Reaching Out To Health Care Providers

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Invention and intention: two interesting words we use every day, but we probably rarely think of them in juxtaposition to determine what they mean to each other. If we did, surely we would like to conclude that our inventions should always grow from our intentions. But in the real world, of course, life is never so well-behaved. So the point of my talk today is to describe to you something -- we'll call it for now a strategic focus -- that we at MWRA regard as an important invention to help us to be successful in our business. And then to account for how it came about, partly through intention, partly through circumstance and accident, partly through nothing more than management instinct. Now that we have engraved it in our panoply of essential strategic themes, we would like to think that its invention was something we completely intended. But Making Waves is about case studies in modernizing utility management. If our experience is to be useful to others, we should be honest enough to tell it like it was!

This strategic focus consists of the daily attention to the partnerships between ourselves at MWRA and the public health professionals in a myriad of positions in our community, as well as a thorough "transparency" on water quality operational and planning parameters. Those partnerships, which it is our aim to nurture and sustain, are keys to our ability to maximize our effectiveness in the water supplier mission. We aim to advance those partnerships to the next level so that the public health and medical communities can move to the forefront of discussions about water quality and risk, as well as consumer decisions on tap water, bottled water and home filters.

Getting Started: Lead and Copper Rule Results

Let me tell you how this started, where it now has taken us, and where we can follow it into the future.

In October 1992, it was a bit of a shock to open *The Wall Street Journal* and see that in the list of ten communities across the country reporting the worst results for lead in the first round at-the-tap sampling under the Lead and Copper Rule, four were wholesale customer communities of the MWRA. It was then apparent that the orderly planning process in which we were engaging for bringing corrosion control improvements to our major new treatment plant -- still years away -- seemed a very inadequate response to the obvious implication that young children in our service area could be facing unacceptable levels of risk.

What could be done? And with whom could we consult to assure that a course of action would be sound in theory and, also, judged to be wise by our customers? The second consideration was as important as the first. We immediately decided that it would be critical to reach out to experts in local lead risk prevention programs first to discuss our options for the interim and the long-term treatment solution, and second to help us fashion the educational message our consumers needed to hear. We invited a group to work with us that was made up of pediatricians and other community health care providers, public health officials, lead poisoning prevention activists, and local WIC (Women, Infants & Children's) nutrition program staff.

Out of the group came two highly useful recommendations. One was that an MWRA interim corrosion control facility had to be fast-tracked to come on-line well before the scheduled start-up of our permanent new facility -- even though investment in an interim facility would not be made with a guarantee that it would fully ameliorate the exceedances of the lead action levels.

With the group's advocacy for an immediate if imperfect response, emergency procurement and construction procedures were put in place for a $6 million interim treatment facility.

But as aggressively as the public health-interested advisors urged us to move on the new facility, quite a different message came back to us on the planning for an appropriate public education campaign. Do not, we were told, publicize and highlight concern about lead risks in tap water in ways that would undercut the

critical themes of lead risk education in general. Lead risk from contaminated soil and lead-based paint, not from tap water even under the Lead and Copper Rule results observed in some of our communities, was so far and away the major threat to children that our message must not be allowed to dilute the attention to greater risks. By ourselves, would we have reached the same result -- and even if we had, could it have carried the same conviction and moral authority? I doubt it very much. So, we had sound and practical advice from people surely entitled to be listened to. In response we helped to produce a very specific, very narrow information campaign designed to reach particularly the mothers of the youngest children, mothers who might mix baby formula from tap water without cautionary flushing. Indeed, so focused, the educational campaign really became WIC's as much as it was ours. In that respect not only was it more effective than if we had owned the campaign ourselves, but we gained appreciation for our effort from a constituency that now with enthusiasm would endorse our entire program because it was tied to their own assessments of public health risk and would be delivered largely by themselves to their own clients.

Carrying Forward the Model: *Cryptosporidium*

Coincidentally, no sooner than we addressed the lead issues in this manner than the tidal wave of concern about cryptosporidium broke across the water industry in late 1993. We recognized the opportunity to apply what we had learned in dealing with the public health experts and the populations for whom crypto concerns were so serious.

It was a simple and obvious extension of our cross-boundary discussions on lead to step forward together with the Massachusetts Department of Public Health to convene seventy-five physicians, AIDS activists, federal, state and local public health officials and water superintendents into workshops and discussions on the cryptosporidium problem. Our purpose was to help develop the voice that the public health community, not MWRA, would use in assuring a good program of advice and emergency contingency response to crypto concerns. The workshop increased everyone's knowledge, illustrated the value of divergent perspectives, and led to the beginnings of new working relationships. Doctors heard, many for the first time, how we in the water industry monitor water, and how we treat water. We heard first hand the consequences of disease, and how the medical community sets priorities (hint – water is generally low on its list of concerns about the contagion risks).

