FYI - Small Systems

Small Systems Committee
INDIANA SECTION AWWA

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FYI

Hello Spring!! We hope those of you who attended the Annual Conference in February found it informative as well as enjoyable. The Legislative Reception that was held as part of this Conference was very successful and afforded the water industry the opportunity to communicate our concerns to our legislators on a one-to-one basis. Please continue to check the Indiana Section AWWA's website on a regular basis as this year's legislative session is winding down. There are several bills, which if passed, will impact the water industry. It is critically important that our legislators know of our wishes and concerns.

There have been a number of changes at the Drinking Water Branch of IDEM since our last edition was published. The "What's Up What's New – IDEM" article below discusses some of these changes. Also in this newsletter you will find an up-to-date listing of IDEM's field inspectors and the counties they serve.

Consumer Confidence Reports, Construction Permits, Chlorination, and Ammonia – all topics which are covered in this issue. In fact, we've had to expand our April publication just to get it all in. The Research and Technical Practices Committee is asking that systems bring samples of their raw water or previously collected ammonia data to the upcoming Spring AWWA District Meetings. They are trying to gather information on the presence of ammonia is Indiana's groundwater supplies and how many systems are impacted by ammonia. Any data will be anonymous and no data will be published that would reveal individual systems' information.

As always, we continue to seek your input on this publication – it is critical as it helps us evaluate our mission and content. Please contact any member of the Small Systems Committee or AWWA Board with comments or suggestions.

WHAT'S UP WHAT'S NEW - IDEM

Over the past couple of months, things have changed a bit here at the Drinking Water Branch (DWB). Mary Hollingsworth has been promoted to the Section Chief of our Construction Permit, Operator Certification, and Capacity Development Section; Martha Clark has left the DWB to accept the promotion to Branch Chief of the Water Shed Branch; and Larey Conquergood has transferred to the Field Inspection Section from the Compliance Section.

Our Construction Permit, Operator Certification, and Capacity Development Section has, over time, changed to include responsibility for construction permits, the operator certification, and capacity development programs. Mary Hollingsworth should be familiar to you – she was formerly with the Field Inspection Section. She assumed her new duties on February 10, 2003. Questions regarding any of those three areas of responsibility should go to her or her staff. For your information, the staff list is located in the IDEM – Contacts section of this

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FYI FROM THE SECTION CHAIR

Hi!! This will be my first letter since becoming Section Chair. Please feel free to talk to me about any concerns or any water related issues that you might have. Your input is greatly needed and appreciated.

I hope all of you had a chance to attend at least some of the Annual Conference. It was a great time to obtain technical information and network with your suppliers and cohorts. In 2004, the Annual Conference will be at the Marriot in Downtown Indianapolis. Mike Simpson and his committee have put an enormous amount of effort into making this happen. They all deserve your appreciation. The cost will be just a little higher, but the facilities are 100% better! This move will allow the conference to continue to grow and prosper.

Pat Spence is your Chair-Elect and the Program Committee Chair for 2004's Annual Conference. She would really like your input for the program. It is very important that the voice from the small systems is heard. The Water Utility Council, with John Stancati at the helm, is actively working to address all the legislative issues that are being proposed at this time. This is a ***very, very, very*** large task!

Hope to see all of you at the spring district meetings!!

Doug Perry
Chair
Indiana Section AWWA

WHAT'S UP WHAT'S NEW - IDEM (continued)

(Continued from page 1)

publication.

The search for a new Ground Water Section Chief will begin soon. Wellhead protection plan review will go on as normal. If you have any questions, the staff remains the same as previously printed in the January, 2003 edition of *FYI – Small Systems*.

Larey Conquergood has transferred to the Field Inspection Section and will be doing special projects and administrative work in addition to some field duties. He will continue to help out with the Capacity Development program review.

Jackie Tyler will be retiring from service on April 11, 2003. Please help us in wishing her a long and peaceful retirement. She will surely be missed. Patricia Conner has joined the Operator Certification staff as an administrative assistant. This should get us through the transition until we are back to full staff.

The Stage 1 Disinfectants and Disinfection By-Products Rule (Stage 1 DBPR) found at 62 FR 69390-69476, published December 16, 1998, Volume 63, Number 241, is in effect for surface water systems and ground water systems under the direct influence (GWUDI) of surface water systems serving ≥10,000 people. Surface water systems, GWUDI serving <10,000 people, and all groundwater systems must comply with the Stage 1 DBPR by January 1, 2004. Further information can be found at www.epa.gov/safewater/mdbp/implement.html.

Drinking Water Infrastructure Needs Survey: Respond for $$$

Why should you take the time to complete the Drinking Water Infrastructure Needs Survey (DWINS) if it is voluntary? **Because your response means money for Indiana!** Demonstrating your infrastructure needs over the next 20 years will determine the allocation of Drinking Water State Revolving Fund (DWSRF) monies for Indiana. The allotment of DWSRF State grants is derived from State drinking water needs identified in the most recent Drinking Water Needs Survey. Each State must receive a minimum of 1% of the national appropriation available to States, but the percentage above that is determined largely by the DWINS results. Based on the last survey, Indiana's percentage of appropriation was a mere 1.17% ($9,144,900) compared to Ohio's 3.05% ($23,742,400) and Michigan's 4.1% ($31,920,000). If your community water system received a DWINS, please put on your wishing cap and fill out the form! This opportunity only knocks once every four years.

