Safe drinking water

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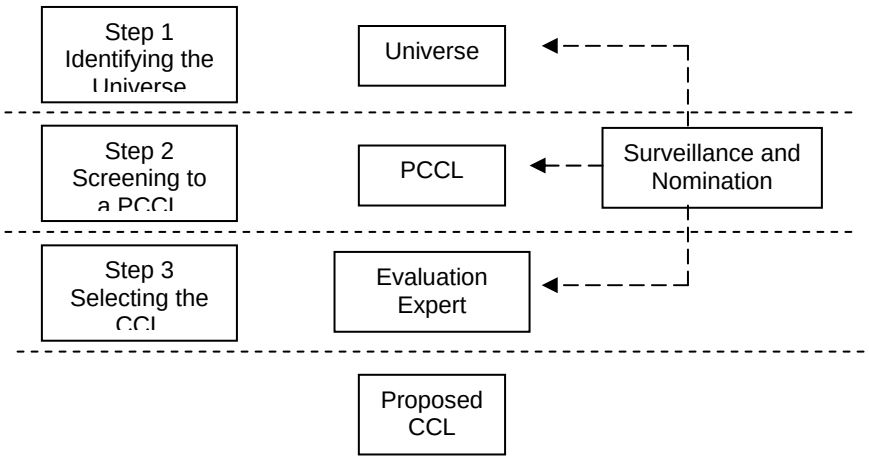
The average individual takes for granted when you turn on the faucet, clean and healthy water will flow. Clean enough to quench a thirst, create a meal, wash off a juicy apple or use it for a whole host of other daily items. As a Public Works employee, you know that there is more than just laying out of pipes to get safe drinking water from the source to the various homes, businesses and institutions in your community. Let's start further up the pipeline and see how our drinking water is kept safe.

In 2002 an Environmental Protection Agency (EPA) work group, called the CCL3 Work Group under the National Drinking Water Advisory Council (NDWAC), has been busy with the creation and recommendation of the Contaminate Candidate List (CCL). This process began as a continuous examination by the EPA of water concerns in order to be compliant with the 1996 amended Safe Drinking Water Act (SDWA). The EPA publishes a list of currently unregulated contaminants which are known or anticipated to occur in the public water systems and which may require regulation. The EPA also makes determinations on whether or not to regulate at least five contaminants from the CCL on a staggered five year cycle. The question that needs to be answered is "how does the EPA determine the list of contaminants?"

The EPA creates the NDWAC work group, which starts the process of compiling a "Universe" list of over 64,000 contaminants that adversely affect drinking water. The work group will whittle down the contaminants to several hundred that are critical; this will be called the "Preliminary CCL" (PCCL). Based on additional discussion and further investigation, the council pares it down to the top list, which includes microbial, chemical and other miscellaneous impurities. After the list is compiled, the CCL is then distributed for consultation with the scientific community. The NDWAC group consults with the primary stakeholders, includes microbiologists, toxicologists, public health scientists and engineers, and members of the scientific community including the Science Advisory Board and National Academy of Sciences. These stakeholders will evaluate and provide expert review of the PCCL. Finally, there is a period of time for the public to provide comment, feedback and contaminant nomination[1]. The information gathered during this period is assembled and delivered to the NDWAC, who then, if approved, passes the recommendations onto the EPA Director.

Exhibit 1. Schematic of the CCL process



The purpose of this top list is a step towards improving risk assessment, strengthening science and data, and achieving better decision-making and future priority setting. The outcome from the CCL provides the influence and helps substantiate the resulting regulations the EPA will create. These will address any urgent threats to public health as outlined by the SDWA. The Agency's drinking water program proceeding from the CCL is "divided among priorities for drinking water research, priorities for additional occurrence data collection and those contaminates which are priorities for consideration for Agency determination of whether or not to regulate (these) specific contaminants."[2]

The process for finalizing the Contaminant Candidate List takes between six to nine years for the findings to be written and approved in the Federal Register. A large portion of this time is devoted to the collection of data, researching needs and determining future steps.