When we had begun to sense the importance of the consensus growing from this group, we took a simple management step. We merged the mailing lists and contact phone numbers now gathering in several files. Across the top we typed the magic words "MWRA Public Health Advisory Group." To that invention, only a pedestrian and jargon-laden mind would attach the label "stakeholder group." What we really had invented was the *inevitability of our own continuing engagement with the entire community whose names were on those mailing list**s***.

Meanwhile, the operations staff on our overall drinking water quality program was closing in on some important chemistry changes that needed to be made to our water. Required improvements to our residual disinfectant levels were leading to new strategies for chloramination; also our new interim corrosion control facility, now about to come on-line, would give us new capabilities to manage pH and alkalinity levels in our system. With routine and regular contact with local public health officials in our service area, we knew how to reach the critical groups to help bring these changes to the customers. For example, it was through the public health participants that the major task of preparing and reassuring dialysis centers about the importance of our water chemistry changes really was implemented. This was beginning to feel like a real partnership!

What happened next? In 1996, we began a new and regular form of outreach, our monthly publication, *Water Quality Update*, a recap of water quality testing results and evaluations, mailed to scores of public health officials, water departments and local elected officials throughout our service area. 1996 also saw our first workshop bringing local health officers and local water departments together on disinfection issues, both for our own system and as the issues were starting to play out on a national regulatory stage.

Then, as if fate wanted to throw a test at our program, we all were handed a serious challenge. Isn't it interesting how often the dividends of a good idea are unexpected?

Partnership and Crisis Communication

You all recall the furor in Washington. D.C. in the summer of 1996. A run of bad total coliform sampling results caught public health officials unaware and uninformed. In an atmosphere of unfamiliarity and confusion, communications were bungled by all concerned. The ensuing public relations fiasco, complete with on-again/off-again boil water advisories, shattered drinking water confidence in our nation's capital.

What few people know is that Boston had its own TCR regrowth bloom that summer. But MWRA staff and our colleagues at Boston Water and Sewer Commission had already built the base for what needed to be done. Daily coordination between MWRA, Boston Water and Sewer Commission, and the Boston Public Health Commission, together with MWRA's willingness to do additional diagnostic tests on the water and the water system, enabled health officials to comfortably put the results into a larger perspective. All follow-up tests were E. coli negative, and MWRA speciatated all the positive total coliform samples providing full information to health officials and regulators. Public health officials in the City of Boston and the Commonwealth of Massachusetts, far better prepared than their counterparts in Washington both to assess the data and the water system from which it was generated, were able to give assurances, rather than spread confusion, or worse, panic among elected officials and the public.

In October 1998, we had an even more challenging situation involving a four-hour loss of primary disinfection during the start-up of some of our new facilities. Downstream disinfection was boosted to protect customers and no water reached customers without treatment. Long before the affected water had reached the service area, we were on the phone with key health officials. These were people with whom communication was now routine, familiar, substantive, trusting and candid -- and into their hands we were comfortable to entrust key judgments about the wisdom of health warnings or advisories. In the truly collaborative environments that had now been nurtured, face-to-face meetings were quick and easy to arrange, well-considered judgments were exchanged, and orderly communications were offered to political officials and the media.

Collaborative Decisions – Making on Treatment Technology Investment

Of course in 1998 our major effort was to formulate the treatment technology decision for our new $260 million treatment plant - a story which is too long to tell in full today, but has been widely reported throughout the industry. However, a very important piece of that story was its critical links to the years long nurturing of partnership with the public health community.

There are three components that are noteworthy:

First, the significant involvement of local public health officials, advocates, activists and academics in the research and assessment of the specific building blocks of the decision itself. Especially important was the active role the public health community played in framing MWRA technology options in relation to microbial and disinfection by-product risks.

Second, the willingness of public health officials and medical specialists to assess and recommend the holistic and integrated program MWRA sought to develop -- from source water protection to distribution system rehabilitation and modernization -- and the cost-effectiveness of the resource allocations on which the program is built.

Third, MWRA’s reciprocal appreciation that its water supply responsibilities, including funding and program support for significant public health research and investigation into water-based health impacts, and efforts in our service area.

