

<b>Brightwater Environmental Education and Community Center</b>	<b>Thursday, May 17, 2012</b>	<b>4:00 – 6:00 p.m.</b>
<i>Board Member</i>	<i>Agency</i>	<i>Present</i>
Barry Bettinger	Community Representative	X
John Buckley, P.E., J.D.	Independent Expert	X
Pam Elardo, P.E.	WTD Division Director, King County	X
David Evans	Snohomish County, Public Works	X
Scott Hageman	Councilmember, City of Woodinville	
Gary Hajek	MWPAAC Representative	X
Dan Kalstad	Community Representative	X
Agata McIntyre, P.E.	Puget Sound Clean Air Agency	
Bob Van Horne	Fire Chief, Bothell Fire and E.M.S.	X

**Non-Board Member Attendees:**

*Stan Hummel, WTD; Robert Waddle, WTD; Yasmin Mudah, WTD*

**A. Call to Order**

- a. Meeting was called to order by Board Chairman, John Buckley at 4:00 p.m.

**B. Meeting Agenda - Key Points of Discussion**

- a. **Agenda item #2 – Board Business:**

**Meeting Notes** – Meeting notes from the March 14<sup>th</sup> meeting were approved.

- b. **Agenda item #3 – Report of Complaints and Investigations and Odor Complaint Log:**  
 Robert Waddle reported that no odor complaints have been received since the March 14<sup>th</sup> meeting. The facilities are operating within standards and wastewater operators are not sensing raw sewage or wastewater treatment odors.

- c. **Agenda item #4 – Property Boundary Odor Monitoring Report and Log:**  
 Robert Waddle provided an update of the routine property boundary odor monitoring and distributed copies of the Monitoring Log to the Board. There are no odors observed attributable to the Treatment Plant during property boundary monitoring. The Property Boundary Monitoring Log is under revision, to include more specific information to identify the type of odor sensed.

**Q.** How often is the property boundary monitoring conducted?

- A.** Property boundary monitoring is conducted weekly, but not on the same day of the week. It is ideal to conduct the monitoring on clear days as the Jerome Analyzer can be damaged by rain water in inclement weather. Operations staff has been trained in how to conduct odor monitoring and regularly join Process Analysts on site during property boundary monitoring. The long term goal is for the operations staff to conduct odor monitoring.

d. **Agenda item #5 – Odor Control System Operational Status Report:**

Stan Hummel updated the Board on the status of the Sycamore monitoring units.

There continues to be occurrences of “spikes” in the readings of the Sycamore units. When this happens the operations staff sample the event using a Jerome Analyzer. The spikes indicated by the Sycamore units have not been detected using the Jerome Analyzers. King County and the vendor (Sycamore Technologies) is currently working to determine what compounds the Sycamore units are reading other than H<sub>2</sub>S.

One of the potential reasons is the Sycamore units are reading another compound creating a false positive. It is not known if this other compound has odor characteristics or not.

The vendor has suggested three approaches to resolve the issue:

1) It is possible that there is a chemical reaction occurring with the stainless steel feed-lines resulting in spiked readings. Other installations of Sycamore units have used Teflon tubing rather than stainless steel tubing. The vendor is providing Teflon tubing to replace the stainless steel tubing. There was a delay in this replacement, as the vendor initially shipped the incorrect size tubing. The correct tubing has been received and is ready for installation.

2) Another possibility is that there could be an interfering compound that the Sycamore analyzer is reading rather than H<sub>2</sub>S. The vendor has provided a filter to apply that will filter out sulfur dioxide, which potentially is the interfering compound. If sulfur dioxide is filtered out the false positives of H<sub>2</sub>S may discontinue.

3) The County will take bag samples during spiking events for laboratory and odor panel analysis. The intent is to identify if another compound is present that is creating a false positive.

The County has also requested that CH2MHill identify odor monitoring instrumentation utilized in the industry that is accurate, reliable and used for continuous testing. Five different instruments with different vendors have been identified. Some of the units are only used for spot checking, and is not suitable for use on a continuous basis. The County is also interested in vendors who have rental units available, in order to test devices and confirm their accuracy. Two of the five vendors have rental units available.

Overall, the treatment plant is operating well within standards. Currently pumping 12 mgd/day, the plant will convert to 21-24 mgd/day approximately the third week of September. Programming is underway to convert the control strategies to full flow operation. There has been no sign of cracking or structural damage to the impeller units that were replaced. There is a one week shut down planned in September. The odor control systems will stay on-line during the shut down period.

**Q.** How long is the tubing from the stack to the Sycamore?

**A.** The tubing can run from 15 to 20 feet in length.

**Q.** Why not replace the Sycamore units with Jerome Analyzers?

**A.** Jerome Analyzers are not typically used for continuous monitoring. The manufacturers of the Jerome Analyzers, however, do have a separate instrument that is used for continuous monitoring. Rental units are available.

**Q.** Is the County required to continuously monitor?

**A.** The agreement is to provide continuous monitors of exhaust emissions. The Sycamore units measure every 10 minutes. There is an analyzer at each process area.

**Q.** How will the County be proceeding?

**A.** Our first step will be to install the tubing and filters provided by Sycamore. After this is completed, we will continue to work to identify what is causing this false positive. If the suggestions provided by Sycamore do not resolve the issue, we may bring in a competitor to run concurrently with the Sycamore units. Testing of another analyzer could take 3-4 months to ensure it meets our requirements.

**Q.** Is it possible to use two (or more) systems concurrently?

**A.** Yes, it is possible and the County is considering this. We are interested in using the most reliable odor monitoring system that can reliably measure at these low levels.

#### **C. Board Actions**

- a. **Meeting Notes** – Meeting notes from the March 14<sup>th</sup> meeting were approved.
- b. **Sycamore Unit Update** - The Board has requested that the County provide a work plan and data of the spikes from the Sycamore unit.

#### **D. Standing Items**

- a. **Next Meeting** – September 20<sup>th</sup>, 4:00-6:00pm Environmental Education and Community Center
- b. **Proposed Agenda:**
  - a. Board photo
  - b. Commemorate the Board for one year of service
  - c. Treatment Plant Operational Status Update
  - d. Odor Complaint and Investigation Update
  - e. Update on Sycamore instrumentation
  - f. Property Boundary Odor Monitoring Update