IDEM SRF staff, Drinking Water Branch staff, and circuit riders from the Alliance will be glad to help you. Surely you have infrastructure improvements to make over the next 20 years. Telling Congress about them means additional $ for the Indiana DWSRF program to fund them.

For additional information contact Cortney Stover, IDEM SRF Section, at 317/232-8663 or call toll free at 1-800-451-6027.

IDEM's Jan. 2003 Wastewater Operator Certification Manual is now available on-line at: www.in.gov/idem/water/compbr/oaps/wwopcertman.html

This document is included on the book list for the upcoming May 8, 2003 certification exams.

WE NEED YOUR HELP!

by: Research and Technical Practices Committee

The IN AWWA Research and Technical Practices Committee is a new organization formed to address technical challenges encountered by Indiana drinking water providers. One of the first topics we are studying is chlorine demand. A **major** component of chlorine demand is the effects of ammonia on chlorine. Raw water ammonia concentrations can make establishing a free chlorine residual difficult. IDEM has virtually no database on ammonia levels in groundwater systems. We would like to gather information on the presence of ammonia in groundwater supplies. In order to direct our future research projects, we would like to know how many groundwater systems in Indiana are impacted by ammonia.

There is no regulation or MCL on ammonia levels, but high levels under certain circumstances can lead to high nitrite and nitrate levels that are regulated, and are a health hazard. Knowledge about potential ammonia levels in your community's wells would be valuable information for you as an operator. **The test results will be part of a R&TPC database, only! Any data will be anonymous; no data will be published in any way that would reveal individual systems' information.** ***Please help us if you can!***

WHAT ARE WE ASKING YOU TO DO?

Please take a water sample or previously collected ammonia data to your spring 2003 district meeting. Each person that brings in a sample or ammonia data will be eligible for a $25.00 Wal-Mart gift certificate drawing. One entry will be given for each well sample or data brought to the meeting. If you have five wells, you could potentially have five entries. Only one gift certificate will be awarded at each district meeting. Ammonia tests will be performed at the district meeting site. ***Please be sure the sample is raw water containing no chlorine.*** Sampling instructions are on the back of this page.

The Research and Technical Practices Committee thanks you in advance for your assistance!

AMMONIA SAMPLING

The Research and Technical Practices Committee would like to gain more information on the presence of ammonia in groundwater municipal supplies. Raw water ammonia concentrations can make establishing a free chlorine residual difficult. In order to direct our future research projects, we would like to know how many groundwater systems in Indiana are impacted by ammonia. The information collected will be available in a database form at a later date.

Please take your water samples to your spring 2003 district meeting. Each person that brings in a sample will be eligible for a Wal-Mart gift certificate drawing.

Sampling Methodology for Ammonia

1. The well must be running continuously for at least 5 minutes prior to sampling. The water sample must be collected from a tap that is before any water treatment processes. The tap should be adequately flushed and all stagnant water removed before a sample is collected.

2. The samples need to be collected the day they are to be analyzed.

3. Please note the capacity, total depth, and screened interval for each well sampled.

4. Please choose a well where there is a history of problematic chlorine residuals or choose the well in your system with the highest chlorine demand.

5. Please use a clean bottle suitable for a water sample with at least 300 ml of water. The bottles should be filled as close to the top as possible.

6. If it is possible, please take a pH reading and note it on the bottle.

Chlorine- So Important, Yet so Misunderstood

The use of chlorine as a disinfectant in public drinking water is one of the most significant scientific discoveries of the twentieth century. There are several ways to disinfect drinking water with chlorine. The most common method is to apply chlorine gas, but the addition of liquid sodium hypochlorite, commonly known as bleach, is becoming more common. Although the chemicals added may not be same, the chemistry and disinfection process are identical for sodium hypochlorite and chlorine gas (though not for chlorine dioxide).

In order to effectively treat drinking water with chlorine, the chlorine demand of the water to be treated needs to be calculated. Chlorine demand is defined as the amount of chlorine needed to disinfect or oxidize impurities in drinking water. Some of the impurities are ammonia, amino acids, proteins, carbonaceous material, ferrous iron (Fe^{+2}), reduced manganese (Mn^{+2}), reduced sulfur (S^{-2}), and reduced cyanide (CN-). The extra chlorine that is not used for the oxidation of impurities is called the free chlorine residual. It is the free residual that is able to disinfect impurities in the distribution system. Many Indiana water utilities chlorinate their water to maintain a free chlorine residual, but ammonia can make it difficult to maintain. Some utilities add a small amount of ammonia to form chloramines to disinfect their water. Chloramination is a widely accepted practice, but will not be discussed in this article. Ammonia is a compound of particular concern because in practice it requires a ratio of approximately 10 parts of additional chlorine (as Cl_2) to 1 part of ammonia (as NH_4^+-N). Therefore ammonia will increase the amount of chlorine needed to maintain a free chlorine residual. Table 1 illustrates the wide variation in chlorine demand that can be observed for different wells at the same water treatment plant. This article will explain how to deal with ammonia concentrations in a raw water supply.

