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Volume IV – Spring 2008



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Waterways is the official publication of the Illinois Rural Water Association, P.O. Box 6049, Taylorville, Illinois 62568, and is published quarterly for distribution to members as well as other industry associations and friends. Articles and photographs are encouraged. Advertising and submissions should be mailed to the above address or e-mail us at ilrwadb@ilrwa.org.

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IRWA's Mission Statement

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

ON THE COVER...

Picture of geese near a creek on Flagg Road northeast of Dixon, Illinois taken by Gary Chase.

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I am certain that anyone with a television, radio or newspaper subscription has seen or heard news accounts of pharmaceuticals being found in drinking water. When this news story broke it seemed like every media outlet was all over it. Headlines were screaming that “Pharmaceuticals were Fouling Our Waters”, “Drugs Found in the Water” and (my personal favorite) “Sex Hormones Found in Drinking Water”. With all of the hype over this new “discovery” more noteworthy news was being shoved back to page three or beyond. You know - those pages that only people that are truly interested in the news will read. After all the headline pages are most generally geared towards what would play well at the water cooler in the office. Let’s not have facts and true science get in the way. But I digress.

It was while all of these reports were playing out in the headlines that an article appeared (if memory serves me correct) on page 4 of the local paper that I happened to be reading. In this article it was being reported that an outbreak of salmonella poisoning in a small Colorado town had been tracked to the city's water supply. At that time more than 100 consumers of Alamosa, Colorado’s public water supply had become ill from drinking the water. I thought WOW how can this be? This only happens in third world countries and we certainly haven’t fallen back that far. Why have we not heard anything of this before (oh yeah, refer back to the opening paragraph)?

I wanted to understand what this thing called salmonella was and how it could survive in drinking water. After

all, the only other times you hear of this particular type of poisoning is when a number of people are sickened after a family reunion, church social or some other like gathering. Since the symptoms for salmonella take anywhere from 12 to 72 hours to manifest themselves, it is usually determined that the source of the outbreak is some sort of common denominator that is no longer available for testing. To satisfy my curiosity



I fired up the trusty computer and went to the Center for Disease Control’s website (www.cdc.gov) for a little enlightening. This is what I found out.

Salmonella (short for salmonellosis) has a clinical definition of - and I quote - “An illness of variable severity commonly manifested by diarrhea, abdominal pain, nausea, and sometimes vomiting. Asymptomatic infections may occur, and the organism may cause extraintestinal infections.” Sounds like many other illnesses that are out there but, for sure, definitely something to be avoided!

There are many different kinds of salmonella bacteria and are found in every region of the United States as well as throughout the world and is most commonly spread by eating foods contaminated with animal feces. These foods are often of animal origin, such as beef, poultry, milk, or eggs. However, all foods including raw vegetables can become contaminated. Infected food handlers who do not wash their hands with soap and water after using the bathroom have been known to spread the bacteria to the food they are preparing. Salmonella can also be present in water sources such as private and public wells that have somehow become contaminated with waste that might have entered the water from sewage overflows, agricultural runoff or storm water infiltration. More often than not this sort of contamination is found to be in private wells and

continued on page 5

An advertisement for Ressler & Associates, Inc. The background is a close-up of a metal chain link partially submerged in water, with ripples visible. The text is white and centered. At the bottom right, there is a logo for Ressler & Associates, Inc. and contact information.

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not public ones. This is due mainly to the awareness of the water professionals dealing with public supplies and, for the most part, disinfection measures.

As was the case in Alamosa, some sufferers will experience severe diarrhea and may need to be hospitalized. These people, usually the elderly, infants, and those with weakened immune systems could have the bacteria spread from the intestines to the bloodstream and then be transported throughout the rest of the body. If treatment is not sought in a timely manner, some cases of these infections could possibly result in death.

So, what happened in Alamosa that could have caused such a widespread outbreak? As of this writing no-one is certain how the bacteria got into the system – only that it was in the system. The

water professionals of Illinois that might be reading this article are probably speculating that there surely must be some sort of contamination at the supply's source of water. That was proven to be wrong. The city's deep well was tested and proved to be negative for the bacteria. At this point it should be noted that the water supply for the city of 8500 does not chemically disinfect its water and has issued a bottled water notice. All residents are being advised not to drink or cook with the tap water but use bottled water instead.

The bottled water notice will be in effect until the system can be flushed and disinfected with chlorine, a process that could take anywhere from one to three weeks. It has been reported in some news accounts that once the system has

been disinfected the chlorination equipment would remain in place. Hopefully, it will not only remain in place, but be put to use as well.

