2005 Industry Forecast

Professionals review the effects of current and future trends on the water industry

Despite remaining concerns over the uncertain economy and under the influence of a steadily changing marketplace, the water treatment industry continues to push forward. During the last year, the industry saw anything from an increased consumer focus on water quality to a steady consolidation trend, to continuously developing standards. So what does it all mean for the water industry? To assist you in the preparation for a new and successful business year, Water Quality Products *asked various industry professionals to share their outlooks for 2005. The following pages contain an overview of current and upcoming issues and how these may affect us.*

2005—Preparing for the Unexpected

By Tom Bruursema

I suspect most everyone would agree there were a few surprises in 2004 for the drinking water treatment unit industry. The lead issue in Washington, D.C. tops my list. And as I reflect on past years, it seems we never have a shortage of similar events. In a way, it's what makes this area fascinating, and in another way, quite unpredictable. Fortunately, the majority of these past events have proven positive for the industry. We should all feel very good about this, not only in terms of the opportunities it presents, but also in terms of the confidence it offers the consumer in the products they use and rely upon. At the same time, we should appreciate and never lose sight of how critical it is to protect this positive image, and make continued investments in furthering it.

Many of us play a critical role in delivering that positive image, including the manufacturers, dealers, certification bodies and others. For NSF, we are continually impressed with the commitment of the industry to develop better, more reliable products to meet the ever-expanding needs and demands of the market. In turn, and through the input of many, we strive to provide services that likewise stay current with these market changes, enabling us all to be best positioned for the expected and unexpected events.

American National Standards

For 2005, we will continue to work toward further enhancements and expansion of the American National Standards. These Standards have come to be a primary basis by which the industry demonstrates product performance, reliability and safety. The following are key areas of activity already started by the NSF committee, and for which we plan to see closure in 2005.

- Addition of Arsenic III claim under NSF/ANSI Standard 53.
- Addition of Perchlorate claim under NSF/ANSI Standard 53.
- Materials harmonization for POE systems between NSF/ANSI Standard 61 and the NSF/ANSI Standards for drinking water treatment units.
- An American National Standard for bacteria and virus claims of mechanical reduction technologies and perhaps others.

Global Markets

Another area of emphasis for NSF, as it will be for many in the industry, is the global water treatment market. Several key areas of development are expected to conclude in 2005, while others are expected to make significant progress.

- Taiwan will adopt NSF/ANSI Standard 42 as a Chinese National Standard in 2005. Work will begin on the next, projected to be Standard 58.
- NSF and the Japanese Water Purifier Association will continue discussions of harmonization between the NSF and the Japanese Industrial Standards.
- The development of European Norms is expected to continue toward completion of several drafts.
- The World Health Organization will further their efforts on the "International Network to Promote Household Water Treatment and Safe Storage," and their further investigation into the potential relationship between public health and the reduced concentrations of calcium and magnesium in drinking water.

Success Through a United Front

Although it may seem, both for those directly involved with these efforts and those observing from afar, that such activities move at a little more than glacial speed, they are nonetheless efforts that lead us to a better position in addressing the changing market. Achieving the best product at the end is key, and it requires time. It is another prudent factor in protecting the positive image, and further solidifies the strong platform we can all be proud of as we strive to improve the quality of drinking water.

A new year is upon us and NSF would like to express our sincere appreciation to the many individuals and companies that made 2004 a success for us and for the industry at large. We look forward to our collective efforts in the new year, and I'm sure we will discover many more challenges, and yes, opportunities.

About the Author

Tom Bruursema is general manager of the NSF Drinking Water Treatment Unit Program. He can be reached at 734.769.5575, or by e-mail at bruursema@nsf.org.

Trends that will Affect You in 2005

By Peter Censky

It is the time of year again when we take stock of our businesses and make adjustments in our plans. Actually, this should be a regular process we do every few months but we get too busy with the day-to-day fires and sometimes we forget to lift our heads up to see what's down the road.

