



Wisconsin Wastewater
Operators' Association

The Clarifier

WISCONSIN WASTEWATER OPERATORS' ASSOCIATION, INC.



Aerial view of the city of Kiel Wastewater Treatment Facility, Kiel, Wisconsin

56th Annual W.W.O.A. Conference

October 4-7, 2022

Hyatt Regency/KI Convention Center Green Bay

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The Clarifier is the publication of the Wisconsin Wastewater Operators' Association and is intended to inform and educate the membership on issues related to the treatment and control of wastewater. The Clarifier is produced five (5) times each year: February, April, June, September, and December. All members are encouraged to contribute to the mission of the Clarifier.

The Wisconsin Wastewater Operators' Association is a non-profit organization dedicated to educating, informing, and advancing the wastewater profession. WWOA has approximately 2,000 members divided throughout six regions: Southeast, Southern, Lake Michigan, North Central, Northwest, and West Central.

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Presidents message: Take 5 minutes.....

Past President Kevin Freber made an impassioned plea during the Awards portion of the 55th Annual Conference Banquet last October. Did it resonate with anyone? He simply asked that members take 5 minutes annually to nominate someone for one of the 6 regional Operator of the Year, or one of the four major Association awards. It's time once again to think about awards nominations, so I'd like to echo Kevin's request—and expand upon it—as this issue's President's message.

Let's start with Association and Regional awards. Can you fit 5 minutes into your day to submit a nomination to acknowledge a co-worker or longtime Association member's contributions to WWOA? Nomination forms are available at <https://www.wwoa.org/events-awards/annual-awards>.

Sadly, too many members simply shrug it off and say “*Aaaah...nominations aren't due until August; I'll get to it later*”. Except all too often, “later” never happens. I don't need to remind anyone that the work that you do with respect to wastewater treatment is not generally appreciated. The general public doesn't even give a thought to it... until it bubbles up into their basements. We can only count on ourselves to recognize and honor excellence. That's why it's so important that every one of us takes time to honor someone's efforts. Receiving an award at our conference is an absolutely genuine, emotional moment for that individual that their efforts have been noticed. It's also the supreme motivator. Every award recipient that I've spoken with feels elation and a burning desire to even strengthen their efforts now that they have been validated.

So, look around...nominate someone you know, who consistently gives 110% effort or has successfully tackled a huge project, for Regional Operator of the Year. The WWOA Board even expanded these regional awards to cover folks involved in all aspects of the treatment plant, including lab staff and collections systems.

With respect to Association-wide awards, consider the people that consistently work to improve WWOA and if they have never received the award (check out recipient lists on the website) nominate them. Many times we believe that someone surely has been honored with a specific award only to find that that is not the case. Is someone routinely providing assistance through talks, training, sharing knowledge, or just neighborly assistance with other plants? Might they be worthy of the Koby Crabtree Research and Education award? Is there some unsung individual that

has routinely pitched in and made things happen for our conferences or the organization? Somebody that fits the criteria for the Albers-Templeton Service Award?

But let's not stop with awards! Surely you can find 5 minutes while driving home, to work, or wherever to ponder some other things. We all can find 5 minutes of



downtime each day. It's what we do with those 5 minutes that count. For example...

There is always room for improvement. It's the basic concept of Continuous Quality Improvement, or CQI. I'd be rich if I had a nickel for every time someone mentioned to me that it seemed crazy that their plant does ABC, when they could instead do XYZ and be more efficient or see significant savings. Some are bold enough to ask the question, “Why don't we try...”, but unfortunately, the answer is often, “That's the way we've always done things”. And it ends there! There is always a better or more efficient way to do things. **Take 5 minutes and ask yourself...** “*What can I do better to improve this task, advance my team, or help my plant?*”

What we often forget is the multiple interactions each of us has with co-workers each day and how those interactions affect the whole team. Maybe you've had a bad day or you have some non-work issues pressuring you and you took

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your frustrations out on a co-worker. Positive attitudes and building others up are so much more powerful and effective than tearing people down, sniping, and even bullying. While it doesn't happen often, these attitudes can quickly make a team dysfunctional. Everyone has to do their part to keep the team focused and positive. Isn't it worth **taking 5 minutes and asking** yourself, "*Can I take pride in my actions and attitude...today? ...this week?...this month?*"

We all have bad days; we all have gripes with the way things are going on the job. No plant operation is perfect, each has its own unique set of personalities and challenges. But can you **take 5 minutes and ask** yourself, "*Am I part of the problem, or part of the solution?*"

There are so very many elements involved in working together as a team to effectively and efficiently treat wastewater to the levels that you all do. Most of your discharges are cleaner than the receiving waters upstream of your discharge point. You all take great pride in what you do, but sadly, wastewater treatment is an under-appreciated job and career choice. It's up to each of us to help paint a more accurate picture of what you do. No one else is going

to do it for us. Can you **take 5 minutes and ask** yourself, "*Is there anything I can do to improve the public's perception of wastewater treatment plant operators?*"

For managers, supervisors, and team leads out there, **take 5 minutes and ask**, "*What are my team members' skills? What piece of the puzzle do their skills provide in our treatment plant operation?*"

Many of you have experienced the difficulty in finding well qualified people to fill positions within your facility. I've heard a number of stories to this effect. Are we seeking whatever warm body that is available? Or are we setting our standards higher? I'm not saying it's easy, given the current employment climate. Just this summer I was appalled to see Burger King on Cape Cod offering a starting wage of \$16/hour, when I know some wastewater operators earn less than that! Is it worth **taking 5 minutes and asking**, "*What can I (or management) do to ensure that the appropriate value is placed on the role of wastewater treatment operators?*"

I know...I'm asking a great deal of you. And some may say, "What difference does it make if I take 5 minutes to ponder things? Nobody listens to me anyway." And to that, I point to the managers out there and ask you all to **take 5 minutes and ask** yourselves, "*Am I fostering a work environment where my staff feel that their ideas or concerns will be heard and fairly considered?*" Are you a big enough person to acknowledge that sometimes you don't have all the answers? Are you secure enough in your role to accept that the best managers know that they themselves don't have all the answers, and that on any given day, any team member can come up with a great solution to the problem of the day?

Can you look back at your 5-minute ponderings and say, "*I'm proud of what we accomplished?*" Because you should be proud! I'm proud of what each of this state's wastewater treatment operators routinely does to effectively clean up the water...something that the public doesn't want to discuss. And any chance I get, I take 5 minutes to let people that don't understand know about what you all do.

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Issue	Deadline
April	March 11
June	May 13
September	August 12
December	November 12

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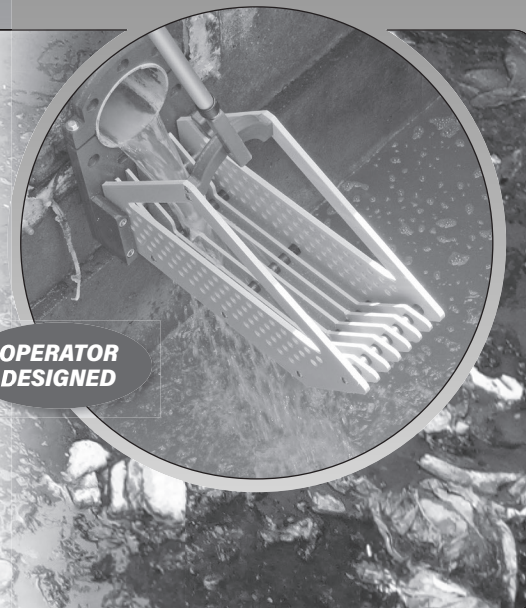
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Kiel Wastewater Facility past and future

Located in east central Wisconsin between Lake Winnebago and Lake Michigan, the City of Kiel is known as the “Little City That Does BIG Things!” Kiel is a safe, family-friendly community with a population of 3,932 and growing. Brands such as Land O’ Lakes, Sargento, Ameriquip, HUI, Stoelting/Polarware and others have facilities in Kiel, which provide the city with a diversified and solid employment base. Also, with its proximity to the Sheboygan River, outdoor recreational opportunities coupled with an extensive trail system provide plenty of things to do for residents and tourists.

