical phosphorus removal to meet an expected effluent phosphorus limit, and a biosolids dryer to replace anaerobic digestion.

“We are one of very few cities in the state that don’t have a phosphorus limit,” says Huston. “We’ve been monitor-only for decades, partly because the Shell Rock River is not technically a Minnesota watershed. All that water flows into Iowa.”

Anaerobic digestion will be eliminated because with a substantial reduction in BOD from food processors, biogas production has declined. The two existing 35 kW microturbines used for cogeneration are aging, and the electricity they feed to the plant covers only about 10% of the total power demand.

“We’re trying to future-proof ourselves.”

**BRANDON HUSTON**

“Our engineers determined that it’s much cheaper to abandon anaerobic digestion because of code issues, electrical issues and worn-out equipment,” Huston says. “On paper, anaerobic digestion looks wonderful. But this plant was designed for 22,000 pounds of BOD per day coming in, and we’ve been averaging 9,000 to 10,000 pounds. That’s just not enough.”

Plans call for the biosolids to be dewatered to about 20% solids on a screw press and then fed to a natural-gas-fueled thermal dryer producing material at 90-96% solids. “We’re trying to future-proof ourselves,” Huston says. “We’re trying to set it up so we could go to a new process after a dryer, like pyrolysis.” That or some other high-temperature process would destroy PFAS, for which Albert Lea biosolids so far have not been tested.

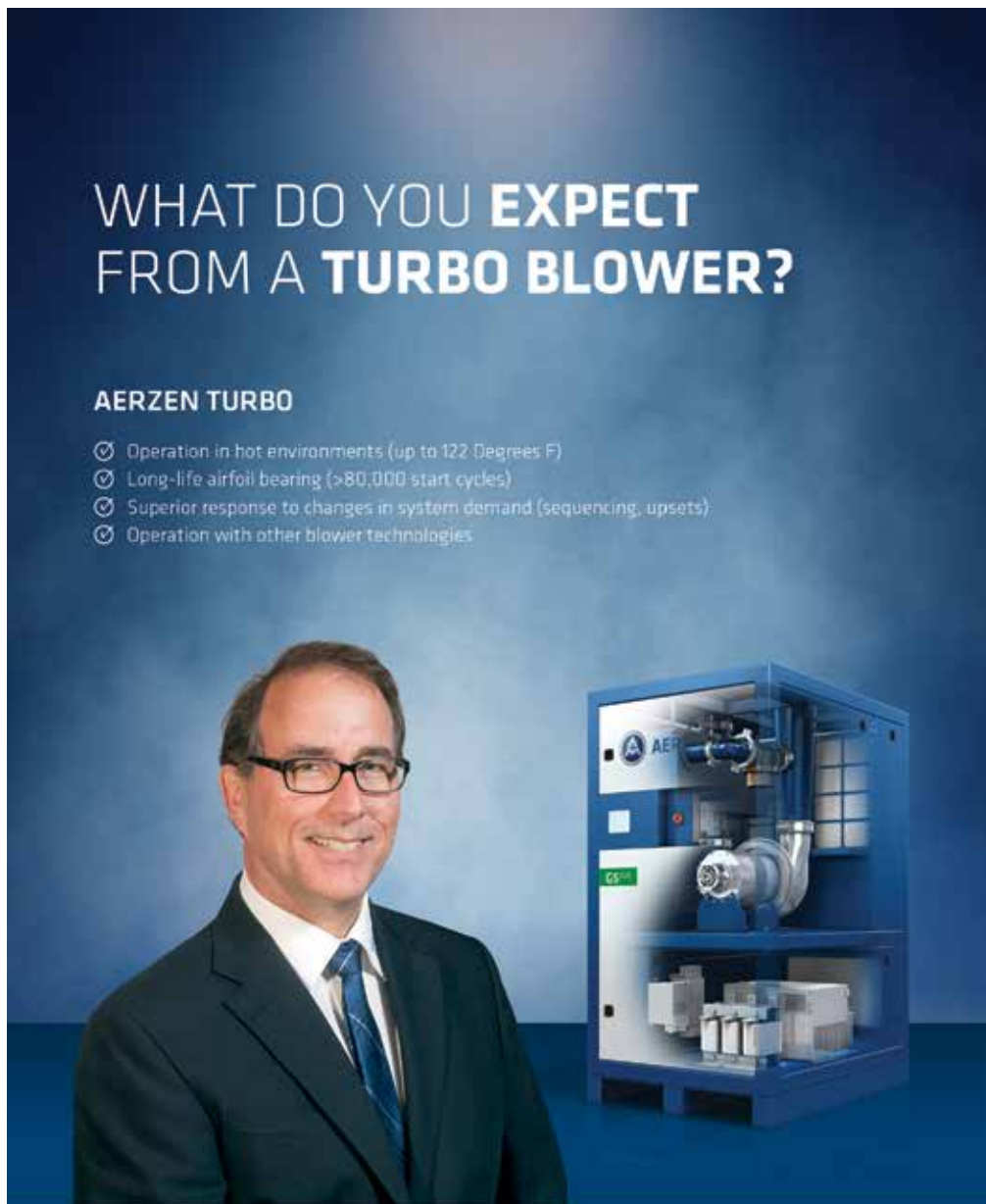
The upgrades will also include an additional secondary clarifier for settling of phosphorus after alum

addition, new disc filters and UV disinfection, a septage receiving station, new offices and new electrical switchgear.