I can't predict the future any better than you can—but I can take a look at emerging trends and tell you about them. After all, most of the future is just an extension of the past. Huge disruptive changes rarely occur overnight, so we don't have to look too far to get an idea of what we'll be facing in the coming year. You may not feel a direct impact from each of these trends but I guarantee that your business will be influenced in some way by each of them.

Take for instance consolidation, it is a trend that continues apace with previous years. GE just announced they intend to acquire Ionics. Pentair isn't finished with its acquisitions. Of course, Culligan was just acquired.

I'm sure we will see some more of these acquisitions happen over the next few months. I can't predict the impact on each of you, but I do know that consolidation affects such things as product offerings, speed to market, layoffs, strategy changes, etc.—but consolidation goes deeper too.

Over the past decade or so we have seen enormous efficiencies squeezed out of existing companies. GE, Pentair and EcoWater are masters at managing costs, supply chains and manufacturing, and I'm sure there are many others like these in the industry. Consolidation isn't a new trend—it is a common strategy in well-run businesses.

Consumer concerns about water quality are rising and this is no surprise. However, these concerns reached a "tipping point" this past year. A tipping point is when a trend that has been slowly growing suddenly hits a point where everyone begins to take notice and the trend skyrockets.

Early in 2004, we surveyed consumers and found that 64% are concerned about the quality of their drinking water. This is an enormous 20% jump over the study we conducted in 2001. Nearly half of all Americans (45%) stated that they believe their drinking water is not as safe as it should be and this was a 10% increase over the 2001 survey. Obviously this is why people are buying bottled water and drinking water treatment technologies for their homes.

What will be the impact? As consumers become more knowledgeable, they also become more demanding. They will be more aware of price, quality, brand name and product testing. Also, they will be more discerning about whom they will do business with, therefore, professional certification will become more important.

Septic discharge issues will continue to emerge in more and more areas around the country. Why? For a very simple reason—nearly 50% of all new homes are being built with septic systems. And this astonishing number is increasing.

The phenomenon is called "exurbia" and it refers to the massive spread of big cities into the extended suburbs that lie far beyond the old traditional suburbs. These homeowners are finding out (for the first time in their lives) what water costs to acquire, treat and dispose of.

Our dealers are the most sophisticated resource in this new "ownership" of homeowner's water. That's a good thing—but we are still left with the problem of septic field installers who aren't that well educated about water. Their flippant attitude to their customers is often "you can either have a septic system or you can have soft water—take your pick." This is an issue we can often win but it takes case-by-case battles.

European standards are developing rapidly. This will be a good thing for our industry in Europe but the problem Americans face is that our national standards are based on an old English system of inches and feet while the Europeans have been working with metrics forever. Another problem for American companies is that the Europeans are very good at marketing their industrial systems to less-developed countries. They sell them the advantage that spare parts are much easier to obtain in a metric system. Some of these less-developed countries are the emerging markets of the future so Americans have a built-in problem they need to overcome.

The China affect is impacting everyone in the U.S. and overseas as well. Even small manufacturers whose products may not face competition from overseas are dealing with price fluctuations in raw materials. China has been on such a construction binge that most of the steel, brass and other metal capacity is used up. I've heard from member companies who have seen enormous run-ups in the price of brass for instance, and these costs have to be passed on. At the same time, they are often facing competition in the marketplace from similar Chinese products and elsewhere that don't reflect the labor costs or environmental rules that we face in the U.S.

These trends are not all bad news. It is normal to have to face a changing marketplace. New laws, tax rules and operational regulations kick us in the backside with regularity. Make no mistake about it, these changes do have an impact on everyone—from the smallest dealer or manufacturer to the largest. Even your trade association is affected.

About the Author

Peter Censky is executive director of the

Water Quality Association (WQA). Censky is also a member of the Board of Directors of Aqua Europa, Brussels, Belgium. For more information contact WQA at 630.505.0160, or by e-mail at info@mail.wqa.org.

Dr. Leff's 2005 Crystal Ball

(batteries not included)

By Dr. Alan Leff

My global travels expose me to water issues around the world. Some issues are unique and some are general. Not only do I look into 2005 for anticipated changes in the water industry, I consider issues around the globe. Two specific areas, municipal water and bottled water are highlighted.