I might expand briefly on the elements in this third area:

- A jointly funded and managed program, with the Department of Public Health and the Boston Public Health Commission, of improved disease surveillance;
- A series of cooperative research programs with local schools of public health to take advantage of new technologies such as testing blood samples for crypto antibodies to both assess and compare MWRA community health with other water systems, as well as to provide a baseline for the last component;

- A commitment to thoroughly evaluate the improvements to public health indicators after our new treatment plant goes on-line. Our Board of Directors specifically included such an evaluation in its votes on the ozonation, watershed protection, and pipeline rehabilitation package it decided on in October 1998.

Needless to say, it was perhaps a natural culmination and outgrowth of our journey that, when the time came for our program choices to be tested in court, *protection and advancement of public health in a cost-effective fashion* has been the litmus test set up by Judge Stearns as the fundamental focus of his inquiry into the experts' evidence and the MWRA's decision process. We could hardly better formulate the test we want applied -- a test that will yield an outcome that we shall all be able to respect.

Outreach to Consumers Starts with Outreach to the Health Community

For the past several years MWRA has been producing and distributing a monthly update on water quality – focused on a series of key audiences. Each month we summarize all the key water quality parameters and send the information to local water superintends, local health officials, and local and state elected officials. Most months it's a bit boring – but that's the point: in risk communication it's important that you regularly communicate the routine boring information to provide the context when there is something out of the ordinary to report.

When it came time to publish a water quality report, the *Consumer Confidence Report*, for all consumers last year, we decided to build on the work already in place with the MWRA monthly report, hoping to push our public health outreach to a higher plane. We conducted focus groups with doctors, used a health literacy consultant from a local public health school, and committed to an extensive outreach effort with public health and health care professionals. One of our goals for the *Consumer Confidence Report* was that our message be reinforced by the health care sector.

With so many steps taken on these various journeys with our public health colleagues, you can well appreciate that we were not discouraged - and certainly not surprised - in the middle of 1999, at the survey results published by the National Environmental Education and Training Foundation. The foundation reported that the public was inclined to place far higher trust in health care providers' advice on water quality than on the information from the perhaps self-interested voice of the water supplier. Yet we also were told by that survey that only a small percentage of people actually receive water supply information from health providers. Focus groups we conducted in the course of preparing our first *Consumer Confidence Report* did help educate us, mostly by illuminating anecdotes, why there was such a dearth of information coming from health care providers. For we learned that doctors in particular actually know very little about water quality, water supply or water issues.

Much of our hard work, therefore, lies ahead. Our goal is to develop and disseminate strong messages about public water supply. Part of that message has to do with the value and usefulness of that water. Part of it has to do with the needs of water suppliers and water systems for modernization and protection.

What we really want is for the message of the healthfulness of tap water, and its relatively low cost compared to the alternative of home filtration or bottled water, to come not from us, but from those who our customers trust – their health care providers.

Where To Go From Here?

There are some important questions we have to ask about our strategy:

Does the public health community care?

Yes. And the most important reason is that public health officials can do the math.

If every household in our service area bought just two bottles of water a week, the annual cost would be almost $100 million. I've never been able to find a health care professional who would say that that's a cost-effective public health investment. We water suppliers have trouble getting that message out. We need to continue to find ways to create and maintain the trust of the public health

community so they will step forward and tell the public what they tell us – that if our customers think they are spending their hard-earned money on alternatives to tap water as an investment in their health, they should be given the information to rethink that probably on erroneous conclusion.

Does the public health community really want to help us?

Yes. If they believe that we're on their program, too. This is a two way street and we must listen and respond to their questions and concerns about water. And to their insistence that our systems are well and carefully run.

With whom do we have to do even more work?

First, people we already know like state Department of Public Health officials and local health officials with whom we've already been involved in activities.

And very important people we still have to meet: like primary care physicians and other providers, medical educators, and everyone who writes a newsletter for HMO customers or the health column in the newspaper.

And we have to make more visits to places we've only started to go: like nursing schools and the health science campuses of our state higher education system. And the professional associations and continuing education meetings where health professionals come together to learn from each other.

And finally, we have to give much greater to crisis planning: so that however small the risk of a water health emergency, we and the public health professionals can provide fast, accurate, understandable public communications and water system management strategies geared to health protection needs.

So this is a work-in-progress--but any good strategy should be. At least we've been able to report some results already achieved and we expect to be able to report more progress as time goes on.

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*Stephen Estes-Smargiassi, MWRA's Director of Waterworks Planning, has assisted in preparation of this paper and with others at MWRA has been heavily involved in the program initiatives it describes.