Table 1

Chlorine Demand for Two Wells in South Bend, Indiana

	Capacity (GPM)	Iron	Manganese	Ammonia	Chlorine demand (lbs./day)
Well #1	2000	0.13	0.175	0.0	7
Well #2	2382	0.53	0.15	0.42	140

The chlorine demand can be calculated by accounting for the concentration of ammonia, iron, manganese, and hydrogen sulfide in the water. However, there is also a field test method that is more accurate and fairly simple to do. A field test method is summarized below.

FIELD TEST METHOD - CHLORINE DEMAND

General Discussion:

The purpose of this method is to establish the chlorine demand of a water supply and to develop a breakpoint curve in the field. Please note that results are approximations.

Should more accurate results be desired *Standard Methods for the Examination of Water and Wastewater* should be reviewed (See Part 2350 B).

Equipment and Reagent Requirements:

* 1000 mL Glass Beakers (5 to 10)
* 500 mL Vol. Flask (1)
* Jar Test Stirrer (5 or 6 place)

Micro Pipettor (adjustable from 10 uL to 100 uL) & Disposable Micro Tips

* 10 % Sodium Hypochlorite or 5% Bleach. When using the 10% Sodium Hypochlorite solution, dilute the solution with chlorine-free distilled water (50 mL sodium hypochlorite solution and 50 mL water) for a final solution of 5% chlorine.
* Chlorine *Analyzer (DPD* Free & Total C12)

Procedure:

* Fill beakers with 500 mL of water to be tested. Use 500 mL Vol. Flask. Samples are to be collected prior to any chlorine and/or oxidizer addition. Number of beakers to be tested will be determined in the field, based on ammonia concentrations and other organics that will cause chlorine demand.

Inoculate the water in each beaker with increasing amounts of the 5% chlorine solution (e.g. 1, 2, 4, 5, and 10 mg/L). Note that each 10 uL applied to sample is equal to 1 mg/L dosage. See example table below.

Jar No.	Volume of 5% Chlorine Solution Added (uL)	Chlorine Dosage (mg/L)
1	10	1
2	20	2
3	40	4
4	50	5
5	100	10

Stir beakers for a contact time of 30 minutes. Test each beaker for free and total chlorine. Record test results. To determine breakpoint use free chlorine residuals to develop curve.

Breakpoint Chlorination Curve

When we take the results of our chlorine demand test procedure and graph them, we form what is called the "Breakpoint Chlorination Curve." (see figure) On this graph the X-axis represents the amount of applied chlorine that was fed. The Y-axis represents either the amount of total or free DPD chlorine residual found. As you can see, as you add chlorine to the water you will begin oxidizing all organic and inorganic compounds in the water. The chlorine in this region is called combined chlorine because it has "combined" with ammonia present in the raw water to form chloramines. As we continue to increase the amount of chlorine fed, the chlorine will react with the chloramines (oxidizing the ammonia to nitrogen gas), which decreases the chlorine residual. The point where the chlorine concentration is the least is called the "breakpoint" of our curve. Any further additions of chlorine represent "free and available" chlorine. To the left of the "breakpoint" on the curve, you will not have free chlorine, everything is total chlorine. To the right, the test for DPD total chlorine will measure combined chlorine plus free chlorine. In raw waters that do not contain ammonia, the chlorination curve begins at the point where chlorine additions provide "free and available" chlorine in the system.

DPD Free and Total Chlorine Test Results vs. Total Applied Chlorine

One very misunderstood concept is that of total chlorine. People misunderstand the total chlorine DPD test result and think it a measure of the amount of **applied** chlorine that has been fed. It isn't. Running the Field Test Method for chlorine demand *and then* graphing the breakpoint chlorination curve will help give you a better understanding of the differences between the DPD Total Chlorine test result and the Total Applied Chlorine Dosage. The DPD total chlorine test is a procedure *using specific* reagents designed to measure the amount of combined chlorine plus free chlorine in the water. Applied chlorine is the amount of calculated chlorine physically fed to the water.

Chasing a Free Residual

If an operator performs the Chlorine Demand Field Test procedure for their water they will also understand how much applied chlorine they will need to add in order to maintain a 0.2-0mg/L free chlorine residual in their system. Many operators are taught that they have to have the minimum 0.2 mg/L free residual. They keep "cranking up" the rotameter on their chlorinator till they get it. Some of them do not realize how much chlorine they actually had to put in to get it. If they have ammonia in their water the amount of applied chlorine can be extremely high to reach breakpoint and a free residual. Excessive chlorine feed rates can be corrosive to copper in their system. Every operator needs to understand their chlorine demand and why they have to feed *the amount of* chlorine that they do.