At last count, the number of cases exceeded 200 and authorities were still looking for the cause - a cause that might not ever be determined. Even if the proverbial "smoking gun" is never found, then at least officials are being forced to take a long and hard look at their water supply and determine ways to best protect it from incidents like this being repeated in the future. Unfortunately for the residents of Alamosa, this has been a reactive response instead of a proactive one. Let's all be diligent out there. The health and well being of your consumers rests squarely upon your shoulders. If you ever feel that the burden is getting to be too much, give us a call. We are always available to help lighten your load. 💧



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Fire Hydrant Flushing

by Perry Musgrave, District 8 Board Member

Spring has sprung so you know what that means golfing, fishing, motorcycle riding, mushroom hunting and gardening. It also means spring



fire hydrant flushing is here. Just like we change our clocks twice a year and change the batteries in our smoke alarms, we should also flush our hydrants twice a year. Because flushing is the single most powerful tool available to maintain quality in a water distribution system.

Before we flush the first hydrant we first need to notify the public when we will be flushing and they may experience colored water but it is still safe. Next, we need a good map. It will tell us the location of hydrants and line size so we will know what flows we should expect. When we go to the field we need to start at the hydrant closest to the source water and work out to the farthest point in our system doing our dead ends last.

Conventional flushing in looped systems results in water flowing from all directions and generates a lower flow velocity and less scouring of the pipes. Unidirectional flushing is water flowing toward the hydrant in only one direction resulting in higher flow veloci-



ty, more scouring and better cleaning of the pipes and uses about 40% less water than conventional flushing. This is achieved by shutting valves in your system and allowing water to flow to the hydrant in only one direction.

As we flush our hydrants we need to check how many gpm each hydrant puts out keeping good records so they can be color coded.



Hydrant bonnet color codes are red = 0-499 gpm, yellow = 500-999 gpm, orange = 1,000-1,499 gpm, and green = 1,500 or more gpm. Other things we should check for are leaks, drainage problems, lubrication, nozzles, caps, grade, and have at least a 3 foot clearance around the hydrant.

You will find that flushing your hydrants twice a year will give you great benefits. It will immediately improve water quality, eliminate taste and odor problems, dislodge and remove biofilm without damaging pipes, reduce disinfection demand system wide, curb bacteria re-growth, control corrosion, restore flows and pressures,



diminish potential for waterborne disease outbreaks, eliminate dirty water complaints during system flushing and gives you peace of mind that your hydrants will work when needed. So this spring and fall don't forget to flush!💧



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Be Prepared for the Hawk

by John Bell, Circuit Rider #3

Spring weather, I hope, is just around the corner. Every spring the wife and I have made the necessary preparations and hung out our hummingbird feeder. The little rascals are fun to watch. This last winter we decided that we would go a step further and get a few feeders and put out some bird seed. The view out our kitchen window of all the different birds that were attracted to the feeders was more than we anticipated. Cardinals, Cowbirds, Blue jays, Finches, Mourning Doves and Junco's are a few of the birds that came to the feeders on a regular basis. Then one morning no birds were around the feeders, in the nearby Redbud tree or for that matter even in the back yard. I then noticed sitting on our neighbor's fence was a hawk. The birds had their plans abruptly changed.

It's funny how things can get into a routine and out of nowhere the unexpected happens. A recent situation brought this thought full circle. A community in

southern Illinois recently had their water and sewer operator fall ill. The operator had been struggling with his health for some time but always managed to have the utilities cared for in a timely and proper manner. Inquiries were made to IRWA concerning the certification requirements if it became necessary for the community to bring in an assistant operator. Each time the operator seemed to recover and the need for an assistant operator was put on hold. Then the hawk arrived. Plans were abruptly changed. The operator was in the hospital and unable to attend to his normal duties. IRWA and EPA were contacted by the community and with proper guidance and direction and some on site assistance the community was quickly returned to normal operation.

A nearby certified operator is going to assist the community until the



operator gets back on his feet and can return. We all hope that the operator's return will be soon. He loves his job and his community. Water and sewer operators are special people in my book, but on occasion the hawk arrives. I hope all of you think of IRWA as a source of help when the hawk is around and also when he is not. 💧

An oval-shaped advertisement with a dark background and white text. The text reads: "Thomas A. Newell Professional Cleaning Sand and Rock filters Phone 217-644-3087 R.R. Box 13 Strasburg, Illinois 62445 www.thomasnewell.com". There is a small white cross symbol in the bottom right corner of the oval.

A rectangular advertisement with a white background. On the left is a large stylized logo for "GURRY & ASSOCIATES ENGINEERS INC". To the right of the logo, it lists services: "General Municipal Water & Wastewater Systems Water Storage Tanks & Facilities Master Plans Rate Studies". At the bottom, it says "Consulting Engineers Telephone: 618.327.8841" and "PO Box 246 | 243 East Elm Newbyville, IL 62263".