> *Sufficient data are needed to conduct analyses on extent of exposure and risk to populations via drinking water in order to determine appropriate Agency action (development of health advisories, or regulations or no action) for many of these contaminants. If sufficient data are not available, they must be obtained before such as an assessment can be made. The data and information required will be gathered by research or monitoring programs…*[3]

The SDWA stipulates that the EPA consider and adhere to statutes and executive orders that will directly effect certain subpopulations, such as infants and children. These considerations, along with the CCL, are taken into account when the EPA provides regulation on particular contaminants.

When the CCL is published in the Federal Register and the subsequent regulations are established by the EPA, it is up to the local jurisdictions to adhere to these regulations. As a smaller community, you have the added challenge of establishing local policies and procedures that comply with new regulations.

During a recent phone conversation, Bruce Florquist, a Small Systems Consultant from Severance, Colorado, made several recommendations for Small Cities / Rural Communities.[4]

- Membership in the following organizations:
  - National Rural Water Association (www.nrwa.org)
    - Technical Assistance and Training (TA&T) Program: Operated by each state rural water affiliate, they combine formal and classroom training with on-site technical assistance. Topics include public health protection as it relates to drinking water, managerial issues, financial issues, and operational issues.
    - Legislative representation and lobbying for increased loans and grants.
  - Rural Community Assistance Partnership (www.rcap.org)
    - Provides technical assistance, training, and financial resources to more than 2,000 small rural communities across the US, Puerto Rico and the Virgin Islands.
  - American Public Works Association (www.apwa.org)
    - Small Cities / Rural Communities – voicing concerns and sharing best practices, in addition to educational sessions at APWA Congress.

  - Info NOW – post and respond to questions from smaller communities facing similar situations.
  - Federal and state legislative advocacy.
  - Training – whether it is a webcast, live workshops, "Click, Listen & Learn" or state or chapter events, APWA has information that can be invaluable to everyday operations.

- Consider the consolidation and management of common systems and resources. It's not only about hooking up pipes together; think globally. How is your system interacting with others upstream and downstream of your operations? Is there a way to work with other organizations or with a larger municipality?
  - Combine management of the water systems. The purchasing power of two or more communities will go a long way as compared to the voice of one smaller system.
  - Employ "investor owned" utility companies to manage the implementation of the water regulations and policies. These outside companies have a history of successful water systems management, understanding and implementing new regulations within existing systems, and maximizing purchasing power for multiple water systems.

In all, the EPA's National Drinking Water Advisory Council is tasked with a multi-year process of sifting through the numerous microbes and chemicals that threaten our drinking water. When the Contaminate Candidate List lands on the desk of the EPA Director, the recommendations and regulations that follow are to the benefit of the people that make up our communities. The difficulty for small cities and rural communities is the managerial, financial and operational issues that result from the EPA's regulations. The preemptive actions taken by the local jurisdictions can simplify or streamline the changes necessary to meet these regulations. As a Public Works employee for a smaller community, you know how imperative it is to be connected to federal and state organizations for much needed advocacy, training and funds. Like a clear glass of refreshing water, it makes sense to tap into the numerous resources and offerings!

TLA Engineering & Planning, Inc. is a land planning and civil engineering firm dedicated to providing a full-range of services to public and private clients. Established in 1985, the firm specializes in planning, permitting, design and managing public and private projects that range from small to large, simple to complex. Experience earned over many years and across all varieties of projects provides the necessary foundation for a wide range of capabilities. Each project is undertaken with an eye toward providing solutions that allow plans and project to proceed smoothly. TLA's extensive experience with regulatory agencies has proven useful to many organizations throughout the Northern California region.

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[1] "CCL3 Fact Sheet. National Drinking Water Advisory Council Briefing Book. Fall 2006 Meeting. Fort Worth, TX". Page 1.
[2] "Announcement of the Drinking Water Contaminant Candidate List", Part III Environmental Protection Agency. Federal Register / Vol. 63. No. 40. / Monday March 2, 1998 / Notices. Page 10275.
[3] Ibid, Page 10285.
[4] Mr. Bruce Florquist, phone conversation on December 18, 2006 regarding the CCL process.