

echnical Assistance

B

Ē



Time Flies!

March 2023 Newsletter

By: Frank Dunmire, IRWA Executive Director

If you attended IRWA's Annual Conference in Effingham last month you probably already know, it was with many mixed emotions that I informed the IRWA Board of Directors that the time has finally come for me to step aside and retire as the Executive Director of the Association. I had made a commitment to the Board a few years back that I would give them at least one year's notice before "pulling the plug". With that promise in mind, I have set my retirement date as April 30, 2024. I have been the Executive Director for 19 years and yet the time seems to have passed by unbelievably fast. It seems like just yesterday I was walking through the front doors of IRWA's office building to attend my very first staff

meeting.

Over the past 19 years, the Association has gone through many changes – some good – some not so good. When I first started, IRWA was in the midst of rebranding itself and I feel that it was a great privilege for me – a newcomer to the staff – to be a part of that process. It was

through that process that a true "team mentality" was formed as everyone had a part, whether large or small, in building a new and improved Illinois Rural Water Association. A fresh new logo was designed and the process of purchasing a fleet of vehicles was undertaken. The Board of Directors agreed that with the new branding, a uniform appearance should be of the utmost importance. After all, as they say, you only get one chance at a first impression. This was just the first of many changes that IRWA would make over the years.

Staff suggested that IRWA should expand the loaner equipment library to better serve the members of IRWA. The Board agreed to not only expand the equipment inventory but also approved building a warehouse to store the equipment. A meager inventory of a handful pieces of equipment that members could borrow has now expanded into approximately \$300,000 worth of equipment available to members.

When I first started, IRWA was in the midst of rebranding itself....

However, it has not always been rainbows and butterflies. IRWA has had to weather some difficult times over the years as well. Probably the most trying times are when funding for a program is lost or delayed for months on end. I can still recall from my days as a Board Member back in the 80's and 90's when funding lags were so severe that the IRWA Board was forced to secure loans to make payroll. Fortunately, those days are well in the past and the Association, through sound fiscal policies, is on very solid ground. Today we are faced with a program delay from the USEPA, but unlike several other State Rural Water Associations, IRWA has set aside plenty of reserves to cover events

such as this. Thanks to the Board's policies, no staff will be forced to experience a layoff.

The Board of Directors will begin the process of hiring a new Executive Director in the upcoming months and I have respectfully requested they hire someone by January 1, 2024. January and February are extremely busy and critical times for Rural Water Executive Directors across the

country and it would be a good idea for my replacement to shadow me during those times. That being said, it will be entirely up to the Board to determine who the new Executive Director of your Association will be.

I'm not gone yet, so you will still be stuck with me for another year, but I wanted to get this announcement out there before my replacement search is started – just in case there is any misinformation being tossed around on social media. It has truly been a great privilege and honor to serve the Association as its Executive Director and being a part of the team there. It will be a sad day indeed when I walk out the door for the final time next year. Hopefully, they will invite me back from time to time just to visit. Hint. Hint.

IRWA'S MISSION STATEMENT

"Protecting and preserving the water and wastewater resources of Rural Illinois through education, representation and on-site technical assistance"



Certification Overview in Action

By: Scott Tozier, IRWA Wastewater Technician

is the Certification Overview training. At first, it doesn't look like much of a benefit to the members, but when you see how it can help the trainee, it's a pretty impressive service. In my travels, I stopped at a small community in Madison County and spoke with Nick Timmons of St. Jacob. In my conversation, I spoke to Nick and he had taken the Wastewater exam around 10 times with no success to date. on Monday to review some questions he had on a few dif-After a little convincing I had Nick sign up for the Certification Overview thru IRWA since he was scheduled to take the test again soon.