A large rectangular advertisement for "BOXLOK THE VALVE BOX ALIGNMENT DEVICE". It features a vertical image of the device on the left. To the right is a list of features: "Aligns the Gate Valve to the Access Unit", "For use with Cast Iron Valve Boxes or 6\" PVC Pipe Risers", "Two piece design requires no Valve disassembly", "Units are White for easy location of the operation nut", and "Easily fits all AWWA C509 R/S Gate Valves up to 12\". At the bottom, it says "Visit us at: www.boxlok.com" and "EMMA SALES, LLC - P.O. BOX 730 - FAIRVIEW TN 37062 (615-210-9141 615-799-9649 (FAX))". There is a logo for "EMMA SALES" in the bottom right corner.



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Rebuilding a WWTP in Non-compliance

by Gary Chase, Wastewater Technician #3

In 2004 Chad Insko decided to accept the challenge of Superintendent of Public Works for the Village of Stillman Valley.

At the time Chad accepted the position at Stillman Valley, the Village of Stillman Valley had numerous non-compliance violations of the NPDES Permit.

Prior to accepting the position at Stillman Valley, Chad had been the assistant Public Works Superintendent for the Village of Pecatonica.

Stillman Valley is located in the North central portion of Ogle County. If you see the two cooling towers releasing steam at the Byron Nuclear Power Plant, Stillman Valley is just east of the cooling towers on Route 72.

When Chad started to sort out the operating procedure, the existing plant was a 1976 Activated Sludge Contact-Stabilization Plant. The Contact-Stabilization Plant was not meeting the Ammonia-Nitrogen requirements at any time and not meeting BOD requirements on numerous occasions. Violation of Suspended Solids were also violated due to the condition of the Activated Sludge.

The Influent flows to the WWTP by gravity, then pumped to the aeration tank by only one centrifugal pump. The second pump was not operating.

The aeration system was coarse bubble. There was only one functioning positive-displacement blower in service, the second blower needed to be overhauled or replaced.

Wasting sludge, when applicable, went to the digester within the plant. Digested sludge was gravity fed to a sludge storage lagoon.

The rebuilding process started with the Influent pumps. Both pumps function on an alternating system. One of the pumps is on a VFD (Variable Frequency Drive) at 380 gallons/minute; the other pump is not on a VFD and discharges 500 gallons/minute. The 500 gallon/minute pump will be put on a VFD this summer.

The Influent pump control panel is also on a dialer-system.

There has been an additional bar screen installed where the Influent enter the Activated Sludge Plant. There is also the original bar screen before the Influent Pumps. This removes more debris that the old bar screen didn't remove.

The new Influent line, into the Activated Sludge plant, was extended to the far end of the aeration tank. This changed the mode of operation to Extended Aeration. The return sludge



line, which was submerged one-foot below the water surface, is now at the same elevation and point as the Influent line.

Chad had a welding contractor fabricate the new air header. This replaced the deteriorated air header. The aeration system is all new fine-bubble, with the exception of the digester.

Wasting the Activated Sludge can be controlled by a timer, which energizes a solenoid valve, or by throttling the air valve. Wasting to the digester is an everyday occurrence.

The aeration requirements is supplied by two 25 H.P. motors driving two positive displacement blowers. Only one unit is required to operate at a time. Air filters are changed quarterly and roof mounted. Chad has intentions on putting the blow-

continued on page 13

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Closeup view of an injection quill.



Chad standing between the air header and the Effluent line.



New welded air header with flexible tubing to drop-pipes in the aeration tank.

er-motors on VFD's in the near future.

To meet the Effluent Dissolved Oxygen requirement of 6.0 mg/l, Chad has installed three air injection quills into the Effluent line from the clarifier. This fine bubble system aerates the Effluent as it falls down the pipe on its way to Stillman Creek.

Sludge is removed from the Sludge Holding Lagoon once per year by Stan Nehring, owner and operator of NIEA (Northern Illinois Environmental Applicators) from Pecatonica, Illinois.


The Village now has standby power with a 100KW Caterpillar

Generator. This unit is also portable if needed at another well site, but has adequate power to operate the WWTP.

The average daily flow to the WWTP is 0.1 MGD, with a maximum daily flow of 0.2 MGD. The WWTP has been meeting all NPDES parameters since all systems have been upgraded. Chad uses the EDMR system for the monthly reports.

Chad and his support staff, Dean Insko and Brad Carter maintain the Water, Wastewater, Streets and Parks.