Understanding Where They Can Operate On The Chlorine Demand Curve

When ammonia is naturally in ground water, or it is purposely added, chloramines can be formed during chlorination. Many operators do not understand the differences between mono-,di-,and tri-chloramine. Some of the di- and tri-chloramines create unpleasant odors in the water. If you perform the Field Test and graph the results, you can see exactly where you should operate as far as chlorine feed rate is concerned. In this case you would want to feed at a rate to maximize the amount of mono-chloramine

As you can see, the subject of chlorination is very involved. It is much easier to understand once you have performed the Field Test Method for Chlorine Demand and graphed the Breakpoint Chlorination Curve.

PREPARING YOUR DRINKING WATER CONSUMER CONFIDENCE REPORT

By Stacy Jones, Water Quality Specialist, Indiana-American Water Company, Inc.

It's almost July 1, have you done your CCR yet? "What is a CCR?", you might ask, especially if you are new to your job. The CCR is an annual water quality report to your customers that was mandated as part of the "Public Right-to-Know" provisions of the 1996 Safe Drinking Water Act Amendments. The first report was done in 1999, and they have been required annually since then. They are required for all community water systems. So, first things first, let's collect our data.

What do I need to put together my report due this year?
You will need all of your sampling results from 2002, plus your most recent results for any contaminants that you were not required to test in 2002. If anything was collected prior to 1998, don't include it. If you purchase water, get information from the system that you purchase from and include their information in your report too. Okay, now go through your data starting with the most recent results and see which contaminants you have detected. Likely you will have detections on your IOCs, possibly nitrate, lead and copper, sodium, and radionuclides. Hopefully you will not have any other detections, however, if you do, those should also be included in your report. Now you have the raw data to put together the main part of your report, the table of detected contaminants.

Your table of detected contaminants will include information on the contaminant detected, the units of measure, the MCL and MCLG (or Action Level or Treatment Technique, depending on the rule), the level you detected (usually your average level of all your tests in a year – if you collected more than 1 sample), the range of detections (NA if only 1 sample was collected), and potential sources of contamination. EPA and IDEM have set units for each contaminant and a listing of the potential sources in their rules and EPA guidance documents.

Example Table

Contaminant (units)	Year Tested	MCL	MCLG	Amount Detected	Range	Major Sources in Drinking Water
Nitrate (ppm)	2002	10	10	1.3	NA	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium (ppm)	2001	2	2	0.189	NA	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
		Action Level		90th Percentile	# of samples above Action Level	
Copper (ppm)	2000	1.3	1.3	0.754	1 of 10	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)	2000	15	0	6	0 of 10	Corrosion of household plumbing systems; Erosion of natural deposits

Now that I have a table, what do I do?
You will need to include your table and a whole bunch of other required language, only some of which you have any control over the wording. Your basic requirements include the following:

- Information about your water system, including the following:
- Name/phone number of contact person

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- Information on public participation opportunities
- Information for non-English speaking populations, if applicable

- Information on the source or sources of your drinking water, including:
  - Type, name, and location of water sources (don't be too specific, you don't want to tell the terrorists where to find your well or intake)
  - Availability of source water assessment
  - Information on significant sources of contamination, if available
- Definitions
  - Maximum Contaminant Level (MCL) and Maximum Contaminant Level Goal (MCLG) – for all reports
  - Action Level (AL), Treatment Technique (TT), Maximum Residual Disinfectant Level (MRDL), and Maximum Residual Disinfectant Level Goal (MRDLG) – only when used in the report
- Detected Contaminant Table
- Compliance with other drinking water regulations
  - Explanation of violations, potential health effects, and steps taken to correct the violations. You must include information about any and all violations, whether they are MCL violations or just monitoring and reporting violations.
- Required educational information (these must use exact language)
  - Explanation of contaminants and their presence in drinking water
  - Warning for vulnerable populations about *Cryptosporidium*
  - Informational statements on arsenic, nitrate, and lead, if necessary

Now that I have my report together, what do I do with it?
Your CCR must be mailed or otherwise directly delivered to each billing customer. This can be a separate mailing, a bill stuffer, a report hand delivered to each customer, or something left at each residence by a meter reader. Your report must be distributed by July 1. You also need to make a good faith effort to reach people who do not receive water bills. You can do this by posting it on the internet, mailing the report to all postal patrons, advertising the availability of the report in the newspaper or on TV or radio, publishing the entire report in the newspaper, posting the report in public places, delivering it to community organizations, or delivering multiple copies to apartment complexes and large businesses. Once you have done all this, you need to tell IDEM what you did. Your CCR Certification Form is due by October 1.

As you see, this isn't an extremely difficult report to prepare, especially after you have prepared your first report. If you have questions, IDEM is always willing to help. Call them. The CCR contact person is Mike Amick, who can be reached at (317) 308-3292. IDEM can also help you put together your table of detected contaminants by providing you with a listing of your detected contaminants. You can also call the AWWA Small System Mentors for assistance.