The Kiel Wastewater Utility operates an advanced wastewater treatment facility on the city’s northeast side of



Aeration upper basins existing

town and discharges into the Sheboygan River. Originally build in 1966 at the current location the facility has gone



Final clarifiers existing

through several updates over the years driven by industry and WDNR WPDES permit limits on the effluent. In 1979 the facility was upgraded to meet the needs of Land

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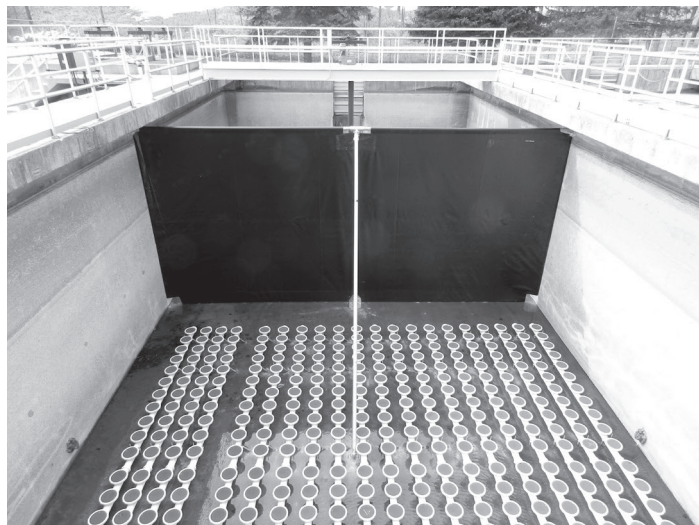
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O'Lakes with the upgrade more than doubling the capacity of the facility. Over the years the facility received several more upgrades, 1995 a new headworks building and fine screen, 1997 the facility went from Class-B sludge to Class-A Exceptional Quality with a lime stabilization process, that



Belt press & lime stabilization

process switched from lime to beneficial reuse of power plant ash for pH control resulting in cost saving and more stable end use product in 2011. In 2007 a Focus on Energy Blower Project done in-house that saved \$180,000 in power cost the first year and ended up as a 2 year payback and



BNR tank installation

in 2012 Biological Nutrient Removal (BNR) was added to help with increase loading and lower effluent phosphorus chemical use. The BNR process implementation is one of the great in-house projects at the facility and attributed to the high mechanical ability of the plant operations staff. After help from Donohue and Associated to put together an engineering study based off in-house built pilot plant testing phosphorus removal directly on our wastewater influent

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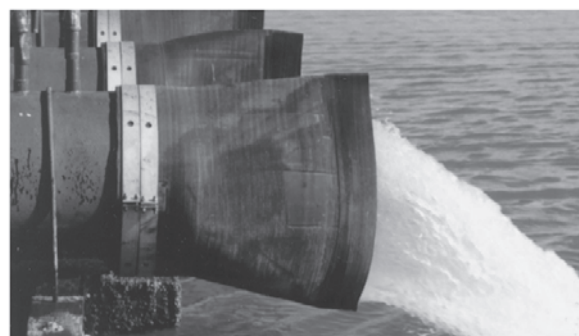
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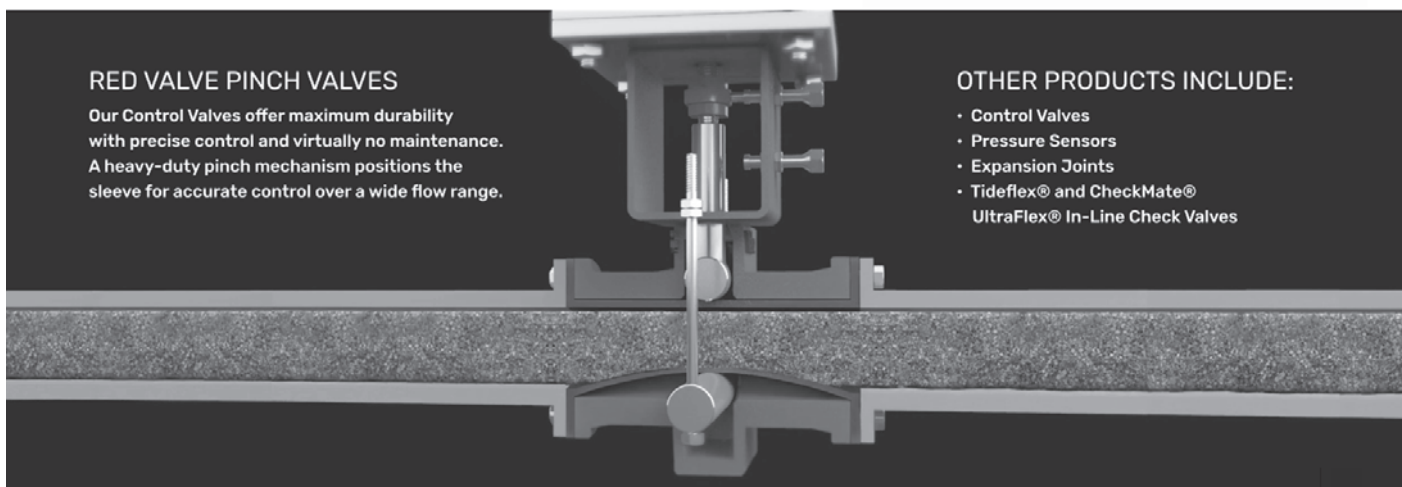


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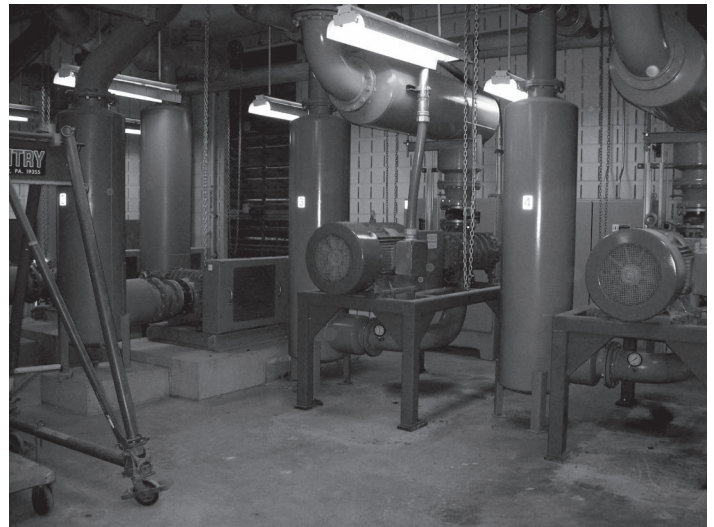


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stream. The plant staff took on the challenge to completed modifications through direct purchase and installation of equipment. Today the facility regularly achieves less than 0.15 mg/l on the effluent phosphorus with no chemical



Raw screen



VFD & DO control upgrade

addition, a true credit to the staff at the facility. A biogas generator was installed in 2015 as part of another Focus on Energy project. The biogas project was engineered with help from McMahon and in-house staff taking over the purchase/install of equipment. The biogas project has not reached its full capacity, mostly due to waste stream inconsistencies and plant upgrade planning.