Good Job to Chad and his Staff. 💧



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**NRWA Board Member Charles
Hilton speaking at the opening
session**



**Outgoing IRWA Board Member,
Ron Cowles, accepting an award
for his years of service**



**IRWA Board President Greg
Bates speaking at the opening
session**



**Water Taste Test Judges: Tom
Rodebaugh, Wendy DeLong &
Charles Hilton**



**Grand Prize Winner—
Chris McKibben—
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What is stress

Stress is a part of daily life. Everyone has stress. Some people appear to have more stress than others. Stress is one way we react to specific events in our life. There are times when you might feel that too much is happening at once and feel overwhelmed. Other times, you feel the pressure of time or a deadline and realize you need to take care of something before it is too late. Having been in a similar situation before will create anxiety. How we perceive a situation will effect how we respond to it. There is good stress and bad stress.

Good stress can be a motivator. Knowing that you have an obligation to address and a timeframe. That type of

stressor puts you into action in order to meet a deadline. Or you might be in an unexpected situation where you need to make a split second response in order to avoid danger. This could be slamming your foot on the brake to avoid an accident. Anticipation of a competition or performance will cause tension and nervousness prior to the event. This nervousness is due to an increased flow of adrenaline going through your body. Your body is preparing for the "fight or flight" syndrome. The release of adrenaline prepares your body to take the steps to deal with the situation, including improved focus, strength, stamina and heightened alertness.

People also have bad stress in their lives. Whether we perceive a situation as

being stressful or not depends on previous experiences. One person might see being in a multi tasking job as very stressful, feeling overwhelmed and becoming anxious about their work. Another person might find multi tasking enjoyable because they continue to stay busy and time goes by faster. Your body is capable of dealing with stress for short periods of time. When the stress is ongoing i.e. dealing with a divorce or bankruptcy, this can wear a person down. Long term stress contributes to feeling tired, overwhelmed and contributes to lowered immunity.

The body's reactions to stress

Once you view something as being stressful, whether positive or negative,

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your body reacts to that perception. The response is a survival technique and a defense mechanism. The reaction is referred to as the “fight or flight” response. Either you are going to fight the attacker or you will choose to flee from the threat. This includes increased heart rate and blood pressure, perspiration, hearing and vision become more acute and hands and feet might become colder since blood is being directed to larger muscles in preparation for a fight or to flee. Your body is being prepped to handle the situation. When the threat is over, your body will return to normal.

If your body has difficulty returning to normal, then you would experience stress overload. This is when you stress out too much or have ongoing stress in your life and never get a chance to relax. Pressure in your life might be too intense or go on for too long without a break. People that have experienced trauma are likely to have stress overload. If trauma is not resolved then you might become hypervigilant, a sense of being overly aware of possible danger. You might always be “on guard.” Stress overload has an emotional and physical effect on the body. This could include panic attacks, depression, sleep problems, physical pain i.e. headaches and allergies as well as abuse of alcohol or other drugs. Having unresolved trauma will effect your perception. Situations that might not have caused tension prior to the trauma can have the ability to create anxiety after the trauma. Becoming aware of how your perception has changed and seeking support to address the trauma issue can be helpful to reduce ongoing stressors and to reduce anxiety. Seeking counseling that focuses on cognitive perceptions will help to decrease hypervigilance and will help to reduce the likelihood of continuing to be retraumatized. In addition, your body has

memory of the event as well. Being able to release that reaction to the memory of the event from your body will help to reduce stress overload and triggers.

Stress and control

Stress is contributed to the desire to be in control. This not only includes control over yourself, but control over other people and your environment. Trying to control others and your environment, however, is impossible. You only have control over your own thoughts and actions. In order to relieve stress and anxiety it is important to let go of trying to control things outside of yourself. We are unable to foresee the future and cannot control what events will happen next. Focusing on future potential problems contributes to anxiety. On the other hand, people are able to prepare for things that might occur and have a plan of how you would like to respond to events. This could be as simple as having a repair kit in your car for getting a flat tire or preparation for an interview and the questions that might be asked during the interview process.

Part of living life is that things always change. Change is normal. How you perceive something will impact how you react to it. This is where the fight or flight reaction occurs. You can decide to be proactive and address the situation. Making a choice to take care of things when they occur. Or you can expend a lot of energy avoiding issues and letting them build. Taking action will actually help to reduce stress and anxiety in the long run. In addition, there will be a feeling of empowerment as you begin to deal with problems as they arise. Trust your intuition and creatively think of all ways you could resolve the issue at hand. Even if you try to tackle a problem and don't succeed, you could then view this as a temporary setback. Review what happened and try to approach it differently.