Municipal Water

One topic of importance for municipal systems is the continuing issue of water rights. The second topic is a new area associated with the World Health Organization (WHO) issuance of the 3rd Edition of the Guidelines for Drinking Water Quality.

Water rights. Who owns the waters (groundwater and surface water) may be defined by riparian rights, but trans-border issues and applications of the rights are still controversial. Annexe 2001 is an example of such a debate. Annexe 2001 is an agreement in process between the Great Lakes States (U.S.) and Provinces (Canada). Balancing water protection with minimal adverse impact on economic growth and stability in light of protectionism and anti-industrialism has been challenging. More discussions of this nature will occur in South Asia and the Middle East.

Digestion of 3rd Edition of Guidelines for Drinking Water Quality. The new WHO document contains more clarity regarding recommendations on how governments should move forward to make more potable water available in developing countries. It is sound judgment to prioritize pathogen-free water as the primary goal. Treating water to remove contaminants that can cause chronic adverse health effects is secondary. Health-based targets have been established for microbiological, chemical and radiological contaminants. Countries will struggle with the amount of information (lots of very useful data included in the text) and how to implement the recommendations.

In particular, the WHO now advocates that municipal water treatment systems adopt Water Safety Plans (WSP). These plans correspond to an engineering fault analysis philosophy to identify the critical control points in the storage, flow and distribution of water in order to minimize the risks of contamination (microbiological, chemical and physical). This is the same approach as Hazard Analysis and Critical Control Points (HACCP) in the food (bottled water) industry. It is a great approach. Municipalities will need to improve water treatment reliability before implementing WSP.

Bottled Water

Consolidation. Consolidation of bottled water plant ownership will continue through 2005. It seems that the latest fad is for venture capital firms to purchase bottled water companies. Although these firms state that they are in the business for the long haul, I suspect that they will turn the bottled water businesses over in three to five years. In 2005 we will find many more medium size companies purchased by venture capitalists. Bottled water businesses that were acquired in the 2002–2003 period were purchased at a premium (large ratio of purchase-price to annual revenue). Far more bargains are available now than two years ago. Look for major consolidation in India and China.

Groundwater stewardship. This topic is similar to the water rights issue described above, except that it is for waters below (ground level). Groundwater is a renewable resource, not like petroleum. Governments have attacked the bottled water industry for regional water quantity problems. Recent studies in the U.S. and Canada have substantiated that bottled water accounts for far less than 0.01% of groundwater removed from aquifers. However, bottled water has far more public exposure and sensitivity than breweries, food manufacturers, golf courses, municipal systems, agriculture and other regional industries. The bottled water industry will continue to be under strong political pressure to pay for its resource and minimize expansion.

Water taking taxation. If government agencies think bottlers are abusing a natural resource and the government needs more revenue to operate, then what better source of income than from the bottled water industry? The industry will face an uphill battle to fight taxation as well as only paying an appropriately allocated share. The only question will be how much will it cost? In the end, the consumers will pay for it anyway.

Hot spots. The places to watch are India

write in 764

write in 776

and China. This is where the hottest action will occur for the bottled water industry. It makes sense since these are the most populated countries in the world and their economies are booming. You can't just feed the economies you must water them. The bottled water industry will grow tremendously in these regions. The governments will try to ensure that quality water is produced. Standards will be consistent with Codex Alimentarius standards for natural mineral water and processed water. Enforcement will be an issue. Watch for growth of international bottled water trade association membership to occur in these countries. Bottlers will look for marketing differentiation by meeting association Model Code requirements.

Note, in Indonesia and the Philippines, there is rapid growth of vended water stations. Governments support this source of potable water. They just want to ensure product quality. This is a less expensive way of getting more potable water into rural areas with minimal direct cost to the government. India and China will see the beginnings of this industry in their countries in 2005.

About the Author

Dr. Alan Leff is managing director of QUASI LLC, which provides training consultative inspections and third-party audits to the food and beverage industries. Leff is a member of the Editorial Advisory Board of *Water Quality Products*. He can be reached at leffa@quasintl.com.

