

Brightwater Operations Center Q Room	Thursday, April 21, 2016	4:00 - 5:45 p.m.
<i>Board Member</i>	<i>Agency</i>	<i>Present</i>
	Community Representative	
John Buckley, P.E., J.D.	Independent Expert	X
Brian Parry (not appointed yet)	Snohomish County, Public Works	X
Curt Brees (not appointed yet)	Cross Valley Water District, MWPAAC Representative	X
Dan Kalstad	Community Representative	X
Carole Cenci	Puget Sound Clean Air Agency	X
Craig Clinton	Snohomish Fire District 7	X

**Non-Board Member Attendees:**

*Stan Hummel, WTD; Bruce Kessler, WTD; Valerie Garza, WTD*

**A. Call to Order**

Gunars Sreibers is the acting Director. The Executive Office is looking to replace Pam.

**B. Key Points of Discussion**

1. **Board Business**
2. **Meeting Notes:** The meeting minutes were accepted as written. Clarification on item no. 3 of the previous meeting minutes is item no. 6 for today's meeting.
3. **Board Membership:** Curt Brees of the Cross Valley Water District and Brian Parry of Snohomish County Public Works have been confirmed by the King County Executive, however, they need corresponding Snohomish County Executive approval to complete the appointment process. John Buckley has completed his four year term as Chairman, and has agreed to continue in that role. The Board approved the continuation, so Stan will prepare a letter to the King County Executive recommending Mr. Buckley for another term. The Woodinville City Council has been consulted regarding recommending the City's representative to the Board. Barry Bettinger, one of the community representatives has resigned, so his seat needs to be replaced by a new community representative.
4. **Report of Complaints and Investigations, Odor Investigation Log:** Since the last time we met; we received two complaints; one in the vicinity of Maltby Road and Little Bear Creek Road. There were no odors evident at the time of investigation; and the other complaint was near Maltby Road and Hwy 522, which was attributed to strong odors of compost from one of the nearby compost facilities.

5. **Report of Property Boundary Odor Monitoring, Odor Monitoring Log:** Overall the treatment plant continues to meet all of the compliance requirements. Hydrogen sulfide was detected slightly above the detection limit at some boundary locations, however, the aggregate of readings at each location were within compliance levels and stack discharges were below 3 ppm in all instances. The observed readings are attributable to vegetation and vehicle exhaust. The meter is very susceptible to exhaust, in particular to diesel, and the plant site is bordered by Highways 522 and 9.

*Q - Is anything occurring in the plant with odor control and scrubbers?*

A - Everything is operating as it should. An odor control train was out of service to replace the fan bearings, but a redundant train was online at the time to ensure we met our odor control commitments.

*Q - Are you running the biological tower?*

A - We are at the plant but not at IPS. The plant uses a triple treatment system that includes a bioscrubber, followed by a chemical scrubber, with final polishing by a carbon scrubber.

6. **Management Practices to Maintain Performance:** Bruce Kessler presented a PowerPoint slideshow on WTD Asset Management to address the question raised at the last AQAB meeting, "What management practices is WTD employing to maintain performance?" Mr. Kessler said that performance is assured by WTD's Asset Management Program and that asset management is an institutional mindset at WTD. WTD has managed assets since the 1960's and formalized the process in 2005 with the publishing of a Strategic Asset Management Plan (SAMP), which is updated every five years. Mr. Kessler described Brightwater's odor control assets, maintenance best practices, and preventative and predictive maintenance practices.

*Q - Do you perform maintenance based on equipment run-time?*

A - We do, however, the process is not automated since we don't have a tie yet between our computer maintenance management system (Mainsaver) and the equipment run meters. Most of our maintenance is schedule based (e.g., daily operational checks, weekly lubrication, monthly vibration testing), however, we do manually monitor run-time on certain equipment, such as our dewatering centrifuges, and schedule maintenance accordingly.