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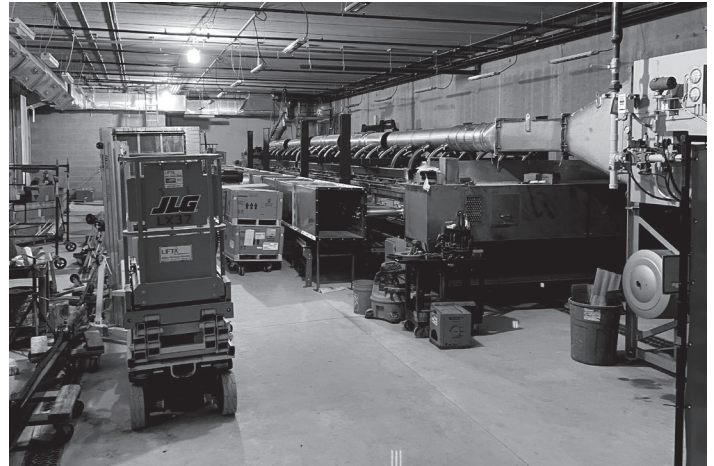
After a 2014 Needs Review the city started to plan for upgrading and replacing aging equipment. During the



2021 Direct purchase Westech filters prepared for installation

same time Land O'Lakes approached the city with their future plans and over the next 6 years the city along with McMahon (Wet End) and Donohue (Solids End) went back and forth with Land O'Lakes to narrow down the flow and loading numbers to finalize design.

Parameter	Current Design	Upgrade Design
Population	3,400	4,250
Flow	0.852 mgd	1.43 mgd
Biochemical Oxygen Demand	6,000 ppd	12,365 ppd
Total Suspended Solids	2,842 ppd	5,673 ppd
Phosphorus	145 ppd	282 ppd



2021 Gryphon dryer project

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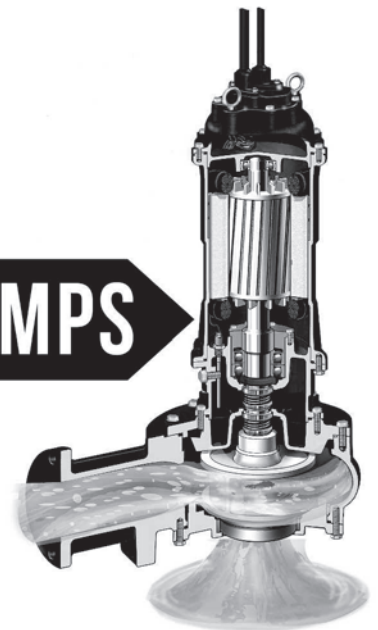
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2021 Project aeration capacity expansion construction

The Facility on average hauls 4000 cu.yds. of Class A biosolids annually to farm fields.

The projected new dryer annual distribution will be 2000 cu yard. The reduction is caused by the reduction in fly ash use and dry percentage of the end product.

Construction on the new upgrade started in summer of 2021 with an aggressive schedule to be completed by December 2022. Larger equipment was direct purchased and designed around the construction, which also helped the construction schedule by having new equipment on site.

The total projected upgrade cost estimated at \$24 million and Land O' Lakes is committed to 70% of the overall debt service to meet their needs. The upgrade entails upgrades in Aeration, Final Clarification, Tertiary Filtration, Digestion, Class A Process, Plant Electrical and SCADA.

Wastewater Utility operations are overseen by the Utility General Manager. The facility personnel consist of Chief Operator, Lab Tech, (2) Plant Maintenance Operators and Water/Wastewater Operator crossover position. Facility

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continued from page 14

staff looks forward to the new upgrade completion and the benefits to be seen to be seen by the facility for the City of Kiel. ●



Staff names Left to right Jesse Valukas- Chief Operator, Andrew Levsen- Plant Maintenance Operator, Chris Vincent- Operator Water/Wastewater, Al Schilder-Plant Maintenance Operator, Kris August-General Manager Utilities. Not pictured retiring Chief Operator Steve Rabe.

Save THE Date

56th Annual Conference

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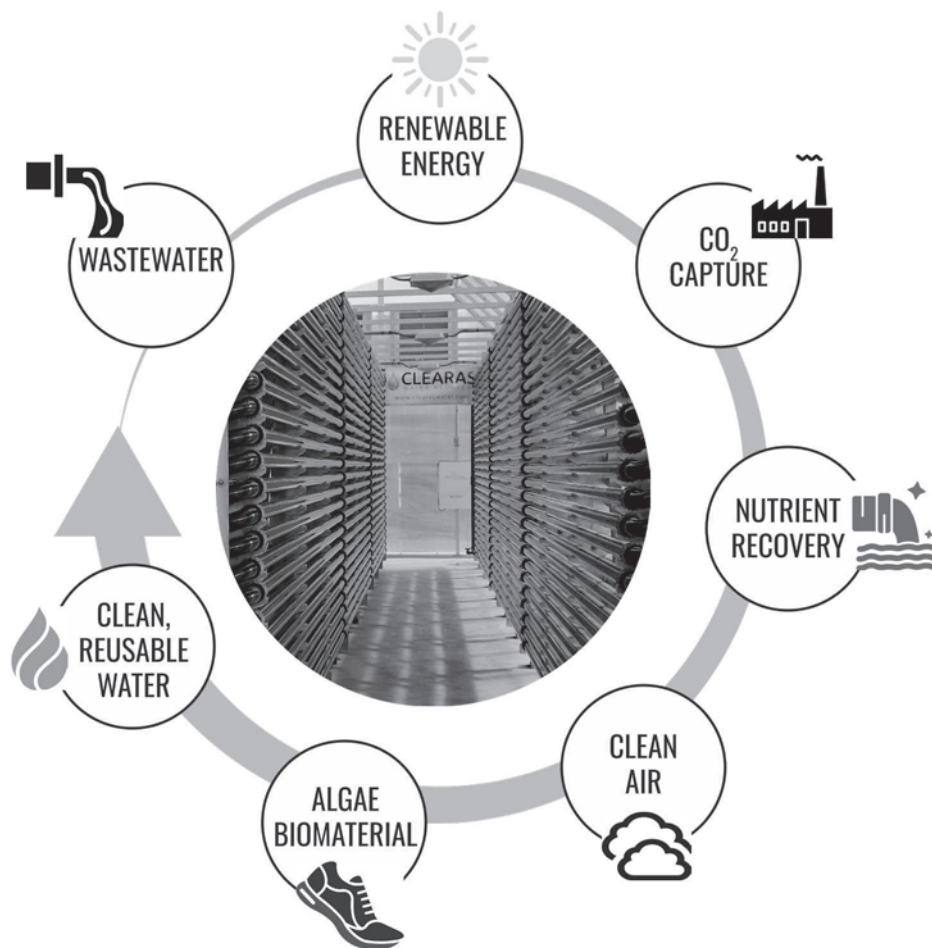
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Recognize individuals in this amazing profession!

It is important to elevate and to help advance our profession and the people that work in it! One way to do that is to recognize those around us that have made a difference. Recognition is something that shows someone the value of their contributions and inspires them and others to continue to work harder at their jobs. So many people in this organization work so hard to help others, without expectation of any recognition. Yet, being recognized is an overwhelming experience as the individual comes to realize that their efforts have been noticed by their peers. Receiving an award in front of one's peers at the annual awards banquet is both a humbling and pinnacle moment for recipients.