Resources
"Preparing your Drinking Water Consumer Confidence Report – Revised Guidance for water suppliers", January 2001, EPA 816-R-01-003, available on EPA's website at http://www.epa.gov/safewater/ccr/ccrguide.pdf

EPA "CCR Writer" software. This can be downloaded at http://www.epa.gov/safewater/ccr/ccrwriter.html

Other EPA resources available at http://www.epa.gov/safewater/ccr1.html

All EPA resources are also available by calling the Safe Drinking Water Hotline at (800) 426-4791.

NEWS ITEMS FROM IDEM OAPS SECTION

The following information emphasizes some important news items that the Operator Assistance and Pretreatment Section (OAPS) at IDEM wants Certified Wastewater Operators to know about. Wastewater continuing education requirements can be found in the Indiana Administrative Code (IAC) – 327 IAC 5-22. The Operator Assistance and Pretreatment Section's website is located at www.in.gov/idem/water/combr/oaps/wwcert.html.

- Contact Hours cannot be "banked" or "rolled over" into future renewal periods. Contact Hours are credited towards the two year renewal period they are taken in. To receive credit for a course you have taken, you must submit a COMPLETE credit report form to IDEM. If the form is incomplete and does not have a current course approval number, you will not receive credit and the form will be sent back to you. Also, please do not submit a certificate of completion for a course you have taken without filling out a credit report form to send with it.

- What is a CEU (Continuing Education Unit) versus a Contact Hour? By definition, one (1) CEU is equivalent to 10 contact hours. (CEU's are what California State University, Sacramento uses in crediting students for having taken one of their courses .) A contact hour is defined as a 50 to 60 minute instructional session given by a qualified instructor. The IDEM approves courses in terms of contact hours.

- The Quality Assurance Manual for Indiana Wastewater Laboratories can be found at the following web address. www.in.gov/idem/water/compbr/oaps/qaqclabs.pdf The manual was presented at the IWEA annual conference in November 2002 and was created specifically as a guidance document for Class I and II NPDES permitted facilities. Please direct any questions or comments about the manual to Barb McDowell at (800) 451-6027, ext. 3-6464 or (317) 233-6464 or via email at bmcdowel@dem.state.in.us .

- If you have moved recently or are planning to, please inform the OAPS staff of your new mailing address so you can receive any updates from our office. Please contact Dyian Jones at (800) 451-6027, ext. 3-0419 or (317) 233-0419 or via email at djones@dem.state.in.us of your new address.

WATER SYSTEM PERMITS - WHAT ARE THEY REALLY?

by: Pat Zaharako, P.E. of Commonwealth Engineers, Inc.

Any "Public Water System" (PWS) in Indiana that wishes to "construct, install, or modify any facility, equipment, or device for any public water supply" must first acquire a permit from the Construction Permit Section of the Drinking Water Branch of the Indiana Department of Environmental Management (IDEM). Facilities include any water main extension – regardless of length. However, a permit is not required for the replacement of similar design and capacity (i.e. replacing a water main with the same size pipe). For limitations of liability reasons, it is a good idea to get IDEM to state in writing that a permit is not required.

Two types of permits exist for application to IDEM: 1) a PWS Construction Permit; or 2) a Notice-of-Intent Letter. For both types of permits, it is necessary that the plans and specifications be prepared and signed by a professional engineer.

The PWS Construction permit requires the PWS information, along with the appropriate attachments for the type of construction proposed. It also has required fees, but many entities are exempt (i.e. municipalities, school corporations, etc.). It also requires the signature of the PWS along with public notice requirements. Once technically and administratively complete, it generally takes 45 to 90 days to receive the final permit back from IDEM.

The Notice-of-Intent Letter is a much simpler, two-page application for water main extensions only. This also requires the PWS information, along with information for the responsible person, engineering firm, and developer. It has a fee schedule similar to the PWS Construction Permit, with the same exceptions. It requires signatures from the responsible person, engineer, developer, and the public water system. It also requires system capacity data, anticipated demand data, and a proposed construction schedule. Upon proper submittal of this information by certified mail, the applicant automatically has his permit-by-rule 30 days later – no formal permit is ever returned by IDEM. Therefore this process is much more streamlined and faster for all involved. For simple water main extensions, this is the way to go.

It is IDEM's stated mission to protect the public health. It tries to ensure the public will have a safe and adequate drinking water supply and that the construction and operation of public water systems will not adversely affect the environment. To help with this goal, IDEM maintains a website with a wealth of information at http://www.in.gov/idem.