Setbacks can be temporary. Find who your friends are and develop a support system. Another option is to seek counseling in order to have someone that is impartial as part of your support system. You don't have to always take care of problems by yourself. Ask your friends, counselor or other support persons what they think about a situation. They might have ideas that you would not think of on your own. Learning to address problems as they occur will help you to change your perception of things from problems to challenges. Doing so will continue to help you build your sense of self esteem and empowerment. Identifying challenges as they occur, developing a plan to deal with the challenge, asking others for their point of view, taking action and keeping focus on the goal you are working toward will help to strengthen your resiliency.

Steps to reduce stress

Each one of us is a unique individual and we all have different experiences throughout our lives that affect our perception. What might be a stressful event for one person, might not be viewed as stressful for someone else. In addition, some activities are more stressful than others. Self care including eating well and getting enough sleep are important for stress reduction. Making time for doing activities that are relaxing is preventative to reducing stress overload. Relaxation is important, but there is no one right way to relax. Some people find that sleeping or going to the beach is relaxing. Others choose to be involved in an enjoyable activity or hobby as a way of relaxing. The goal is to find an activity that allows you to escape from everyday worries and problems. There is no right way to do that. Relieving stress can be done by meditation, exercise or doing an activity. Making the time to care for yourself is a

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priority that helps to reduce stress overload.

As you focus on making positive change in your life that will help to reduce stress and anxiety, be forgiving of yourself if you don't resolve your problems immediately. Being critical of yourself is very easy to do, especially when people close to you have been critical of you for a long period of time. That critical voice can be very loud when you don't get it right the first time. A suggestion is a positive response to the changes you are trying to make and to be forgiving of yourself when things don't go perfectly as planned. These are some suggestions that might work or to come up with your own.

"As things develop, I will, through

listening to guidance from my unconscious, adapt to changing circumstances and grow with them."

"I may not get what I want when I want it; I trust that things will work out in their own good time, for my ultimate benefit, as long as I remain calm and peaceful."


"I may not get what I want at? all, and yet, in remaining calm and attentive, I may discover something else that I need even more than what I thought I wanted."

How you perceive a situation will affect how you respond. Whether you choose to address the issue or to avoid it. If you have a negative perception then you are more likely to experience anxiety and not be able to effectively take care of

the problem. This will then reinforce that you have no control over the outcome and reinforce the perception of being helpless. On the other hand, a positive perception will help you to find a way to deal with the challenge you are presented with. If you choose to take responsibility for your feelings and actions then you are more likely to have a positive outcome. This will rein-

force the sense of resiliency and empowerment. Breaking old patterns of behavior is difficult, especially when trying to do it by yourself. Being willing to look at yourself and to identify changes you would like to make takes a lot of energy and time. The more effort you put into making a positive lifestyle change, the greater the feeling of accomplishment you will experience. Develop a support system, whether family, friends or a counselor. Having someone that helps you to make positive change will increase the likelihood that the change will be long term instead of temporary.

Loren Fogelman is the co-owner of Kolpia Counseling. Her education includes a Bachelors degree in Psychology and a Masters in Community Counseling. She is an Oregon Certified Alcohol and Drug Counselor and an advanced certified EFT practitioner. Since 1984, Loren has been working as a therapist. Her experience includes Mental Health units in hospital settings, schools, residential and outpatient treatment programs. Her specialties include addictions, chronic conditions, trauma, and spirituality. Loren's goal is to help people reach their peak potential, whether personally, professionally or in sports performance. "Part of my approach to counseling involves energy work using the Emotional Freedom Technique (EFT). EFT is the most effective, gentle, yet rapid method for personal growth I have ever found." Maintaining a sense of safety while working on issues is a priority. EFT focuses on perceptions and helps to change negative beliefs into positive ones. EFT has the ability to clear emotional traumas without additional anxiety and to remove physical pain. Contact www.kolpiacounseling.com for a free consultation. 💧



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Digital TV Will Soon Be Here: \$40 Coupons to Help Consumers with Transition

***by Anthony G. Wilhelm, Director,
Consumer Education &
Public Information,
U.S. Department of Commerce***

Imagine watching your favorite primetime TV program, when all of a sudden your analog TV screen goes to black...for good. There is still time to prevent this situation, as long as you know your options.

On February 17, 2009, all full-powered television stations will begin broadcasting only in digital, as required by law. To assist U.S. households with this historic transition, the National Telecommunication and Information Administration, part of the U.S. Department of Commerce, created the TV Converter Box Coupon Program to help Americans continue receiving over-the-air television after February 17, 2009.

Why is television going from analog broadcasting to digital?

The Digital Television Transition and Public Safety Act of 2005 requires broadcasters to broadcast only in digital after February 17, 2009. Digital television promises to provide a clearer picture and more programming options and will free up some of the nation's airwaves for use by emergency responders.

What is the significance of the February 17, 2009 digital TV transition date?

