



## SPU Water System Advisory Committee (WSAC)

**October 15, 2014 Meeting notes**  
**Seattle Municipal Tower, 700 Fifth Avenue**  
**Room 5965**  
**5:30 pm – 7:30 pm**  
*Chair: Kyle Stetler*  
*Vice-Chair: Kelly McCaffrey*

Committee Members & CAC Staff	Present?	SPU Staff & Guests	Role
Tom Grant	Y	Wylie Harper	SPU Drinking Water Quality Manager
Jessy Hardy	Y	Rick Scott	SPU Deputy Director, Water Line of Business
Chelsea Jefferson	N	Alex Chen	SPU Water Planning & Program Management, Acting Director
Kelly McCaffrey	Y		
Kyle Stetler	N		
Chris Thompson	N		
Heidi Fischer, Program Support	Y		
Julie Burman, Policy Liaison	Y		
Sheryl Shapiro, Program Manager	N		

**PLEASE NOTE ACTION ITEMS ARE ✓ MARKED AND HIGHLIGHTED IN YELLOW**

### 1) Regular Business

#### Introductions

- Committee members and staff briefly introduced themselves.

#### Review of May 21, 2014 Meeting Summary

- Summary is approved without discussion.

### 1) Boil Water Advisories

Wylie Harper gave a presentation about mandated and precautionary boil water advisories, especially in light of the recent boil water advisory on Mercer Island. Please see the power point for more information.

A few highlights from the presentation:

- Mercer Island does get water from SPU, but after the pipe that supplies Mercer Island leaves a particular point, the water travels through pipes owned and controlled by Mercer Island, not by SPU. The boil water alert there was the result of something entering the system after it left SPU's pipes, and those pipes only feed one way, so the problem was isolated to Mercer Island.
  - Mercer Island is the first confirmed e. coli contamination event in the Seattle regional water system. There are approximately 10 e. coli events in a year statewide.
  - Advising customers of the boil water alert was made easier by Mercer Island's defined boundaries.
  - Mercer Island has approximately 62 restaurants, all of which have to be inspected, along with all schools and hospitals, before they can use the water following a boil water alert. Many more facilities would require inspection if a boil alert were issued Seattle wide.
- Boil water advisories are mandated by law based on the total coliform rule (explained briefly here: <http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation.cfm>). If routine monitoring detects total coliform and repeat sampling detects *E. coli*, or the reverse, then a boil water alert is required by law.
  - If e.coli was confirmed in Seattle, SPU would have to notify all of its direct service area customers. Wholesale customers outside of Seattle whose water districts purchase water from SPU would also be informed but the notice would likely apply to Seattle only.
  - Water samples are collected 7 days per week and incubated over a 24 hour period, and can be incubated for an additional 24 hours if the test is indeterminate, resulting in a 48 hour period of possible e. coli contamination before a public advisory can be issued.
- A precautionary boil water advisory is quite different. This happens when there's an event where contamination is possible, like a large main break that causes loss of pressure. This is not prescriptively regulated, but suggested as guidance from WDOH. But there has been a push to put some firm guidance in place, and the regulator for Seattle has been encouraging this lately.
  - There are four categories of water main breaks. Category 4 is catastrophic. With Category 1, crews can work on repairs with the water pipes still functioning. Categories 2 and 3 are subtle, and SPU is in ongoing dialog with the state about how better to define them and the necessary actions to address them. How they are managed can depend on the site of the possible contamination and whether a vulnerable population might be affected (like a hospital).
  - There are approximately 140 breaks in the water system per year, 10 or more per month, and most are repaired quickly with pressure maintained.
  - In 2008 for first time, SPU issued a precautionary limited boil alert in Beacon Hill. Other examples of water main breaks in Seattle are U Village in 2013 (where no boil alert was issued), and Capital Hill in 2013 (where a small break did result in a precautionary boil water alert).
- Generally, a boil water alert generates the same level of public concern, whether it's mandatory or precautionary.

- SPU expects to see water main break issues in the future, but believes we are less likely to have an event of e.coli contamination.

Questions from the committee:

- 1) What is e.coli, how did it get into the system, and can it travel through the system?
  - Coliform bacteria are a broad group of organisms of which fecal coliform is a subset, and within that group is e. coli. It comes from animal waste or sewer contamination. Coliform itself is not harmful, but it's a easily measured indicator of things (like e. coli) that can make people sick.
  - Pressure differences in the water system dictate where water contamination can travel. Pressure makes Seattle a confined system outside of its wholesale customers.
  - E. coli contamination can occur if a treatment plant fails to adequately disinfect the water, or if particular businesses inadvertently release potential contaminants into the system.
  - After water leaves the treatment facility, not much additional treatment happens except some extra chlorination. The intent is to have the system secure. Storage tanks are covered, and there are screens where needed to keep wildlife out.
- 2) What role did SPU play in the Mercer Island response?
  - SPU played a supportive role, providing some technical assistance, sample collection, analysis, and public communication, especially to inform SPU customers that this issue was isolated to Mercer Island and was not occurring in other parts of the Seattle water system.
  - Public Health officials from Seattle and King County were also assisting.
  - The Incident Command System (ICS), which is the government standard coordination practice for any kind of emergency event, was used effectively.
- 3) Why have a boil water alert when there's main break and the system has drained?
  - It's mostly a precaution for intrusion of potential external contaminants when there's a loss of pressure.
  - Loss of pressure can create vulnerabilities in the system.
  - Once water pressure is reestablished, the water can be discolored. A lot of pipes are old and have rust and sediment. Changing velocities can stir these up. Usually within 2 hours of being restored and flushed the system is fine.
- 4) How does SPU find out about water main breaks like the one at University Village?
  - In general, there are three ways to know: Customer calls, field observation, and pressure sensors with electronic signals (the pressure sensors are not a very sensitive system).
  - There are also customers calling the news, and reporters texting.
- 5) Did SPU contact Children's Hospital during the U Village water main break?