For more information on this subject, please feel free to contact Patrick Zaharako at Commonwealth Engineers, Inc. at 317-888-1177 or by e-mail at pzaharako@contactcei.com.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PERMITS, CERTIFICATION, CAPACITY SECTION - CONTACT PERSONS

Mary Hollingsworth, Section Chief	308-3331
Vacant, Secretary	303-3299
Fax	308-3339

CONSTRUCTION/CHEMICAL ADDITION/PERMITS

Arnold Bockrand	308-3302
Heidi Nassiri	308-3362
Romy Manalo	308-3306

OPERATOR CERTIFICATION PROGRAM/ REGISTERED BACKFLOW TESTERS

Ruby Keslar	308-3305
Jackie Tyler	308-3307
Patricia Conner (AA)	308-3304

CROSS CONNECTION CONTROL PROGRAM

Rick Miranda (Special Projects)	308-3300

CAPACITY DEVELOPMENT

Larey Conquergood (Field Inspection Section)	308-3318

IDEM Drinking Water

www.in.gov/idem/water/dwb/index.html

IDEM Wastewater

www.in.gov/idem/water/compbr/compeval/index.html

Indiana Rural Water Association announces its new website: www.indianaruralwater.org

Mailing Address:

P.O. Box 6015
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2525 North Shadeland Avenue
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WASTEWATER CONTACTS

Debbie Dubenetzky, Operator Assistance & Pretreatment Section Chief Acting Compliance Branch Chief	233-5747
Natalie Green, Acting Continuing Education Coordinator	233-0479
Barb McDowell, Laboratory Issues & Exam Study Materials	233-6464
Christine Hightower, Operator Exam Applications	232-8666

OTHER NUMBERS

EPA Safe Drinking Water Hotline
800/426/4791
www.epa.gov/safewater

IDEM Environmental Helpline
800/451-6027

DNR
877/928-3755
DNR Water Well Record on line web site:
www.state.in.us/dnr/water/waterwell

All phone numbers are area code 317 unless otherwise indicated.

AWWA MENTORS PROGRAM

The persons listed below have volunteered to be primary contacts as part of our "Mentors Program". Please contact any of them for advice and information. If these primary mentors are unable to assist you, they will direct you to others that can. Additionally, you may contact any of the Small Systems Committee members, AWWA Officers, or District Presidents. Mentors and others will speak to you as peers only. Please keep in mind that IDEM has final regulatory oversight.

Bob Leible
(Water Quality Issues)
Indiana-American Water of Kokomo
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317-263-6469
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District Presidents

Central District President
Vince Sommers
Clark Dietz, Inc.
317-259-4644 – Office
317-259-4660 - Fax

Northeast District President
John Muford
Town of North Manchester
260-982-9800 - Office
260-982-1525 - Fax

Northwest District President
Bruno Trimboli
Mishawaka Utilities, Water Division
219-258-1652 - Office
219-258-1711 - Fax

Southeast District President
Roger Maynard
Indiana-American Water Co.
812-282-8203 - Office
812-284-3541 - Fax

Southwest District President
Darrel Heisler
Indiana-American Water Co.
812-853-3356 - Office
812-853-7553 - Fax

IDEM OWQ Drinking Water Inspection Areas - 2003

COUNTY	COUNTY NAME	INSPECTOR	COUNTY	COUNTY NAME	INSPECTOR
1	ADAMS	PAUL DICK	47	LAWRENCE	KEN BROWN
2	ALLEN	PAUL DICK	48	MADISON	CAROLYN CHAPPELL
3	BARTHOLOMEW	KEN BROWN	49	MARION	CHRIS HOESLI
4	BENTON	PAUL MAHONEY	50	MARSHALL	DAN PLATH
5	BLACKFORD	PAUL DICK	51	MARTIN	PATRICIA TURNER
6	BOONE	CHRIS HOESLI	52	MIAMI	PAUL DICK
7	BROWN	KEN BROWN	53	MONROE	KEN BROWN
8	CARROLL	CHRIS HOESLI	54	MONTGOMERY	CHRIS HOESLI
9	CASS	CHRIS HOESLI	55	MORGAN	KEN BROWN
10	CLARK	PATRICIA TURNER	56	NEWTON	PAUL MAHONEY
11	CLAY	PATRICIA TURNER	57	NOBLE	LUCIO TERNIEDEN
12	CLINTON	CHRIS HOESLI	58	OHIO	KEN BROWN
13	CRAWFORD	PATRICIA TURNER	59	ORANGE	PATRICIA TURNER
14	DAVIESS	PATRICIA TURNER	60	OWEN	KEN BROWN
15	DEARBORN	KEN BROWN	61	PARKE	WAYNE BRATTAIN
16	DECATUR	KEN BROWN	62	PERRY	PATRICIA TURNER
17	DEKALB	LUCIO TERNIEDEN	63	PIKE	PATRICIA TURNER
18	DELAWARE	JIM DAVIS	64	PORTER	PAUL MAHONEY
19	DUBOIS	PATRICIA TURNER	65	POSEY	PATRICIA TURNER
20	ELKHART	DAN PLATH	66	PULASKI	PAUL MAHONEY
21	FAYETTE	CAROLYN CHAPPELL	67	PUTNAM	WAYNE BRATTAIN
22	FLOYD	PATRICIA TURNER	68	RANDOLPH	JIM DAVIS
23	FOUNTAIN	WAYNE BRATTAIN	69	RIPLEY	KEN BROWN
24	FRANKLIN	KEN BROWN	70	RUSH	CAROLYN CHAPPELL
25	FULTON	DAN PLATH	71	ST. JOSEPH	DAN PLATH
26	GIBSON	PATRICIA TURNER	72	SCOTT	KEN BROWN
27	GRANT	PAUL DICK	73	SHELBY	CAROLYN CHAPPELL
28	GREENE	PATRICIA TURNER	74	SPENCER	PATRICIA TURNER
29	HAMILTON	CHRIS HOESLI	75	STARKE	DAN PLATH
30	HANCOCK	CAROLYN CHAPPELL	76	STEUBEN	LUCIO TERNIEDEN
31	HARRISON	PATRICIA TURNER	77	SULLIVAN	PATRICIA TURNER
32	HENDRICKS	WAYNE BRATTAIN	78	SWITZERLAND	KEN BROWN
33	HENRY	CAROLYN CHAPPELL	79	TIPPECANOE	WAYNE BRATTAIN
34	HOWARD	CAROLYN CHAPPELL	80	TIPTON	CAROLYN CHAPPELL
35	HUNTINGTON	PAUL DICK	81	UNION	CAROLYN CHAPPELL
36	JACKSON	KEN BROWN	82	VANDERBURGH	PATRICIA TURNER
37	JASPER	PAUL MAHONEY	83	VERMILLION	WAYNE BRATTAIN
38	JAY	JIM DAVIS	84	VIGO	PATRICIA TURNER
39	JEFFERSON	KEN BROWN	85	WABASH	PAUL DICK
40	JENNINGS	KEN BROWN	86	WARREN	WAYNE BRATTAIN
41	JOHNSON	KEN BROWN	87	WARRICK	PATRICIA TURNER
42	KNOX	PATRICIA TURNER	88	WASHINGTON	PATRICIA TURNER
43	KOSCIUSKO	LUCIO TERNIEDEN	89	WAYNE	JIM DAVIS
44	LAGRANGE	LUCIO TERNIEDEN	90	WELLS	PAUL DICK
45	LAKE	PAUL MAHONEY	91	WHITE	CHRIS HOESLI
46	LAPORTE	PAUL MAHONEY	92	WHITLEY	PAUL DICK