It's often hard to determine who exactly deserves one of the WWOA awards because so many individuals are deserving. I encourage you to take a look at the lists of past winners of these awards (WWOA Annual Awards page www.wwoa.org/events-awards/annual-awards), and then consider individuals that meet the award criteria that have yet to be recognized.

It is time to start filling out the nomination papers for the Annual Conference Awards. Please take the 5 minutes to nominate someone today. There are many people in our industry that are deserving of these awards. We are looking for nominees for the following awards:

ASSOCIATION AWARDS (Note: WWOA Board members are not eligible for these awards)

George F. Bernauer Award: Criteria include successful plant performance, and/or successful solution of important or complicated operational problems, and/or outstanding contributions in the field of wastewater technology in the State of Wisconsin. The nominee may be a municipal, industrial, or institutional operator, administrator, or educator in Wisconsin. It is not limited to WWOA members.

Koby Crabtree Award: Presented to a WWOA member for excellence in technical support provided to others in the

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continued from page 18

field of wastewater treatment. The individual should be a recognized authority in some aspect of wastewater, share knowledge through presentation, contribute to problem solving, and provide service regardless of compensation. **Albers-Templeton Service Award:** Presented to a person who has made an outstanding contribution to the WWOA in the areas of promotion, operation, management, program participation, or education. The nominee must be an active member of WWOA for a period of ten years.

Newcomer of the Year Award: Recognizes an operator, support staffer, or environmental technician with less than three years of experience as of August 1st of the year nominated. The nominee should demonstrate higher than average growth in their place of employment, a willingness to learn, innovation on the job, and exceptional enthusiasm for their profession. The nominator should be a supervisor, manager, peer, coworker, or DNR personnel familiar with the day-to-day efforts of the nominee. WWOA membership is not required, and a two-year membership or renewal is included in the award.

Membership Award: Presented to the WWOA member who sponsors the most new WWOA memberships.

REGIONAL AWARDS

Regional Operator of the Year Awards: Given out to someone who has demonstrated excellent plant performance, and/or successful solution to a problem, and/or contributions to the wastewater field.

It is open to Wisconsin Certified operators of municipal, industrial, or institutional wastewater treatment facilities. This award is not just limited to actual plant operators, but is open to those working in a variety of areas, including biosolids, collections, engineering, lab operations, maintenance, etc. The nominee must be at least a five year member of WWOA.

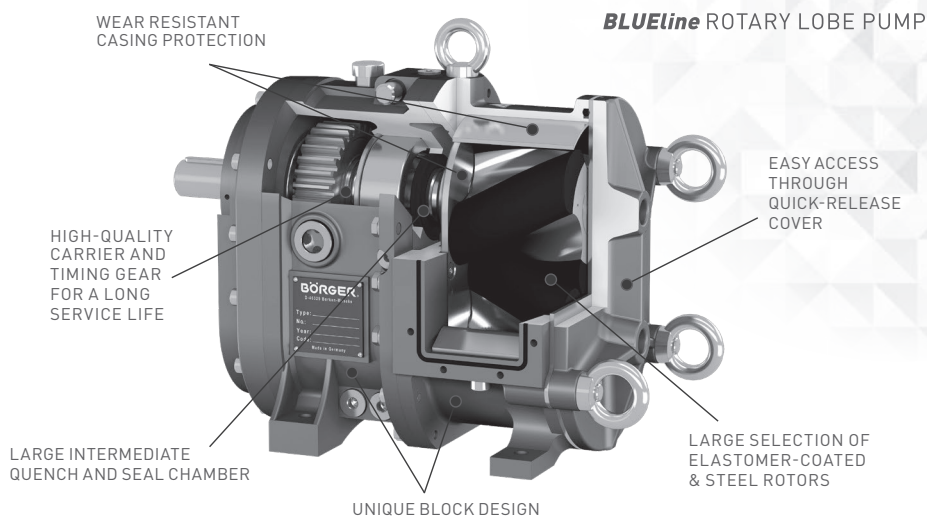
The nomination form and instructions for all the awards can be found on the WWOA website www.wwoa.org/events-awards/annual-awards or by contacting Jeremy Cramer, Awards Committee Chair, at (608) 235-9280 or email at jcramer@cityofsunprairie.com

Please note, the Regional Operator of the Year Award nominations should be submitted to the Regional officers listed on the nomination form by **July 24, 2022**.

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continued from page 19

All other awards need to be submitted by **August 1, 2022** for consideration. Feel free to contact me if you would like any further information on the awards, the nomination procedure, or if you have a question if a potential nominee meets specific award criteria.

Thank you in advance for taking the time and effort to nominate individuals and allowing WWOA to recognize these deserving recipients! 🌱

Sincerely,
Jeremy Cramer, Awards Committee Chair



Spring Biosolids Symposium

Tuesday, March 22, 2022

Holiday Inn Stevens Point

Via Zoom or In Person

To register go to
[https://](https://www.wwoa.org/events-awards/spring-biosolids-2022)

www.wwoa.org/events-awards/spring-biosolids-2022



For more information, contact:

Dave Diehl at (414) 455-1607
DiehlDL@bv.com, OR
Glenn Tranowski at
(608) 251-4843 glenn.
tranowski@strand.com

For questions regarding
registration, contact
Courtney at c.harris@wwoa.
org or via phone
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Laboratory Limelight: Zen and the Art of BOD Testing

By Rick Mealy, RGM Lab Consulting

My wife and I spent time on Amelia Island (FL) in mid-December, and I did a lot of thinking one day while hiking on “Boneyard Beach”. I realized that, as baby boomers continue to retire, I’m noticing more and more new faces doing lab testing. Either that, or I’m getting senile and just don’t remember names and faces any more. My wife says it’s definitely senility setting in, but I’m going with my take, and—given that—it’s probably a great opportunity to once again unlock the secrets to mastering BOD testing, the test that everyone loves to hate.

The title of this article is a reference to the best-selling book, “Zen and the Art of Motorcycle Maintenance”, which is actually about neither. What it is about, and the relevance here, is that using rational problem-solving skills is the key to keeping anything working well. In this case, that “anything” is BOD, a test feared by many operator/analysts. The way to conquer fear is to embrace it, to confront it head on. And that’s exactly what you should do.

Without intending to unnerve you even more, you should also know that, in my experience dealing with all kinds of complex analyses, I still regard BOD as the single most difficult analytical test. It always amazed me when I found that many large commercial laboratories assigned BOD to their newest, least skilled analyst. And they simply handed them the method, and instructed them to go forth and generate BOD sample results. That’s a recipe for disaster! Attempting to conquer BOD, equipped only with the Standard Methods procedure, is like going hunting for grizzlies armed with a Wikipedia article on the grizzly bear.