2005 Bottled Water Market

By Joseph K. Doss

Consumer demand for bottled water remains very strong. In 2003, bottled water became the second most consumed packaged beverage in the U.S. behind carbonated soft drinks. And with industry analysts predicting that bottled water's upward trend will continue, the International Bottled Water Association (IBWA), its members and the bottled water industry as a whole will keep working to build on our industry's record of safety, quality and excellence.

Part of this effort, in addition to the daily business of serving IBWA's bottler, supplier and distributor members, is devoted to sharing the facts about bottled water aggressively to counter misinformation perpetrated by industry critics.

One such challenge is the so-called environmental movement, which seeks to portray the bottled water industry as a colossal user of ground water resources. In mounting public misinformation campaigns and seeking to impose restrictive laws—or even outright prohibiting bottlers from operating in a community—these self-styled advocates are setting their sites on the bottled water industry. What do we know that the activists don't? The science and data, which soundly prove that the bottled water industry is a responsible, efficient and minimal user of ground water resources.

The Drinking Water Research Foundation (DWRF), utilizing data from the U.S. Geological Survey (USGS) and bottled water industry, recently completed a study on the relative size of bottled water withdrawals as a portion of all groundwater withdrawals and recharge. The results of the studies demonstrate that bottled water accounts for less than 2/100's of a percent of all groundwater withdrawals in the United States, while being a highly efficient manufacturing process. DWRF found that on average, 87% of the water withdrawn by the bottled water industry is actually bottled for consumption by humans.

Groundwater supplies are continuously "recharged" or replenished by precipitation, thus they are considered "renewable." Ground water is recharged at a rate of 1,270.4 billion gal.

write in 762

write in 763

per day or 463,696 billion gal. per year and bottled water production was found to use an infinitesimal percentage of groundwater recharge in all but one water resource region (Lower Colorado). DWRF further determined that annual bottled water production accounted for only 0.0012% of the nation's total recharge volume.

With communities and lawmakers increasingly working to tackle ground water sustainability issues, some choose to narrow the view to a focus on the bottled water industry, which singles out the bottled water industry—from among the thousands of industrial water users—for scrutiny that will do nothing to protect and preserve renewable groundwater resources and do nothing to arrive at an effective U.S. water policy.

If we are to come together and develop policies that preserve and protect groundwater resources, placing a subjectively narrow focus on the bottled water industry alone will not result in any measurable benefit to those resources. For groundwater policy to be effective, an approach must be comprehensive and based on sound science. In addition, such policies must consider all users of the resource and treat all users equitably. All too often, the advocates ignore facts about the safety and quality of bottled water and the industry's minimal—and responsible—use of renewable groundwater resources.

How does this affect the readers of *Water Quality Products* magazine? As does a rising tide lift all boats, uninformed attacks against the industry's bottlers and the imposition of onerous, expensive regulations and other restrictions can threaten the ability of the industry to thrive and grow; threats that can resonate throughout all sectors of the bottled water industry.

About the Author

Joseph K. Doss is president and CEO of the International Bottled Water Association (IBWA), Alexandria, Va. Doss has extensive experience in food and drug, government affairs, public relations, legal and association management issues. He can be reached at 703.683.5213 x105, or by e-mail at jdoss@ibwa.org.