Please visit AWWA's website (www.awwa.org) for additional information regarding continuing education and professional development offerings. Materials and instruction are available through a variety of media, from traditional seminars to online courses, teleconferences, and webcasts.

Ed Zook wishes to thank everyone for the cards and messages of support while he's been recovering from knee surgery!

AMERICAN WATER WORKS ASSOCIATION
INDIVIDUAL MEMBERSHIP APPLICATION

American Water Works Association

FAX (303) 347-0804 Phone 1-800-926-7337/303-794-7711
6666 W. Quincy Avenue/Denver, CO 80235
www.awwa.org

For AWWA Use Only

Have you ever been a member of AWWA?_____
When?_____
Member No._____

Please furnish your preferred mailing address below (Indicate whether business or home): ❑ Business ❑ Home

❑ Mr.
❑ Mrs.
❑ Ms.
❑ Dr.

First Name | Middle Initial | Last Name | Suffix

Exact Street Address | (P.O. Box or Mail Stop)

City | State or Province | Zip or Postal Code

Title

Company Name | E-mail Address

Home Phone | Business Phone | Business Fax

Applicant's Signature | Date

Signature of AWWA Member Endorsing Application (Optional) | Endorsing Member Number

Is your company a current member of AWWA?_____If not, please provide your company's main address if different from above:

Company Name | Main Business Address

City | State/Province | Zip or Postal Code

ANNUAL DUES:

	$114-Active Grade Code 02	$57-Operations/Administrative Grade Code 06 (For operator or administrative level personnel or employees of small utilities. Will not receive *Journal AWWA*.)	$36-Student Grade Code 14	$150-International Grade Code 03

ANNUAL DUES $ _____

Section Assessment* _____

Multi-Section Option† _____

TOTAL DUE $ _____

Make check payable to AWWA (U.S. funds only).
❑ MasterCard ❑ VISA ❑ Send Invoice
❑ American Express

Card No. _____ Exp. Date _____

PREPAYMENT OF ONE YEAR'S DUES REQUIRED
No action can be taken on this application until payment is received.

Dues amount guaranteed through December 31, 2003.

*Section Assessment - AWWA has 43 local sections. Your section is determined by your address. However, some sections require additional annual fees to better serve their local members. Section assessments are mandatory for applicants with addresses as shown:

Please find your Section Assessment fee in the table at right and enter the total on the line reading "Section Assessment."

ADDRESS	ACTIVE (02)	OPERATIONS (06)	STUDENT (14)
Alabama, Mississippi	$20	$20	-
Alberta, Manitoba, N.W. Territories, Saskatchewan	$10	$10	-
California, Nevada	$17	-	-
Connecticut	$10	-	-
Florida, Minnesota, South Carolina, Texas	$10	$10	-
Georgia	$28	$28	$5
Illinois	$ 9	$5	-
Iowa, Idaho (western), Oregon, Washington	$11	-	-
Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	$50	$20	-
Missouri	$7	$3	-
New Jersey	$15	$10	-
New York	$15	$8	-
Pennsylvania	$15	$5	-