If households receive television programs over-the-air using "rabbit ears" or a rooftop antenna, they must take action to continue using their analog TVs after February 17, 2009. Consumers have three options, which include 1) buying a converter box that will plug into their current analog TV, 2) buying a TV with a digital tuner or 3) connecting their analog TV to cable, satellite or other pay service.

How can the public obtain a \$40 coupon toward purchasing an eligible converter box?

From now through March 31, 2009, all U.S. households are able to request, on a first-come, first-served basis, up to two, \$40 coupons to help pay for the cost of a certified converter box. Converter boxes are expected to cost between \$40 and \$70, however, it is a one-time cost with no monthly service charges. Coupons will expire 90 days after they are mailed and cannot be replaced.

For more information about the TV Converter Box Coupon Program, visit www.DTV2009.gov or call toll free 1-888-388-2009 (1-888-DTV-2009). The hearing impaired may call the TTY number 1-877-530-2634 for information in English, and for information in Spanish, consumers can call TTY number 1-866-495-1161. You can also apply by mail at PO Box 2000, Portland, OR 97208 or by fax at 1-877-388-4632.

Where can the public buy a coupon-eligible converter?

Coupon-eligible converter boxes are only available at certified stores and online retailers where televisions and other consumer electronics are sold, as well as by mail-order. When the coupon is mailed to you, it will include an insert with a list of nearby, participating retailers. You can also go online at www.DTV2009.gov, enter your zip code, and locate participating retailers on a map.

What can the public do to plan for the transition?

Now is the time to identify whether any TV in your home is analog and receives over-the-air programming through "rabbit ears" or a roof-top antenna. Television viewers with these sets that are not connected to a pay TV service will need to take action before February 17, 2009, to ensure their TV sets continue to work. It is important to know your options and make sure your family, friends and neighbors are aware of whether they need to take action before the transition date. The important thing is that no one is left in the dark on February 17, 2009.

The TV transition deadline will be here soon. Working together, we can make this historic digital transition a success for all Americans. 💧

Just for Fun Answer Guide



Our Fiduciary Responsibilities

*by Curtis Ludvigson, Management Technician,
Rural Water Association of Utah*

*Reprinted with permission from
RWAU – taken from the Fall 2007
RWAU issue of the Connector*

What does the word “fiduciary” really mean? Webster says it means:

“Held or holding in trust. Legally responsible for what belongs to another. Of a Trustee; of trust and confidence: A guardian acts in a fiduciary capacity, depending upon public trust and confidence for its value.”

In other words, we are “trusted” to take care of something that really isn’t ours. How does that apply to our positions in our Communities, Districts, Water Companies, etc.?

Certainly, whatever your role is, you have fiduciary responsibilities. Now you may ask yourself a couple questions: “Do they really trust me?” And a more pointed question may be: “Do I deserve their trust?”

As Elected Officials and also employees of your communities you are entrusted to do several things. I would like to address just a few things that I think you are responsible for, that your citizens are depending on you taking care of.

Of course, they depend on you to look after their money. The taxes, water revenues, sewer revenues, and other money isn’t yours, it’s theirs! They count on you to be honest and ethical.

It is very important that you have a good “checks and balances” policy in place and that you follow that policy. You should never have just one person receiving the money, making the deposits, and reconciling the books.

Also, it is not a good policy to have people signing their own checks. Good policies and practices are for the protection of the community, the leaders, and the employees. Don’t allow your policies to be so relaxed that people are tempted to act in a dishonest way.

Part of your responsibilities are to make sure that your Ordinances, Resolutions, By Laws are up to date. You need to know what your laws say.

I visit many places and find that the leaders in the community have not even read these laws. Sometimes they don’t even know that they have them on the books. This is most often a problem as community leaders change.

I would make a suggestion that in your City Councils, Town Boards, District Boards, and Water Company Boards, spend some time in each meeting going over the various laws that you have on your books, making sure everyone involved knows your laws and also the policies that enforce those laws.

This also provides the best opportunity for someone to suggest changes to the laws that govern your community. Now I know it will take time to do this, and you say that you don’t have time. My response to that is, make the time! It’s too important not to!!

Consider for a minute the consequences if you violate your own laws, or if your laws are so outdated that they are more harmful than helpful. There is also the possibility that you don’t have laws on the books at all that cover certain situations.

For example, do your Ordinances, Resolutions, or By Laws address appropriately the subject of water line exten-

sions and who pays for them? Do they address the turning off of someone’s water because of delinquent payment, or mandatory connections to the system, or situations where water is being wasted?

Additionally do you have a law on the books that addresses growth issues and development, including Water Rights and Source Development to accommodate such issues?

