

TO: Chairwoman Boxer and Ranking Senator Inhofe
FROM: Mike Keegan, Analyst – National Rural Water Association
DATE: April 14, 2008
SUBJECT: Pharmaceuticals in Drinking Water Hearing

Safety Levels of Substances in Drinking Water

The federal drinking water program (the implementation Safe Drinking Water Act – SDWA) can't tell Congress, community water supplies, nor the public the main thing that everyone wants (and needs) to know; what levels of trace substances in drinking water, including trace levels of pharmaceuticals are safe, or unsafe for drinking.

The current federal system for identifying enforceable drinking standards is not primarily based on public health, nor health effects science, but primarily on the feasibility of what a large city can afford. For example, the EPA established a standard of 10 parts per billion (ppb) for arsenic in drinking water. It would seem common sense would dictate that any level above the standard would be a health risk. However, when pressed by the statute and Congress to confirm this, EPA didn't or couldn't.

In 2002¹, EPA did not find that arsenic concentrations above their standard necessarily present an “unreasonable risk to health.” Instead of identifying the levels of arsenic that are “protective of public²” or don't present “an unreasonable risk to health³” as authorized in the Safe Drinking Water Act, and that the Agency was requested to identify by several Congressmen, EPA creatively chose to identify what these levels are not.

“EPA is... determining what does not pose an unreasonable risk to health with respect to arsenic, rather than address the much more complex issue of what does constitute an unreasonable risk to health.”

EPA can't say what “is” a health risk, only what is not a health risk. Are communities supposed to be persuaded by EPA that they should triple their water rates on low-income families to treat their water when EPA can't say what level of arsenic is safe in drinking water? Should EPA be able to not make difficult decisions because they are “complex” determinations?

EPA should be required to identify the level contemplated in the law and if they can't, we should review the federal policy that removes authority to make these decisions from the local families that have to drink water and pay for the treatment.

Who could credibly argue that 10.1 ppb of arsenic is unsafe, while 10.0 ppb is safe? The Palisades Water Association in Washington has 32 homes with an arsenic drinking water level of

¹ http://www.epa.gov/OGWDW/arsenic/pdfs/ars_final_app_g.pdf

² 42USC300g-1(b)(15)(B)

³ 42USC300g-5(a)(3)

10.6 ppb, or 6/10 of a part per billion over the MCL (one of their tests showed a 10.08 ppb level). According to the community, *“the reaction of the state enforcement agency would have one to believe we were attempting a Jonestown massacre on our neighbors.”* According to the volunteer treasurer for the community association, *“a quick study of our community would leave you to believe we have a Fountain of Youth. Since I’ve been on this water system 7/8ths of the users have ranged in age from 96 to 83. We have to install a \$50,000+ filtration system to satisfy the mandate from the EPA. My users are mostly senior citizens, in good health, but fixed incomes, and are thrilled with the current arsenic levels. The county is threatening to withhold building permits.”*⁴

To avoid as much local opposition and confusion as possible, EPA should identify the health levels. This would allow small community officials to: explain the health necessity of reducing trace chemical levels in their drinking water to their citizens, allow them to effectively plan to comply with rules, or determine if they may be eligible for a variance/exemption.

Unnecessarily Alarming the Public

Total Coliform Rule (TCR) – On March 31, 2008, three U.S. federal agencies (EPA, Small Business, and OMB) declared that they, *“support[s] an approach which uses total coliform as a trigger for investigation and/or corrective action rather than as a basis for an MCL violation and notification of the public.”*⁵ This conclusion reflects the consensus that the current TCR, which identifies total coliform as an enforceable maximum contaminant level, and requires timely public notice to each consumer is not appropriate – and more likely misleading.⁶ Total coliform rule violations (which don’t necessarily indicate any harmful contamination) often cause significant public alarm.⁷ Despite the overall agreement that the rule is inappropriately designed and confuses the public, it continues to be broadly enforced. Approximately 9,000⁸ public water systems violate the rule each year and are forced to send out the unnecessarily alarming public notice letters. The situation is to the point where state governments are compelled to publish notices⁹ (following the mandated EPA public notices) to tell the public that the alarming information from federal notice is misleading. The cost of distributing the EPA alarming information has to be paid by the community (a common occurrence) - and can cost thousands of dollars per town.

Implementing the Law in the Manner It Was Intended

In order to prohibit small communities from utilizing economical treatment options (the so-called small system variance technologies), under the SDWA – the EPA must make a finding that their rules are “affordable”¹⁰. To determine affordable EPA adopted a policy that families can afford annual water rates of 2.5% of median household income (MHI) or approximately \$1,000 per household annually. The use of MHI computed as a national aggregate as the sole metric for

⁴ Gus Wenzel, Secretary/Treasurer of Palisades Water Assn, Camano Island, WA (March, 2008)

⁵ <http://www.ruralwater.org/sbrefa-tcr.pdf>

⁶ <http://www.ruralwater.org/tcrjack.pdf>

⁷ <http://www.ruralwater.org/tcrherdon.htm>

⁸ <http://www.ruralwater.org/tcrvios.pdf>

⁹ <http://www.ruralwater.org/pubnotice.pdf>

¹⁰ 42 U.S.C. 300g-1(b)(15)(A)

determining affordability has many problems¹¹ and should be revised to be reasonable for small communities and allow access to affordable compliance treatment options. EPA has stated that the purpose of their affordability determination is to *"look across all the households in a given size category of systems and determine what is affordable to the typical, or middle of the road household"*¹².

EPA's MHI standard does not consider the quantity, concentration, rural demographics, and financial abilities of low-income families or disadvantaged populations to afford the rule as required by the Agency's Environmental Justice policy.¹³ EPA's current affordability policy assumes that low-income families can afford over \$50 a month in rate increases. However, data from the U.S. Bureau of Labor Statistics, Consumer Expenditure Survey and numerous other studies show that low-income households are already forced to make serious tradeoffs that affect the health and well being of their members – including foregoing food and medical care. For example, a study conducted for the State of Iowa Department of Human Rights concluded that, in order to pay their home-heating bill, low-income households made the following tradeoffs: over 12% went without food at some point during the month, more than 20% went without necessary medical care (failed to see a doctor when sick, failed to fill prescriptions for medicine, failing to take the full dosage of a prescription so it would last longer), nearly 10% were unable to pay their mortgage or rent, risking foreclosure or eviction, and almost 30% did not pay other bills or incurred debt to pay the heating bill.

EPA concluded that it does not accept the contention that *"an increase in water bills would force a low-income household to trade off health care or some other 'essential' expenditure to pay the water bill"*¹⁴.

In 1996, with the passage of the Safe Drinking Water Act, small town America welcomed a new law with provisions to assist small communities as described by Senator Baucus on the Senate Floor, *"the bill provides special help to small systems that cannot afford to comply with the drinking water regulations and can benefit from technologies geared specifically to the needs of small systems. Here is how it would work. Any system serving 10,000 people or fewer may request a variance to install special small system technology identified by EPA. What this means is that if a small system cannot afford to comply with current regulations through conventional treatment, the system can comply with the act by installing affordable small system technology."*

To date, EPA has determined all regulations are affordable for small communities and therefore has not allowed any use of small system variance technologies.

¹¹ <http://www.ruralwater.org/sba%20affordability.pdf>

¹² Federal Register (Jan. 22, 2001) 6975-7066

¹³ Executive Order 12898

¹⁴ Federal Register (Jan. 22, 2001) 6975-7066