ALL APPLICANTS SHOULD COMPLETE

BUSINESS AND INDUSTRY
A. Public Water Supply Utility—Municipally Owned
B. Public Water Supply Utility—Investor Owned
C. Governmental—Federal, State, Local
D. Consultant
E. Contractor
F. Private Industrial Systems or Water Wholesaler
G. Manufacturer of Equipment & Supplies including Representatives
H. Distributors of Equipment & Supplies including Representatives
I. Educational Institutions, Faculty and Students, Libraries, and Other Related Organizations
J. Fully Retired
K. Research Labs
L. Unreported

CHECK FIELD(S) SERVED:
5 ❑ Water Supply Only 7 ❑ Wastewater Only
9 ❑ Both 3 ❑ Other

JOB TITLE
A. Executive-Gen'l Mgr., Commissioner, Board Member, City Mgr., Mayor, President, Vice-President, Owner, Partner, Director, etc.
B. Management-Division Head, Section Head, Mgr., Chief Engineer, Comptroller, etc.
C. Engineering/non-managerial-Civil Engr., Mech. Engr. Envir. Engr., Planning Mgr., Field Engr., Systems Designer, etc.
D. Scientific/non-managerial-Chemist, Biologist, Biophysicist, Researcher, Analyst, etc.
E. Purchasing-Purchasing Agent, Procurement Specialist, Buyer, etc.
F. Operations-Foreman, Operator, Maintenance, Crewman, Service Rep., etc.
G. Marketing & Sales/non-managerial-Mkt. Analyst, Mkt. Rep., Salesman, Sales Rep., etc.
H. Other (describe) _____
_____
I. Professorial - Teacher, Educator, etc.

Completion of this information is optional.

AWWA maintains profile data for use in developing additional programs and services to meet the diverse needs of our members.

Birth Date
_____/_____/_____

Race/Ethnic Identification: (check one)
❑ 1 American Indian/Alaskan Native
❑ 2 Asian/Pacific-Islander
❑ 3 African American
❑ 4 Hispanic
❑ 5 White (Non-Hispanic)
❑ 6 Other

Gender: (check one)
❑ F Female ❑ M Male

† MULTI-SECTION MEMBERSHIP OPTION In addition to your own section membership, you may also join other AWWA section(s). This allows you to receive information on events and activities from other local sections. If this is of interest to you, call 1-800-926-7337 for multi-section information and fees.

The following information is for USPS Standard class mailing requirements ONLY: In some AWWA sections, a portion of the section allotment equal to 50 percent or more of the domestic subscription rate charged for the section periodical will be allocated toward a subscription of that periodical. Dues allocated for each publication members receive: *Journal* $30 *MainStream* $6 *Opflow* $6

Small Systems Committee
INDIANA SECTION AWWA

2984 Crestwood Lane
Danville, IN 46122-8500

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Indiana Section AWWA:
www.inawwa.org

American Water Works Association:
www.awwa.org

EPA Drinking Water Hotline:
www.epa.gov/OGWDW

MARK YOUR CALENDARS!!

To add dates to this section, contact any Small Systems Committee Member.

April 21-23, 2003 -
Indiana Rural Water Association - Annual Spring Conference - Holiday Inn; Columbus, Indiana. For more information go to www.indianaruralwater.org or contact Odetta Cadwell at 317-402-7349. Walk in registrations welcomed!

April 29-May 1, 2003 -
Hoosier Safety Council at West Lafayette. Contact: John Robison; 800-537-5346

May 7, 2003 -
AWWA Southwest District Spring Meeting at Newburgh - For more information contact: Darrel Heisler; 812-853-3356

May 8, 2003 -
Wastewater Operator Certification Exam. Contact: Debbie Dubenetzky; 317-233-5747.

May 9, 2003 -
AWWA Southeast District Spring Meeting at Edinburgh - For more information contact: Roger Maynard; 812-218-1512

May 9, 2003 -
Water Operator Certification Test Prep Course; IDEM Offices; 2525 N Shadeland Avenue; Indianapolis, Indiana. For more information contact: Jeff Robinson; 317-885-2409

May 15, 2003 -
AWWA Central District Spring Meeting at Greenwood - For more information contact: Dan Hilton; 317-831-3385

May 16, 2003 -
AWWA Northwest District Spring Meeting at Logansport - For more information contact: Bruno Trimboli; 574-258-1652

May 16, 2003 -
Water Operator Certification Examination. Contact: Operator Certification Assistance Line at 317-308-3307. Applications for taking this exam must have been submitted and postmarked no later than midnight April 1, 2003.

May 22, 2003 -
AWWA Northeast District Spring Meeting at Wabash - For more information contact: John Mugford; 219-982-2993

August 26-28, 2003 -
Indiana Street Commissioners Convention; Indianapolis, Indiana. For more information contact: Larry Lee, Lebanon Street Department; 765-482-8870

January 1, 2004 -
Surface water systems, GWUDI serving <10,000 people, and all groundwater systems must comply with the Stage 1 DBPR by January 1, 2004.

June 30, 2004 –
Deadline for Vulnerability Assessments and Emergency Response Planning submittals for Water Systems of more than 3,300 served but less than 50,000 served.