These are only a few examples of things that need to be in a good Water Ordinance, Resolution or By Law. Do you have a good Cross Connection law? Have you appropriately adopted Impact Fees? Are you sure that you are abiding by the law with what you charge for a Connection Fee, meaning that you only charge what the connection actually costs in parts, labor, etc.?

These are only a few of the laws that you need to make sure you are adopting and following. I feel that regular review of the Ordinances, Resolutions, and By Laws is vitally important to the success of your community.

Along with that, I would encourage you to evaluate often, at least annually, your rates and fees. It is equally important to make sure that your system is not operating in the “red” with higher expenses than revenues.

Do you follow your Budget and insist that each department or individual involved in the finances make regular reports to the Board or Council? Do you require Purchase Orders and accountability in spending the public’s money? This is a problem that several of our communities have realized and had to deal with.

Remember, it’s better to tackle these

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kinds of problems early on rather than waiting until it's a bigger problem than you can deal with. I'm aware of a few places where different departments have been allowed to have too much free reign and as a result the "budget" has been basically thrown out the window.

I've only scratched the surface when talking of our "Fiduciary

Responsibilities." In your position, your citizens are "Trusting" that you will take good care of what is theirs, even the entire community. Sometimes addressing a better system for "Checks and Balances" is difficult.


It's not easy find time to review and evaluate such things as Ordinances. Requiring folks to follow the "Budget"

isn't always easy. Making increases in rates and fees is usually an unpopular thing to do. However these things are part of your Fiduciary Responsibilities.

I encourage you to be brave as you tackle all the "STUFF" you have to deal with. And don't hesitate to ask for help if we can assist you in any way.

Happy Trails!!! 

SAFETY



Across	Down
<p>1 Gaseous form of substance</p> <p>4 Personal cleanliness</p> <p>7 Matter of unrestricted molecules</p> <p>9 A confined space found in most sewer systems, 2 words</p> <p>14 Gases, vapors, etc. surrounding the Earth</p> <p>17 Most atmospheric monitors will alarm if <19.5% of this gas is present</p> <p>19 Organic combustion takes place at 650 _____</p> <p>20 To prevent or treat _____, keep a person warm and lying down</p> <p>21 Face protection used while pouring chemicals, 2 words</p> <p>22 Protective footwear, _____ shoes, 2 words</p>	<p>1 Blower use required</p> <p>2 Displacing gas from a space</p> <p>3 Head protection</p> <p>5 Lower explosive unit</p> <p>6 Limited access or entry, 2 words</p> <p>8 Common term for odors emanating from a sewer manhole, 2 words</p> <p>10 Used to protect workers during excavations, 2 words</p> <p>11 Labware used to safely transfer small amounts of liquids, 2 words</p> <p>12 Form of eye protection</p> <p>13 Hydrogen Sulfide is considered to be this</p> <p>15 Self contained breathing apparatus, abrv.</p> <p>16 Sewage treatment precipitate containing methane</p> <p>18 Material safety data sheet, abrv.</p> <p>22 Standard operating procedure, abrv.</p>

What Will We Have To Worry About Next?

by Wayne Nelson, IRWA Training Specialist/Field Staff Coordinator

Turn on the television or read the paper and all we hear and read about is how bad our drinking water is in this country. Now the newest fear is that some types of pharmaceuticals have been found in a few of our water systems. Of course, these levels are detected at parts per trillion. Personally I'm not losing sleep over this news because, as Jim Morrison of The Doors sang forty years ago—"No one here gets out alive!" Jim was right. Something is going to kill all of us. If I had to make a list of things that I think will cause my demise water from a public water supply is not even on the list.

Am I making light of a serious health issue that is facing our citizens today. Maybe (but I don't think it is a serious health issue). What I do want to say to many of the experts is "Give it a rest!! I would bet that our final exit from this planet is not caused by a part per trillion of a pill that drowned in the privacy of a restroom. However, there is a chemical compound out there that can be traced back to the deaths of millions. Yet our government still allows this compound to be available to all of our citizens. The respected Ira M. Markwood, a pioneer of the Illinois EPA, tried to warn us many years ago but to no avail. Mr. Markwood has passed on but his words are just as true today as the day he wrote the following article:

"Investigation of the effects of dihydrogen monoxide showed that under certain conditions the substance could be harmful if inhaled or if it came in contact with the skin. If inhaled it was almost invariably fatal. Ingestions in sufficient quantities also had led to death in some recorded cases, and there was reason to believe that it might be a carcinogen. It

was therefore decided to conduct a retrospective investigation of this substance to determine whether there should be a regulation setting a limit on its presence in drinking water. A recommendation concerning this was made.