That’s because BOD is as much art as it is science, and Standard Methods doesn’t discuss the nuances that are the art of BOD. The great tactician, Sun Tzu, in his treatise, “The Art of War” wrote, “Know thy enemy. Know thy self. A thousand battles. A thousand victories.” Translated, that basically means work smarter, not harder. If you understand your enemy (BOD) and you believe in your own

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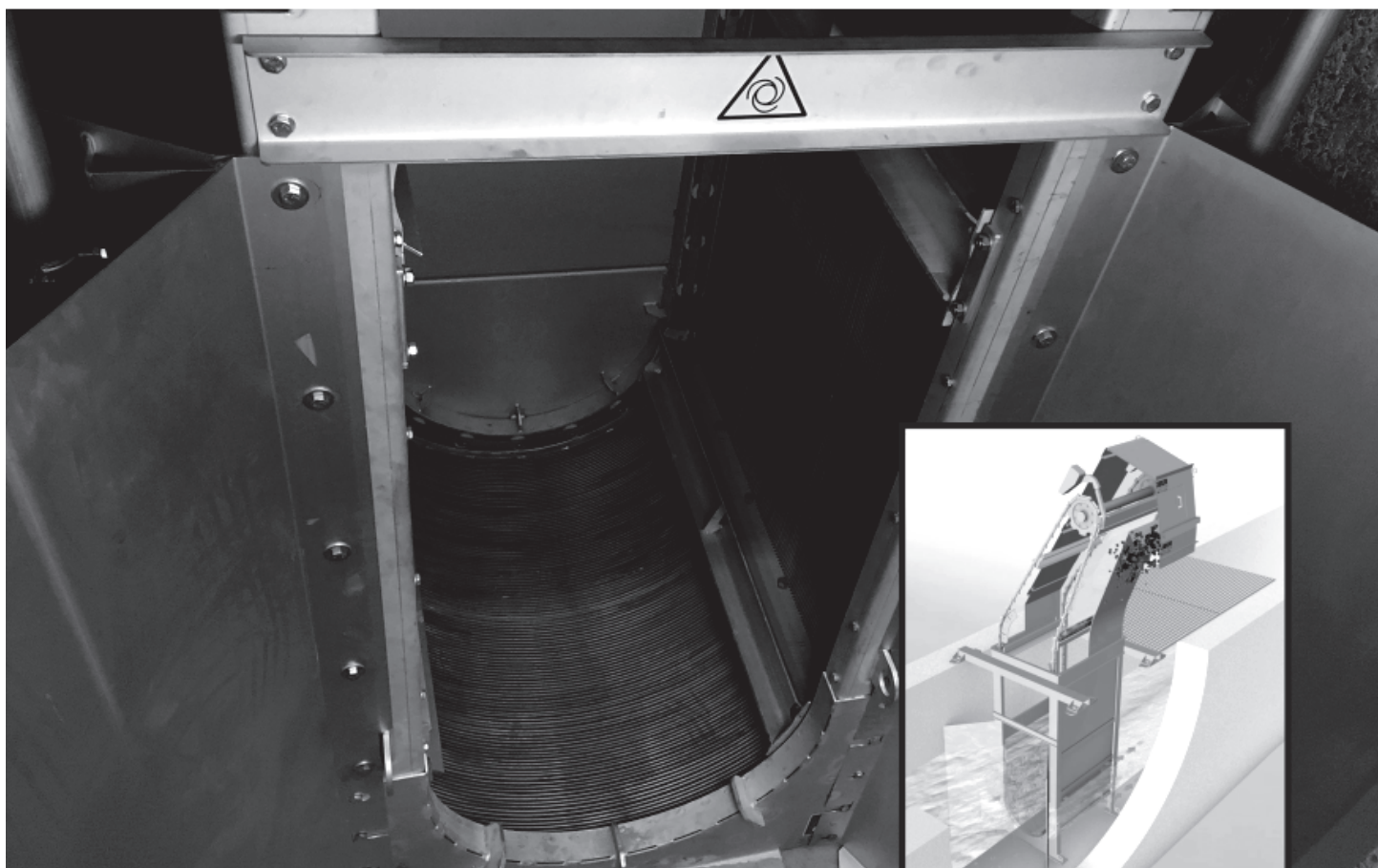
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abilities, then you have all you need to master the BOD test every time.

The first, and only, rule of BOD testing is that BOD testing does not follow rules. Unlike, other wastewater lab testing, BOD testing does not align with any physical testing (solids) or chemistry (ammonia, phosphorus) rules. With BOD, we are measuring the impact of bacteria on waste, and bacteria are living organisms that can be as finicky and unpredictable as any teenager (with sincere apologies to all those wonderful, emotionally balanced teenagers out there).

And if that isn't enough of a challenge, the method itself is written as if the analyst has control over things that they do not. For example, there is the requirement that blanks not have an oxygen depletion greater than 0.2 mg/L.

If a blank goes into the incubator under conditions of an extreme high-pressure system, such as an arctic high in the dead of winter, and the samples come out 5 days later during a low-pressure system, it is likely that your blank will fail simply because of the pressure difference. You can't control that!!!

And what about the opposite situation, in which your blank actually appears to GAIN oxygen of slightly more than 0.2 mg/L after 5 days? That violates the Law of Conservation of Mass in physics. You cannot "create" oxygen!!! But it happens, or more accurately, can LOOK like it happens. Because BOD is different. So many people talk to me about blank depletion issues because their plant manager gets upset when they "fail" a blank or a GGA. The simple reality is that in a given month you can do everything right and STILL expect to fail a blank or a GGA standard. It's the nature of the beast. So...what can you do about it? Borrowing from the "Serenity Prayer", you need to empower yourselves to accept those things that you cannot control, the focus to control that which you can, and the reasoning ability to differentiate between the two.

It sounds a little hokey, but it serves as a constant reminder that there ARE things about BOD testing over which you have no control, like with the blanks and air pressure (which is why auditors impress upon you the need to record barometric pressure). Much like the blank issue, the control limits for GGA are 198 +/- 30.5 mg/L. Did you know that those criteria are based on the mean plus or minus only

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continued from page 24

ONE standard deviation based on extensive testing? We typically deal with control limits that are based on the mean plus or minus THREE standard deviations, which represents 99.7% of a statistical population of data. One standard deviation around the mean represents only about 68% of an entire set of data. That means, statistically, you can expect to fail GGA limits as much as 32 times out of 100!

But let's not get carried away. Just because statistics are in your corner, doesn't mean you shouldn't do everything in your power to beat the statistics. Let someone else's lab be the outlier. There are some things you can focus on that give you the best chance to beat the statistics and maintain a strong lab performance track record. BOD testing can be broken down into three critical elements. Controlling these will go a long way to helping you defeat the beast and master the art of BOD testing.

Calibration and consistency

Calibrating the DO meter correctly is essential. It doesn't take much to introduce a bias that will result in blank failures. The key to air calibration (probe in a BOD bottle, not touching a small volume of water) is that oxygen saturation is based solely on temperature and barometric pressure. Being consistent with every detail makes a huge difference. Start with maintaining the exact same level of water in the calibration bottle. Whether you decide to use 1, 1.5, or 2 inches of water in the bottle, mark YOUR level in the bottle and make sure the water level stays there!

DO meter calibration electronics use pure physics and it is the assumption that the air in the bottle is completely saturated with moisture. And that may well be the case... if the bottle is left unopened. You leave it sealed with the probe in it in between uses, but what happens after that and between analysts is what matters. It doesn't take a rocket scientist to understand that when you take the probe out of the bottle the 100% humidity air within immediately escapes. Eventually equilibrium will be re-established, but that will take many hours. It doesn't matter if the bottle is at 100% humidity at calibration. What matter is if, at every calibration, the relative humidity inside that bottle is exactly the same. And the only way to do that is to be consistent.

Let's say Jack calibrates by taking the probe out, dabbing any droplet off of the probe, putting the probe back in and then goes off to have a cup of coffee and do some other things. By the time he gets back to calibrate, anywhere between 10 minutes and 45 over an hour could have gone by.