2005—More Changes on the Horizon

By Jeff Roseman

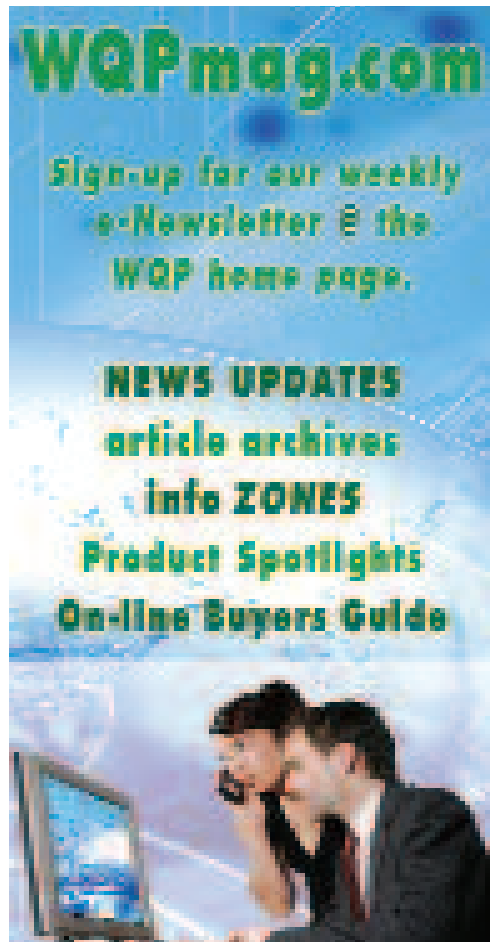
"Plus ca change,
Plus c'est la meme chose,
The more that things change,
The more they stay the same."
—Circumstances – Rush "Hemispheres"

These few lyrics say so much about our society and also about the water industry. Look at the evolution of other industries. Look at the aerospace and airlines industries; have there been changes since the inception of Wilbur and Orville Wright's first flight? Take a look at the automotive industry? All cars aren't black and the makes and models available are unbelievable. Water treatment has been around since time began. There are references in the Bible, treatment practices by the Egyptians and of course, the hydrological cycle is the biggest cleanser of water.

Water treatment technologies have evolved with the inception of RO membranes, ozone, UV, ultra-filtration, ion exchange and other techniques to make water healthier and easier to manage, but the whole concept of market acceptance has stayed stagnant. Despite not evolving like other industries, water treatment continues to provide profits to many dealers, suppliers and manufacturers.

The changes that are evolving after decades are the fact that consumers are becoming aware of their water sources and the media is making them more aware of what they might be consuming. Lead levels in water systems on the East Coast and perchlorate levels on the West Coast are frequently in the news. Consumers want answers and groups such as the Water Quality Association, EPA and the Natural Resources Defense Council (NRDC) are providing information. It is all about educating the consumer, not only on water quality, but also on the technology for treatment. The big change in the water industry today is that water treatment professionals are realizing the need to help create the market, instead of the old way of thinking that they just need to close the deal. If we create the desire for water treatment, the paradigm will change.

Prospecting and cold calling will be a thing of the past. Telemarketing will long be forgotten, because by creating the market, people will want water treatment. Gone will be the days of the dog and pony show with soap and chemical kits of the in-home demos. Gone will be the hard



For reprints of articles from ***Water Quality Products***
Contact: Adrienne Miller at Scranton Gillette Communications
380 E. Northwest Hwy., Suite 200, Des Plaines, IL 60016-2282
tel: 847.391.1036 • fax: 847.390.0408 • e-mail: amiller@sgcmail.com

close and promise of free soap for a year. All those tactics are old school. Consumers today want to be educated and informed and will buy once they have reached an educated decision. It is not about closing the deal, but about opening the mind of the consumer and building their trust.

Big names and independents must meet the new consumer head on. The information is available to everyone, but we, as water professionals, must be consistent in presenting this information. Buyers will look for designations that show them that the sales rep is providing the correct information and that the treatment system will work for their water and application. Water sources are different and uses vary, so not all treatment can be the same. One size does not fit all. Consumers will buy from dealers and sales reps that portray trust and understanding, and are endorsed by groups such as the Water Quality Association. Many may disagree, but over time, regulations will prevail and the consumer will purchase from those that are certified or licensed. The more the industry self polices itself, the longer government interaction will be avoided. Don't stay the same, make a change. *wqp*

About the Author

Jeff Roseman CWS-IV is owner of Aqua Ion Plus Technologies, Inc., La Porte, Ind., and a member of the Editorial Advisory Board of Water Quality Products. He can be reached at 219.362.7279, or by e-mail at jeff@aquaionplus.com.

LearnMore! For more information related to this article, visit the web at www.wqpmag.com/lm.cfm/wq010510

For more information on this subject, write in 1010 on the reader service card.

write in 774