Nick had taken the ERTC short school a while ago and had sufficient study material to go on to feel prepared for the exam. He had been getting really close to passing but couldn't manage to find his last few points to pass. After going thru the exam in our Certification Overview I was pretty sure I could find those points Nick needed to get his Class 4 certification.

that we could further look into to fill the gaps that he was needing to pass the test. We looked into the how activated sludge plants flow process worked, using line drawings and labeling each process it was clear he had a better understanding of how these treatment facilities operated. Though it seems unnecessary to know this type of treatment works for a class 4 test, they expect you to at least know the basics of an activated sludge treatment plant. Nick felt pretty good on his math skills and after reviewing his previous test scores math wasn't his weak point, so we proceeded to try to fill in some of the other holes. Disinfection was another area the he had scored below passing so we spent some time exploring that process as well.

When Nick took his next test the following week I was sure that we had found those few points but to both of our disappointment it was not meant to be, but undaunted Nick

One of the more utilized services that IRWA is called on for had signed up for his next test in a couple weeks after that notification of not passing. I discussed over the phone a couple areas of questions that he still was unsure of and due to my schedule I wasn't feeling good about getting back down to see him before his next test.

> As luck would have it a cancellation provided me an opportunity to get down there the Friday before his next test ferent areas and still his disinfection score was poor as well as a couple other areas. The problem with these tests is you have no idea what you are getting right or wrong so with the help of the WW Tech's or Circuit Riders we help to weed out those questions of uncertainty. After a long morning of going over many areas Nick felt good once again going into next Monday's test.

Just last week I was in an Onsite visit with a municipality and I looked at my phone and Nick was calling, unfortunately I had to decline that call but after I finished, I finally got ahold of Nick and he informed me he had been told by After giving Nick the test on the Overview I could see areas ERTC that he would be receiving good news soon. I felt like I had passed the test myself and I'm sure you can tell Nick was beyond relieved to hear this. I congratulated Nick and wanted to talk about this service that IRWA provides for members to make sure everyone knows that they can sign up for the Certification Overview by getting in touch with us.

> Well congratulations Nick again and if anyone else is interested in this service or to just talk about how their Certification training could be improved, please call our office and they can point you in the direction of who they need to talk to in your region.



Aquaphalt Village of Ashkum Jessica Borries Daniel Boyrd, Sr. Janet Branson Matt DeVries

WELCOME NEW IRWA MEMBERS

Village of Gorham Jordan Harper Kyle Hogg Illinois Alluvial Regional Water Company, Inc. Village of Jerome Jim LaMache

Douglas Mifflin Napoli Shkolnik PLLC Douglas Ohme Village of Summerfield Tim Walter