Jill, on the other hand, dabs the probe, sets a timer for exactly 15 minutes and then immediately calibrates. Jill is doing things consistently, but when Jack takes over on the weekend or when Jill is on vacation, consistency is thrown to the wind, and plant data will suffer. The problem only multiplies with multiple operators doing testing. EVERY analyst in a given lab must do things in precisely the same manner.

Supersaturation

Oxygen saturation is completely dependent on temperature and barometric pressure. If you keep your lab tightly temperature controlled, and know the temperature and barometric pressure, then you absolutely know (based on saturation tables) how much oxygen should be present when you calibrate. If you don't measure the saturation mark within 0.1 mg/L, then something is wrong and you should start over. Colder water holds more oxygen, so if your samples are not at room temperature, they will measure higher initial DO and your BOD results will be biased high.

Controlling GGA

The secret to getting good GGA results is to use a good, consistent seed, and the right amount of seed to ensure that you will obtain a GGA result within acceptable limits. If your GGA results run low, it's a virtual certainty that you are either using too weak a seed, or not enough seed. If you use settled primary and there has been a significant rain event, your seed source will be diluted and you will have to use more to obtain good results.

Low GGA always means USE MORE SEED!

On the other hand, high GGA results indicates some sort of contamination... either bugs, extraneous waste, or both. Are your bottles properly cleaned? Remember that in order to have measurable oxygen depletion, you need to have oxygen, bugs and a food source (wastewater).

Therefore, the only way you can have blanks fail high (other than calibration issues) is if you have contamination of both bugs (bacteria) AND waste (yuck!). Having just one or the other won't do it.

If you make just those three elements of testing your Zen, you should gain significantly greater control over your BOD testing. Just be sure that everyone that performs BOD set up or readout in your lab follows the identical protocol. 🍎

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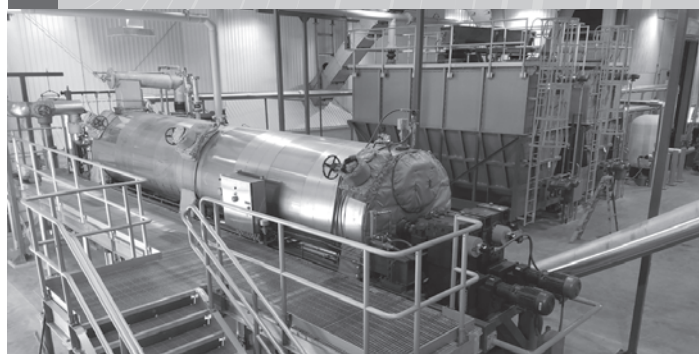
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Delafield-Hartland WPCC collects electrical data to save on energy cost

By Wayne Dehn, CLOCworks (wdehn@clocworks.com)

The phrase “knowledge is power” is often attributed to Francis Bacon in 1597. Today Delafield-Hartland WPCC (Delhart) general manager Scott Luczak, is putting a new spin on the famous quote. “I believe knowledge can save you power”, he stated during a recent conversation. For the past 10-month DelHart has been collecting electrical energy data. Data used to make optimization and efficiency changes without additional capital cost. These changes have led to over 15% in energy cost reduction for the DelHart facility.

Power companies bill wastewater/production customers not only for the amount of electricity they consume but also a demand charge for when they use the most amount of electricity throughout the day by breaking the day into 96 fifteen-minute segments. Understanding how electrical energy is consumed throughout the day can allow operators to make small changes that can save thousands of dollars. Shifting the electrical energy load by only a few minutes within peak periods can reduce the demand charges. The key is to know when and why those peak occur.

Luczak stated that he was skeptical at first when presented with the idea of collecting electrical data from a fellow WWOA member. Like other wastewater operators, DelHart had implemented many energy saving ideas. Those changes resulted in lower energy consumption charges. But DelHart like so many other wastewater plants, was missing opportunities to reduce demand charges. “Once I fully understood the demand charge calculations, we were able to make minor changes to our operation to significantly lower our KWH’s!”, added Luczak.

With the new data operators can make decisions to reduce power factors, predict and prescribe equipment optimization, monitor scheduling recommendations, visualize an electrical blueprint of how and when the buildings use power, calculate the R.O.I. data for battery storage solutions, solar optimization and other equipment need, and provide details of energy use in different departments for budgeting or grant requests.

Energy efficiency has become a higher priority within the wastewater treatment sector, with facility operators, state, and local governments ramping up efforts to reduce energy costs and improve environmental performance. Across the country, municipal wastewater treatment plants are estimated to consume more than 30 terawatt hours per year of electricity, which equates to about \$2 billion in annual electric costs.

According to the U.S. Department of Energy electricity alone can constitute 25% to 40% of a wastewater treatment plant’s annual operating budget and make up a significant portion of a given municipality’s total energy bill. These energy needs are expected to grow over time, driven by population growth and increasingly stringent water quality requirements. As a result, wastewater treatment plants need to consider new steps to manage and reduce their energy cost.

The Delafield-Hartland WPCC facilities includes a wastewater treatment plant, intercepting sewer, five pumping stations and an outfall sewer. The treatment plant was originally designed to treat an average daily flow of 2.2 MGD and now is rated for 3.23 MGD.

The new data and optimization suggestions included changes to DelHart’s effluent wet well levels and GBT operations. “With the proper data there is no doubt about it, operators will save on energy, both consumption and demand,” Luczak added. “We were able install the data capturing meter, hardware and software at no upfront cost to us. Each month we get a report on how and where the electricity is used throughout our facility, along with optimization suggestions. It is a great partnership,” he concluded. ●

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April 8 & 9, 2021 Board of Directors meeting minutes

WISCONSIN WASTEWATER OPERATORS' ASSOCIATION,
INC. BOARD OF DIRECTORS MEETING AGENDA
10:00am – 2:30pm Thursday, April 8th and
9:00am – 1:00pm Friday, April 9th, 2021 Via Zoom Meeting

Day 1

1. Call to Order / Roll Call – President D. Lintner
10:00 AM

R. Mealy	J. Voigt	C. Harris	D. Lintner
N. Tillis			
J. Cramer	J. Pagel	B. Brooks	M. Stephanie
J. Smudde			

2. Agenda: Changes, Additions, or Correspondence:
No changes.

3. Approval of Minutes: December 10 & 11, 2020 meeting
Motion to approve the December 10 & 11, 2020 meeting minutes: M. Stephanie; 2nd by N. Tillis. APPROVED

4. Financial Reports: N. Short to report on Day 2 of meeting (4/9/21).

5. Committee Reports:

- a. Nominations – J. Smudde
No report.

- b. Promotional items – M. Stephanie
 - D. Lintner to pick 2021 board shirts.
 - Until the operators competition teams are finalized, there is no other activity in promotions.

- c. Membership – C. Harris
No report

- d. Executive Committee – D. Lintner
No report.

- e. Career Development – B. Brooks
 - Discussion on forming a Young Professionals Group with two committee members involved.
 - Possibly have a raffle at conference for these young professions to network and introduce themselves to current professions.
 - B. Brooks to look further into hosting a raffle.