Some time ago attention was called to the fact that there was a high percentage of dihydrogen monoxide in the drinking water in one of the major cities. It was decided that there would be an investigation into its properties, to determine if it were a hazard. It was found that many people had died from inhaling it; when skin was exposed to it for a long period it had a deleterious effect, particularly when its vapor pressure was equal to or above atmospheric; deaths had been caused by ingesting large quantities; build-up in the body caused swelling and serious health problems; in the crystalline state it was particularly dangerous for long exposures; and it had many other unpleasant attributes, such as bladder failure with continued excessive consumption.

It was decided that a retrospective investigation would be of value and obtaining a federal grant to cover the cost of this work was considered. But, since it appeared that the investigation might be more free to proceed if it were not funded by an arm of the government, efforts to obtain a grant were abandoned.

The first part of the investigation covered Egypt in the time of the Pharaohs. The results of this search indicated that dihydrogen monoxide in its liquid state was a very popular drink. In fact for the purpose of this investigation it can be said that everyone was exposed to it from birth, since, when ingested by the mother, it was also found as an appreciable constituent of mother's milk. It was



found that in its impure state as it occurred in nature it could carry inorganic and organ substances and organisms which could cause illness and death, and at times whole populations exposed to it in this state sickened and died. The technological level at that time did not allow for adequate separation of impurities, so that it was invariably present in its impure state. Further examination of the records indicated that everyone who drank it eventually died, but some people had extraordinary resistance and managed to live to a ripe old age, although they usually had many disabilities at the time of their death. Due to the lack of adequate documentation this usually could not be attributed to dihydrogen monoxide alone.

After it appeared that continuing the study of Egyptian records could add nothing further to this inquiry, attention was turned to the golden age of Greece. Surprisingly, it was found that almost the exact same facts came to light. However, the one thing which differed was that the Greeks made a slight advancement in the technology of purification, but this was limited, and most people did not benefit by it.

The next subject of the investigation was Rome in the time of the Emperors. Again surprisingly the facts duplicated

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themselves, with almost no deviation. It was distressing to find that the primitive purification methods developed by the Greeks had still not come into common use, and therefore the problems caused by the impurities were still present in Rome.

In order to come closer to modern times, the investigation turned to London at the time of the great fire. Amazingly, once more the same findings resulted. Despite the great passage of time since the purification efforts of the Greeks were started, there was no wide-spread use of the technology even at that time. Dihydrogen monoxide was still a great potential hazard.

Bringing the investigation to modern times, it was found that the purification technologies had been refined, and had become widespread, but the other deleterious

effects of dihydrogen monoxide were still affecting the general public. This included inhalation; long time exposure to its vapors at varying vapor pressures and in its crystalline states; ingestion and its effect on body swelling; and other various conditions. Better reporting methods made it possible to provide closer details on the number of person who died by its inhalation or other effects of the substance.

At this point it was decided that it might be advantageous to determine if there were any carcinogenic properties associated with these dismal findings. The investigator therefore looked at the records of a large number of people who had died of cancer within the preceding ten years, and discovered that that all of them had been drinking dihydrogen

monoxide since birth. There was 100% correlation. In order to rule out the effect of any other substance and confirm the cause and effect relationship, the investigator looked at a control group of people who had been isolated in deserts for a long period of time with no access to dihydrogen monoxide. They all died, but none of them died of cancer.

In view of the above, and because high percentages of dihydrogen monoxide have been found universally in drinking water it is suggested that a maximum contaminant level (MCL) with a MCL goal of 0 be set for dihydrogen monoxide, otherwise recognized as H₂O, in drinking water.”

Reprinted with respect to Ira M. Markwood.

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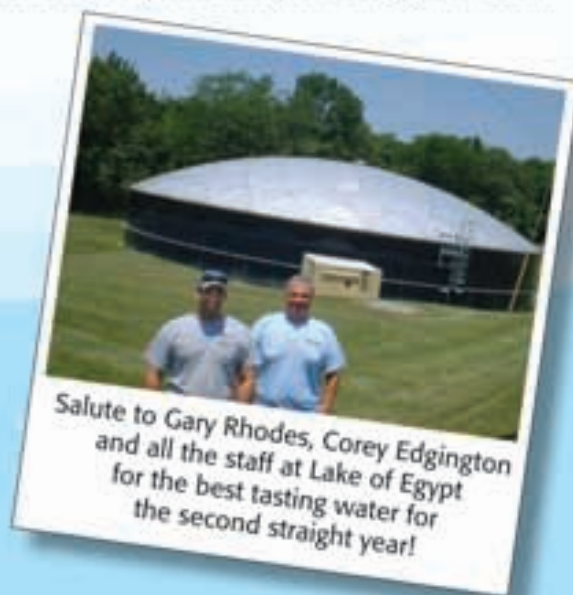
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