Wastewater Practice Questions

Page 3

By: Jeff McCready, IRWA Wastewater Technician

IP-			
1)	The main difference between a primary clarifier & a secondary clarifier is:	9)	When installing a sewer line under a stream or river, a is used without interruption of flow?
	A. Detention time		A. Drop manhole
	B. Type of solids handled		B. Pipe invert
	C. Weir overflow rate		C. Downspout
			•
	D. Loading		D. Inverted siphon
2)	The invert of a pipe is the	10)	The activated sludge process works by:
	A. Top inner side of the pipe		A. Busting up solids with excessive air so they will not
	B. Top outside of a pipe		settle in the receiving stream
	C. Bottom inside of a pipe		B. Attaching an O_2 bubble to the solid particles to help
	D. Bottom outside of a pipe		them settle better
			C. Biology in the tank consumes the solids in the influent,
2			then settle out in the secondary due to increased waste
3)	What is a drop manhole?		D. Converting bacteria to inlet solid
	A. A manhole that is over 18 ft. deep		-
	B. A manhole that has an inlet pipe above the invert	11)	If your plant is operating at capacity with a P.E. of
	allowing the water to drop	• /	8,000 people, how many lbs. of BOD are you receiving?
	C. A manhole below the water table		
	D. A manhole shaped like a tear drop	12)	A lagoon has an influent flow of 500,000 gpd with a
	· · ·	12)	
4)	A well operated Inhoff tank can expect to have a $_$ % removal of BOD		BOD concentration of 900 mg/l. What is the population equivalent of the wastewater influent?
	A. 80 to 90		
	B. 75 to 85		
	C. 5 to 10		
	D. 15 to 35		
	U U U U U U U U U U U U U U U U U U U		
5)	"Rising" solids in a secondary clarifier is most likely		
	caused by	ANSW	'ERS:
	A. High dissolved oxygen	1)	A – Detention time
	B. Nitrification	2)	C – Bottom inside of a pipe
	C. Denitrification	3)	B – A manhole that has a inlet pipe above the invert
	D. Filamentous bulking	•	allowing the water to drop down
	Ğ	4)	D - 15 to 35 percent
6)	How long must records of your treatment facility be	5)	C – Denitrification
-,	retained according to the N.P.D.E.S. Permit?	6)	C = 5 years
	A. 1 year	7)	B – Filamentous bacteria
	B. 3 years	8)	C – Increase re-circulation
	C. 5 years	o) 9)	
	,	•	D – Inverted siphon
	D. Life of facility	10)	C – Biology in the tank consumes the solids in the influent then settle out in the secondary due to increased
7)	Dulling to a second on a low they to make the barries of the		ent, then settle out in the secondary due to increased
7)	Bulking in a secondary clarifier is most likely caused by:		
	A. Insufficient wasting	11)	1360 lbs. BOD P.E. = $.17$ lbs BOD/day/person
	B. Filamentous bacteria	1.01	.17 X 8,000 = 1360 lbs .
	C. Insufficient return	12)	Population Equivalent = <u>lbs/day/BOD</u>
	D. High organic load		
			$900 \times .500 \times 8.34 = 3753 = 22,076 \text{ people}$
8)	During low flows, your trickling filter only doses periodi		
	cally throughout the day. What should you do to correct		
	the problem?		
	A. Shut off the flow		
	B. Decrease re-circulation		
	C. Increase re-circulation		
	D. Nothing, There is no problem		

Illinois Rural Water Association 3305 Kennedy Road P.O. Box 49 Taylorville, IL 62568 217-287-2115 PRESORTED STANDARD U.S. POSTAGE PAID SPRINGFIELD, IL PERMIT NO. 500



.

IRWA Staff Members Executive Director (dunmire@ilrwa.org) **Frank Dunmire Deputy Director** Don Craig (craig@ilrwa.org) **Membership Services Assistant** (ilrwahm@ilrwa.org) **Heather McLeod** Administrative/Program Assistant **Denise Burke** (ilrwadb@ilrwa.org) Circuit Rider #1 **Evan Iones** (jones@ilrwa.org) **Circuit Rider #2 Roger Noe** (noe@ilrwa.org) **Circuit Rider #3** (ilrwacw@ilrwa.org) **Chuck Woodworth Circuit Rider #4 Marc Lemrise** (lemrise@ilrwa.org) Wastewater Technician #1 Jeff McCready (mccready@ilrwa.org) Wastewater Technician #2 (tozier@ilrwa.org) Scott Tozier **USDA Source Water Protection Specialist** Richmond Adams (adams@ilrwa.org) **State Funded EPA Technician Clark Cameron** (cameron@ilrwa.org) **Energy Efficiency Circuit Rider** (speagle@ilrwa.org) **Dave Speagle EPA Training Specialist** Dave McMillian (mcmillan@ilrwa.org) **Steve Vance** (vance@ilrwa.org) **EPA WW Training Specialist** (cox@ilrwa.org) Kent Cox **Apprenticeship Coordinator** leff Tumiati (tumiati@ilrwa.org) **Compliance Assistance Specialist** (reed@ilrwa.org) **Mary Reed**



ILLINOIS RURAL WATER ASSOCIATION 19TH ANNUAL GOLF OUTING

WHEN: FRIDAY, AUGUST 25, 2023 10:00 A.M. SHOT GUN START

NEW LOCATION THIS YEAR -EDGEWOOD GOLF CLUB AUBURN, ILLINOIS



PLEASE JOIN US FOR ANOTHER FUN FILLED DAY WITH PEERS! Look for more information in June on our website at www.ilrwa.org and in the mail.