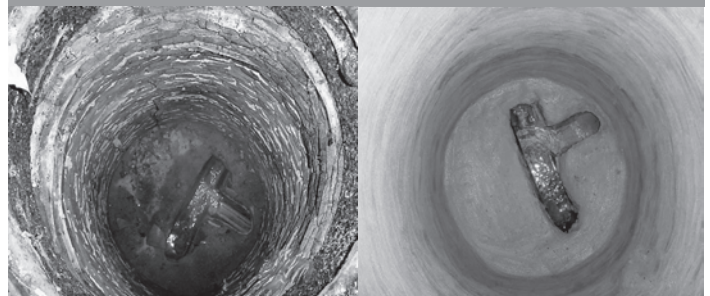
- f. Awards – R. Mealy
 - Nomination form has been revised for 2021

and posted to the website. In addition, an article seeking nominations for WWOA awards has been submitted for the April Clarifier.

- g. Operator Training – N. Tillis / J. Cramer
 - Discuss about starting in person meetings starting May 1. Regions will have the choice to continue virtual or host in-person, following local guidelines.
 - Motion to allow regions to host in-person meetings: D. Lintner, 2nd by J. Cramer. APPROVED
- h. Publicity – M. Stephanie
 - M. Stephanie has created a group on Facebook but has not invited anyone yet.
 - Have it set up as a forum of communication. Make sure rules are set up for the Facebook group as far as what can be posted.
 - Once B. Brooks gets Young Professional committee going, have them run it.
- i. Regional Coordinator – J. Voigt
 - COVID 19 has cancelled all regional meetings for

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in person. The North Central, Southeast and Lake Michigan Districts have all had virtual meetings with good reviews.

j. Government Affairs Seminar – J. Smudde / J. Pagel / B. Brooks

- The event was held virtually, with 249 registered.
- Revenue of \$3,568.11 for WWOA and CSWEA
- 130 responded to the survey after event which will be helpful in planning the event next year.

k. Spring Biosolids Symposium – B. Brooks

- The event was held virtually with 260 registrants.
- WWOA ran short on Pheedloop seating and N. Short was required to purchase more seating for \$1,085.
- Total revenue shared equally between CSWEA and WWOA was \$3,183.37.
- Planning of the 2022 event will be headed by CSWEA and is contracted to be held at the Stevens Point, WI. Holiday Inn, March of 2022.

l. Central States Liaison – J. Cramer

- CSWEA has continued with its Operator Training Program and has been providing operator training opportunities.

m. Technical Program – J. Cramer

- 71 total submissions for the program.
- Program acceptance and rejection letters were sent out in March.
- Final program needs to be sent to J. Butt to print I the Clarifier.

n. Clarifier – J. Butt / J. Cramer

- Continuing to update invoice forms and send out to potential advertisers.
- Over \$25,000 has come in year-to-date for advertisements.

o. Exhibit Committee – T. Mulcahy

- No report

p. Historical/photos – T. Crouse / J. Smudde

- No report

q. Operators Competition – J. Voigt / R. Mealy

- J. Voigt reached out to all regions to let them know Operator Competition is still happening. May not have as many teams as previous years due to COVID-19 but will have better understanding within the next few months. Placement of operator competition at conference will be in the middle of exhibit hall.

r. Golf Outing – R. Mulcahy

- No report

s. Sporting Clays – J. Smudde

- The 2021 Annual Sporting Clays will be held October 5, 2021 at Woods and Meadows in Sparta. Bucky Walters has volunteered to help organize the event again this year. Price will be \$60 per shooter which will include a round of sporting clays, Lewis Class, and a steak lunch. More details will be finalized closer to event.

t. Bicycle Outing – T. Crouse

- No report

u. Resolutions and Bylaws – R. Mealy

- Board to review and discuss 2nd day of Board meeting, April 9.

6. Old Business

a. WWOA Storage Locker

- J. Voigt has key to locker. Possibly take a trip soon to go through everything as there are many old files that can be thrown out.
- Start saving things electronically going forward.
- Get a new locker/storage soon that is centrally located in a safe place.

7. New Business

a. WWOA Directory – C. Harris

- Name and process constantly changing that it's difficult to keep updated.
- With new website, directory flash drives will no longer be necessary.

b. Annual Conference Pins – C. Harris

- Bring left over 2020 pins to this year's conference to hand out at registration desk.
- Courtney to order pins for 2021 conference from PinCrafters. Work with Don on color of pins.

c. Website RFP Discussion – N. Tillis / S. Meifert / J. Bratz

- Website committee reviewed RFP's for new website from Webfitters and AEG. Board to review further for best option.
- 3 options: have new site built through AEG, have new site built by Webfitters, or improve current site. After reviewing, any solutions would work. Timeframe to get it done before conference.
- Potential drawback for new site would be data transfer. Want to make sure all data gets transferred correctly.

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- AEG price for new website is very doable.
- Discussion to continue day 2 of Board meeting, April 9th.
- Create conference site first, then launch main site.

D. Linter adjourn meeting at 1:50 PM

Day 2

1. Call to Order / Roll Call – President D. Lintner
9:00 AM

R. Mealy J. Voigt C. Harris D. Lintner
N. Tillis
J. Cramer J. Pagel B. Brooks M. Stephanie
J. Smudde

2. Committee Reports – Continued
 - a. Permanent Arrangements – K. Freber
 - Discuss 2024 Annual Conference Contract
 - Motion by J. Cramer to sign both contracts for Red Lion Hotel and Fox Cities Exhibition Center; 2nd by J. Smudde. APPROVED.

- b. Bylaws – Phase two revisions continued – R. Mealy
 - Last year phase one was completed. Phase two to simplify wording.

- Publish in Clarifier. Aw
- Motion by M. Stephanie to present these changes to Articles of Incorporation and Bylaws to the membership as currently written by the committee; 2nd by J. Pagel. APPROVED.

- c. Financial Report – N. Short
 - Extensive time spent on budget; updating accounts, figures; provided explanations/rationale for line items.

- d. Local Arrangements – J. Greeno
 - No report.

- e. Scholarship / Tuition – J. Pagel
 - Continue to update contact information to ensure the appropriate program directors are notified of the scholarship opportunities available and to pass along the information to their students in wastewater and engineering related fields of study.

- Follow up with program directors, professors, and educators again in June to remind them that the application deadline for scholarship opportunities is July 1st.

3. New Business – Continued

- a. Annual Awards – C. Harris
 - Confirm process of awards. R. Herwig takes care of plaques in the past. Follow up with him regarding plaques. Get someone lined up to take pictures of award recipients. T. Crouse does picture taking but will need help to write

down names. J. Smudde looking at backdrop options.

- b. Website RFP Discussion continued– N. Tillis / S. Meifert / J. Bratz

- J. Bratz followed up with Webfitters with a few items. Main concern is can WWOA afford to do a new website.

- A few items need to be fixed ASAP, which includes the payment system. This will save on AEG hours.

- Badge printing is an important item if getting new site.

- Concern with price different between AEG and Webfitters proposals.

- WWOA Board to review further and continue discussion Monday, May 19th.

2. New Business

- a. PFAS – J. Smudde

- J. Smudde got approached offering a 60 min virtual presentation about things going on with PFAs.

- J. Smudde to follow up and work with Jeremy to schedule virtual luncheon presentation.

Motion by B. Brooks to adjourn meeting; 2nd by M. Stephanie. Meeting adjourned 1:00pm. 🕒

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August 19 & 20, 2021 Board of Directors meeting minutes

WISCONSIN WASTEWATER OPERATORS' ASSOCIATION, INC.
BOARD OF DIRECTORS MEETING AGENDA
10:00am – 5:00pm Thursday, August 19th and
8:00am – 12:00pm Friday, August 20th, 2021
Radisson Hotel, La Crosse, WI | Zoom Meeting
August 19: 880 4164 0275
August 20: 815 6366 5977

1. Call to order, Roll Call - President D. Lintner: 10:08 AM

R. Mealy	J. Voigt	C. Harris	D. Lintner
N. Tillis			
J. Cramer	J. Pagel	B. Brooks	M.
Stephanie	J. Smudde		
2. Meet with La Crosse Center representative Elizabeth Poh and Kris Salzwedel @ 10:30am. Meeting went until 12:00 PM
3. Agenda Changes, Additions, or Correspondence NONE.