- Yes. The SPU communications team reaches out to critical customers in these situations, as well as to media and public health.

6) Do the communications people enter some kind of code red mode?

- Communications staff have some preloaded messages but they tailor them to the specific situation. They also select the best modes for getting the message out, which can include press releases, Facebook, Twitter, phone, and door to door.
- In the Capitol Hill case, it was door to door messaging and the neighborhood blog.
- SPU does not yet have the capability to send alerts to cell phones in the area like Amber alerts but are looking at a program that could do that. For now, SPU is encouraging people to register their cellphone so they could get a robocall in the event of a water alert.

7) Do small businesses and restaurants have any claims to lost income when these boil water alerts happen?

- Yes, they do. There is a claim process for it. Los Angeles, CA did a boil water order and is still negotiating claims, as is Phoenix, AZ. Portland has also had some issues and seen some claims filed, but whether money has been paid is unknown.
- Most utilities are self-insured for some amount to pay these claims before Federal Emergency Management Agency (FEMA) money would be available.
- Many Mercer Island small businesses impacted. They have insurance for events like this, but Mercer Island expects a lot of claims and they are seeking some federal dollars to help pay.

8) Is SPU insured?

- SPU is self-insured, and has a staff person to sort out claims. Whether the claims get paid is a legal question.

The committee had some discussion about how boil water alerts can get to people who are not connected to the news or social media, or who speak a language other than English.

- Rick Scott explained that SPU is trying to organize communication hubs. SPU connects with local community groups and uses phone trees in some areas, and has had a lot of success with this approach in some small communities that have 30-35 members.

✓ Rick Scott suggested a follow-up agenda item to respond to the committee's interest in and questions about emergency management and communications. He specifically mentioned Ned Worchester, SPU Emergency Management and Karen Reed, SPU Communications to invite. They will be invited to WSAC's November 19 meeting.

- SPU did get some critiques of their communication methods during the Graham Hill main break. Communication staff (who are not present at tonight's meeting) could explain more.
- Seattle area has 7 primary languages other than English; SPU field operations is geared up to handle those languages by partnering with the call center staff.

- 9) Does SPU track best practices for communication of water alerts?
- Yes, SPU looks at this, even internationally. European electronic communication is 3 – 5 years ahead of this country.
  - Washington, DC has a system that was used in Katrina.
  - SPU is striving for continuous improvement as technology is changing fast.
- 10) Does SPU believe that there is too much or too little discretion in issuing boil water alerts and how to manage them?
- On one hand, regulations cut a lot of debate in emergency situations; that's the case with e.coli.
  - Precautionary advisories, which are not regulated, are more difficult. We try to tailor our response. The good thing is that we don't get boxed into a bigger response or an ineffective response.
  - We have a good relationship with the regulatory body here in WA.
  - SPU often spearheads practices that become best practices.

## 2) WSAC 2015 Work Plan

The policy liaison acknowledged the good work of the committee in 2014, and the committee discussed possible topics for the 2015 work plan.

- Item #12 & 14, the Tolt Pipeline Slide Analysis and Seismic Program, are both high on Alex Chen's list. A briefing for the committee on these topics might be useful, and a field trip to West Seattle is possible to look at seismic retrofitting of the reservoir.
- The tap water campaign is on hold for now. Some work has been done by CAC members and Julie Burman will make sure that information is captured for the communications staff.
- SPU CAC staff is considering an orientation for new members (and existing members who would like a refresher).
- The committee will continue its work on the drinking water quality report.
- ✓ Item #9 from the 2014 Work Plan, Generational Equity: Julie Burman will gather more information on this topic.
- ✓ Item #8 from the 2014 work plan, SPU drinking water rates proposal
- ✓ Julie Burman will work with Alex Chen and the WSAC Chairs to develop a draft of the 2015 work plan for WSAC consideration at the December or January meeting.

## 3) Residential Survey

The policy liaison added this topic at the meeting and asked the committee for input on its residential customer surveys. She read a list of questions being considered for the survey, including:

- Should SPU go to monthly billing for water rather than every two months?
- Do you know where your tap water comes from? How confident are you of the source?
- How important is it to plan for climate change?
- How prepared are people for an emergency?

- What is the best way to communicate a boil advisory?
- Question about the value of water, vis a vis the cost of phone bill; does water cost too little?

Committee's Comments:

- Question about the value of water may be too complicated for a survey. We feel we have a right to water, could be offensive. Perhaps better asked of a focus group.
- Question about knowing where your water comes from might illicit a negative reaction.
- Questions should be directed along the survey's goal, whether it is to improve service or create a better relationship with the customer.
- The committee supported questions about the water's taste, what kind of water people are drinking (tap or bottled), monthly billing, and how best to communicate boil water advisories.
- Customer perceptions about safe water can be drawn out by asking questions about what kinds of water customers drink.
- Not sure what kind of feedback would be useful regarding climate change because it still has to be addressed. Perhaps SPU could include a question in a future survey based on likelihoods of circumstances and possible options for dealing with them.

December meeting may be cancelled due to holidays. Julie Burman will let members know.

7:35pm meeting adjourned.