## DILIGENT MAINTENANCE

The existing plant is built for reliability and ease of maintenance. All major equipment has redundancy so that a pump or valve can be taken out of service for repair without interrupting treatment. Team members can track equipment operating hours on the Wonderware SCADA system (AVEVA) and perform planned maintenance on schedule. Housekeeping is a priority. Operators mow some 30 acres of grass, prune trees and trim weeds. The grass is allowed to go natural with clover, dandelions and other flowering plants to provide pollinator habitat.

Inside the facility, operators regularly hose or brush the clarifiers weirs; they pressure wash the concrete on the clarifiers and aeration basins. A city



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### LET'S TALK

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Huston is proud to work in an industry that is growing in sophistication as its professionals deal with increasingly complex and important issues. (Blower control panels from Hoffman.)

street sweeper cleans the roads within the complex. The building windows are kept clean, the interiors walls washed and painted. Old exterior lights are being replaced with LEDs.

## SOURCES OF PRIDE

“I want our plant to look like a park,” says Huston. “It’s one of the most expensive properties the city owns. I want to show the public and the city management that we’re caring for their investment.”

Huston takes pride in improvements made on his watch. Leachate accepted from an Iowa landfill generates some \$500,000 a year in revenue and does not upset the process. Training for team members has helped elevate plant performance: “Some people say, ‘What if you train all your guys and they leave?’ My mentality is, ‘What if I don’t train them and they stay?’ My goal is to make sure our team members can run the plant in my absence if they need to.”

A certified lab has been a valuable asset: “We’ve been able to maintain certification not only for MPCA but also for the Department of Health in testing for coliform in the city’s drinking water. With an accredited lab we can have the data extremely fast instead of waiting for a third-party lab to get back to us. It makes plant control so much easier.”

Huston is also proud to be part of an industry that is advancing in sophistication. “They’ve solved a lot of the world’s problems with pollution, and now they’re fine tuning it and dialing in,” he says. “In past decades we were looking at PCBs and heavy metals. Now we’re looking at future concerns with PFAS.”

Albert Lea is among about 30 cities working with the University of Minnesota on wastewater surveillance for COVID-19. “You can actually determine when COVID is going to hit a community before the cases start appearing,” Huston says. “Our bodies excrete RNA from the SARS-CoV-2 virus days before the symptoms show up.”

Huston’s brand of leadership is sure to help keep Albert Lea’s clean-water facilities on the cutting edge. **tpo**

## NEW TO THE TEAM

Cavit Wobschall joined the team at Albert Lea just two years ago and made an immediate impact. In 2023, he was recognized as the Outstanding Rookie Operator of the Year from the Minnesota Wastewater Operator Association.

He came with an associate degree in information systems from South Central Community College in Mankato, Minnesota, and nine years in wastewater spray irrigation in the food processing industry. He holds Class D Wastewater Operator and Type 5 Spray Irrigation certifications, along with a Specialty Boilers license and a commercial driver’s license.

“While I was in college I started working at a food processing plant and driving a combine for peas and sweet corn during summer just to gain some money,” Wobschall says. “After I finished school I realized that I hated computers. I like to work with my hands.”

He started doing maintenance at the food plant and soon was offered a position on the wastewater side. Water from the plant’s cleaning operations and overflow from vegetable processing was sent to a pond to be sprayed onto permitted land. He became the wastewater mechanic, then the wastewater lead and finally environmental supervisor.

From there he took his current position with Albert Lea. “I was done with the food processing side,” he says. “The hours were insane. I was working 80 to 100 hours a week for seven months out of the year, I had a couple of kids, and you can’t be away from them that much.”

He quickly came to love the municipal clean-water sector: “It’s fascinating. Anybody who gets into wastewater never said ‘My dream is to be a wastewater operator.’ I don’t think you’ll ever find someone who says that. But once you get into the field, it’s interesting to see how it all works — the chemistry, the biology, everything.

“There’s always something going on. Everything is always changing. It keeps you on your toes. I like working for this plant and with these people. It’s good for mentorship. They teach you how to do things here. Before, I had to figure it out on my own. Now I have a lot of people I can lean on, and that elevates everything I do.

“Our foreman, Dustin White, is one of the quietest and nicest guys around. He’s very knowledgeable. He’s been here 15 years, so he knows the entire process. He’s patient and he helps me figure things out. And everyone else around here is really nice and really helpful.”

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