4. Approval of Minutes: April 8 & 9, 2021 meeting
MOTION to approve the April 8 & 9 meeting minutes: J. Voigt; 2nd J. Cramer.
5. Committee Reports
 - a. Annual Awards – R. Mealy
 - Board reviewed all award winners to approve nominations.
 - Honorary Membership award has not been done since 2011. Award has to be approved by full board, then membership votes on it.
 - MOTION to have Gary Hanson to receive Honorary Membership Award: J. Cramer; 2nd J. Smudde.
 - Award winners from 2020 will be awarded this year at the 2021 banquet.
 - MOTION to move with awards and order plaques: R. Mealy; 2nd J. Cramer.
 - b. Bicycle Outing – T. Crouse
No report.
 - c. Bylaws – R. Mealy
 - Bylaws committee met on five occasions via Zoom in February and March of 2021. They made adjustments and revised both Articles and Bylaws.
 - There will be an article prepared in the September issue of the Clarifier to announce that the two documents will be presented for membership approval.
 - d. Career Development – B. Brooks
 - At the 2021 WWOA Annual Conference, a table will be reserved for Young Professionals at the Meet and Greet on Tuesday, October 5.
 - Continuing discussion on Career Development ideas and strategies. Work with Young Professionals to get the word out.
 - e. Central States Liaison – J. Cramer
 - CSWEA has continued with its Operator Training Program and has been providing operator training opportunities.
 - f. Clarifier – J. Cramer / J. Butt
 - There are currently 29 spots being advertised in the Clarifier.
 - Over \$34,000 has come in this year for advertisements.
 - g. Executive Committee – D. Lintner
No report.
 - h. Exhibit Committee/ M & C – T. Mulcahy / C. Strackbein / J. Bratz
 - Registration is going good for booth spaces. Plans to extend exhibit registration early rate one more week.

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- i. Golf Outing – R. Mulcahy
No report.
- j. Government Affairs Seminar – J. Smudde / J. Pagel
 - The Government Affairs Seminar Committee will be meeting soon to begin planning the 2022 Government Affairs Seminar.
- k. Historical Photos/Records – T. Crouse / J. Smudde
No formal report.
- l. Local Arrangements – J. Greeno / B. Lenz
 - Plant tour is planned. Busses will be picking up people at the La Crosse Center.
 - Possible COVID protocols were discussed. Such as masks may be required, tour can be mostly done outside, and being socially distanced.
- m. Nominations – J. Smudde
No formal report.
- n. Operators Competition – R. Mealy / J. Voigt
 - Only 2 teams signed up so far. Hoping to get a few more teams prior to the conference.
- o. Operator Training – N. Tillis / J. Cramer
 - Three virtual training opportunities were provided in 2021. One training event was a three hour afternoon session while the other two were lunch hour webinars.
 - Having training at lunch time is more effective and convenient.
- p. Permanent Arrangements – K. Freber
No formal report.
- q. Promotional Items – M. Stephanie
 - The 2021 conference shirts are ordered for the board.
 - Discussion on ordering a few items to sell at the conference, like hats and shirts. Have a budget of \$800.
- r. Publicity – M. Stephanie
No formal report.
- s. Regional Coordinator – J. Voigt
 - All regions have had their first in-person or will be having a meeting before the conference in October.
- t. Scholarship / Tuition – J. Pagel
 - The committee received and reviewed 16 potential candidate application packets for the 4 scholarship opportunities being offered. The committee met via phone and zoom to discuss the candidates on August 5th, 2021. Of the 16 applicants, 11 of them were seriously considered and four were selected by the committee with all members of the committee being in agreement.
 - MOTION to approve the scholarship recommendations: M. Stephanie; 2nd B. Brooks.
- u. Sporting Clays – J. Smudde
 - The 2021 Annual Sporting Clays Shoot will be held on Tuesday October 5, 2021 at Woods and Meadows in

Sparta. Bucky Walters has volunteered to help organize the event again this year. The price for the event will be \$60 per shooter, which will include a round of sporting clays, Lewis Class, and a steak lunch.

- Josh, Bucky, and Jeff are working on soliciting major sponsorships for large door prizes. A donation form has been added to the conference website which includes \$50 station sponsor and another category for major sponsorships over \$100. The deadline for sponsorships is Sept 21.
- In late August Josh, Bucky, and Jeff will be visiting Woods and Meadows to talk to the owners to organize details of the event and walk the course. During the meeting the possibility of doing something in honor of Tom Stebbins will be discussed for this year.
- v. Spring Biosolids Symposium – B. Brooks
 - The Spring Biosolids Symposium planning committee is planning to host an in-person event March 8, 2022 at the Stevens Point Holiday Inn. (CSWEA takes the lead for 2022)
 - In person event with the possibility of a Hybrid option. TBD
 - Contract signed with the Holiday Inn for the 2022 event.

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- Next SBS planning committee meeting to be held on 9/3/21 at 11:00am to discuss planning, speakers, and associated cost.
- w. Technical Program – J. Cramer
 - The technical program for the Annual Conference is set with all selected speakers confirming they would speak. Speakers have a sent bio's and short summaries of their talks. The final program has been sent off to be included in the September issue of the Clarifier.
- x. Website – N. Tillis / J. Bratz / S. Meifert
 - The new website is making progress. Programming of all page templates has been completed and uploading copy has begun.
 - AEG will be hosting optional weekly meetings for board members to join and ask any questions.
 - Launch of website is scheduled for mid-October.
- 6. Old Business:
 - a. WWOA Storage Locker
 - b. Young Professional Committee Program – B. Brooks
- 7. New Business
 - a. Membership Database – R. Mealy
 - The current WWOA database is replete with errors, with many developing years ago. The database has no mechanism to do many required things. With the new database and website, these issues will be resolved.
 - b. Annual Conference Items
 - COVID protocols – Masks are not required but optional. Hand sanitizing stations will be spread out through the building. Extra seating in sessions. Limited supply of masks will be available at registration desk.
 - F&B Budget – Board went through F&B to decide menu selection and quantity. Will get more accurate numbers closer to registration closing.
 - Ribbons
 - Registrations
 - c. Signage – R. Langer
 - Reviewed signage and discussed what else needs to be done.
 - d. Photo backdrop and lighting – J. Smudde
 - Jeff will look for different backdrop and lighting for conference.
- 8. Adjournment
 - a. Day 1: MOTION to adjourn meeting at 5:03 PM: J. Cramer; 2nd B. Brooks.
 - b. Day 2: MOTION to adjourn meeting at 11:30 AM: M. Stephanie; 2nd J. Smudde. 🗳

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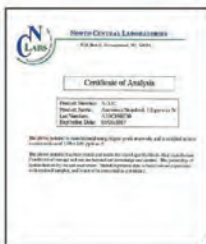
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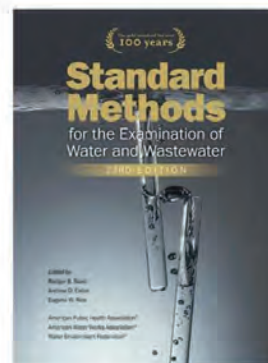
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