*Q - How about on the chemical end? Where are your vulnerabilities that may require District 7's involvement? Is there anything you address on the preventive maintenance list to ensure safe operation of chemical systems?*

A - Sodium hypochlorite 25% solution; poly aluminum chlorite; ferric chloride; sodium hydroxide (caustic) are the most dangerous of the chemicals on-site. The chemical

system piping is double contained (the chemical pipe is installed inside a redundant containment pipe) to protect workers from coming in contact with chemicals, should the pipe leak or rupture. The containment pipes are electronically monitored and alarmed if leaks are detected. The containment pipe sumps are also checked for leakage periodically as part of our preventative maintenance program.

*Q - If a sodium hydroxide tank ruptures, what do you expect the fire department to do?*

A - All chemical tanks are in structures designed to contain 100 percent of the tank volume. If a tank were to rupture, then Brightwater will manage that contained spill. We would contact the fire department if emergency response is needed due to injury or if confined space rescue is needed.

*Q - How do you make sure that scheduled maintenance gets done? Is it recorded?*

A - We have a workflow that uses Mainsaver for tracking and recording maintenance. All maintenance is performed on work orders generated through Mainsaver. The Supervisors will distribute each work order to staff, the work is performed, staff enter what they did into Mainsaver, then Mainsaver sends the supervisor notification that the work is completed, the supervisor inspect it and then closes the work order. Schedule attainment is reviewed weekly with the supervisors and managers. Supervisors are held accountable for schedule attainment, which is a key performance indicator (KPI) for their position. Work that is not completed gets rescheduled.

*Q - Do you feel that your maintenance budget is adequate?*

A - We exceeded last year's maintenance budget so, for this year, we almost doubled it to make sure there was enough. Part of our strategic planning is to extend the life of our assets, which takes money upfront; we spend the money now in order to save a lot of money later.

*Q - Is this asset management plan a requirement of federal funds for Brightwater?*

A - No it is not because we didn't have any grants for Brightwater, rather, we had low interest loans from the state.

EPA has a 10 step process for asset management which Brightwater exceeds.

*Q - There was a commitment that King County made to train County staff at the Director level and above on a particular management style. The training gives you a whole bunch of support, so you are on the front end of catching things. It happened about a year or two years ago. Where is that as far as training the staff below Pam's level?*

A - Mr. Hummel and Mr. Kessler where not sure which specific training was being referenced, however, Mr. Hummel did discuss the Lominger and Lean training being given to County employees. Lominger is a method for evaluating leadership competencies of managers and supervisors along with the competencies required by their positions, and then developing plans to align the two. The Lominger 360 reviews have been done from upper management to the supervisory level. We have also using Lominger to hire people to determine the characteristics or qualities we need for each position. That's one initiative. The other from the Executive is Lean, which is aimed at gaining efficiencies through process improvements.

*Comment - I was expecting something regarding the odor control systems in the Brightwater collection system and how you handle complaints for the system? What are some of things you employ in the collection system to keep odors down at Brightwater.*

A - We dose with Bioxide at our Hollywood Pump Station and sodium hydroxide at the IPS to reduce odors by reducing the biological activity.

*Q - Can you give us an idea of the percentage of flow into the plant this winter and the ability to control odors? Does the Brightwater odor control system have a good buffer or did this winter push demands?*

A - As far as odors are concerned, winter is actually better than in the summer. Summer flows are fairly low; sewage could be in the collection system for a day before it gets to Brightwater, and odor causing microorganisms reproduce faster in during warmer temperatures. In the winter, flow are diluted and pushing faster through the system. The odor control facilities at Brightwater have performed very well because they are sized to handle high odor concentrations.

*Q - How do the bioscrubbers perform in winter?*

A - The "bugs" in the bioscrubbers generally die off in fall and repopulate in the spring. I'm not sure of the exact temperature when bugs die off, but they will even in a mild winter.

When we have the new board members, we will schedule a tour and orient them to the charter.

## **C. Board Actions and Requests**

1. Brightwater Treatment Plant Technical Tour – it was requested that a facility tour be scheduled prior to the next meeting.

2. New Members Orientation – it was requested that this occur on the same day as the above facility tour for new members.
3. Presentation – Request to have a presentation on the Brightwater collection system and the facilities used to prevent odors from the collection system.

**D. Standing Items**

1. **Next Meeting** – It was suggested the next meeting be scheduled for mid-October 2016.