

Brightwater Operations Center, Q Room	Tuesday, August 23, 2011	3:00 – 6:00 p.m.
<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	Woodinville City Council	X
Gary Hajek	MWPAAC Representative	X
Julia Lacey	Community Representative	
Agata McIntyre, P.E.	Puget Sound Clean Air Agency	
Gary Meek	Snohomish County Fire District 7	

Non-Board Member Attendees:

Stan Hummel, WTD; Ron Kohler, WTD; Sean Kehoe, WTD; Larry Sasser, Vanir; Carol Nelson, WTD; Yasmin Mudah, WTD

A. Call to Order

- a. Meeting was called to order by Board Chairman John Buckley at 3:00 p.m.

B. Meeting Agenda - Key Points of Discussion

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

Meeting Notes – The meeting notes from the August 11th meeting were approved.

Board Charter – The Board Charter was approved.

Q. Regarding Board Charter Section II.A.3 – “Review the Brightwater Odor Monitoring and Response Plan approved by Snohomish County as part of the Binding Site Plan permitting process”. It was suggested that the members be given additional time to appropriately review the Odor Monitoring and Response Plan in order to provide meaningful comments.

A. Review and discussion of the Odor Monitoring and Response Plan will be included in the agenda for the next meeting.

Q. The County requested that the Board also review Appendix C – “Odor Report and Odor Investigation Forms” of the Odor Monitoring and Response Plan.

A. These forms will be discussed at the next meeting.

Other Business – The King County Financial Disclosure Forms were emailed to members on August 18th.

King County email accounts along with instructions were provided to members on August 17th. Emails will now be sent to King County email addresses for those members

who have activated their accounts. It is requested that all members activate their accounts.

Notifications will be sent to your agency/personal accounts when an email is sent to your King County email address. Contact Yasmin Mudah if there are any questions.

Updated contact lists were distributed.

b. Agenda item #3 – Property Boundary Monitoring Locations:

Stan Hummel and Yasmin Mudah presented photos identifying the 7 odor monitoring locations along the property boundary. A map of the site with the odor monitoring locations was presented. Included in the handouts was a spreadsheet of property boundary monitoring data over the last year. The spreadsheet included the date, approximate time, H₂S measurement, wind speed and sensory observations for up to 3 measurements taken at each location. Ammonia samples were not taken during every monitoring event. Ammonia readings are included when the data is available.

Q. Property boundary monitoring is already finding an ambient background of H₂S larger than 0.8 ppb. Will the County be averaging the data per location?

A. If concentrations greater than the 3ppb detection level are observed, staff will initiate the response protocol as identified in Section 4.3 of the Odor Monitoring and Response Plan.

Q. What is the direction of prevailing winds?

A. During environmental review for the treatment plant, a weather monitoring station was located near the center of the site. Analysis of the data collected during the 9-month period from July 2002 through March 2003 show that the winds blew predominantly from the north 50 percent of the time and from the south 23 percent of the time. This pattern is consistent during both winter and summer months. The winds at this site generally follow the terrain and flow up and down the SR-9 corridor, mostly following the Little Bear Creek drainage. Nighttime wind patterns are also from the north.

Q. It was suggested that wind direction be added to the property boundary monitoring data spreadsheet provided during the meeting.

A. Wind direction will be a monitoring parameter recorded during the property boundary monitoring.

c. Agenda item #4 – Odor Control System Presentation:

Ron Kohler and Stan Hummel provided a brief introduction to Brightwater's odor control system. A graphic of the odor control system was presented. Included in the handouts was a drawing of the odor control system for the solids building and a schematic of the treatment plant odor control system.

Q. A question was posed regarding continuous monitoring at the 13 process trains.

A. Continuous monitoring of the stack emissions is performed for each process area, rather than having continuous emissions monitoring for each process train within a given process area. The reason for this is that monitoring a single train within an area was considered to be representative of the emissions for the trains in a given process area. Periodically, the monitoring will be rotated between process trains.

d. **Agenda item #6 – Tour of Odor Control Facilities:**

Ron Kohler provided an overview of the odor control facilities from the viewpoint of the top of the Disinfection Building. Stan Hummel provided an overview of the overall treatment plant process.

Larry Sasser gave a tour of the odor control train at the Headworks and Primary Treatment Odor Control Facility. He explained the function of the biological, chemical and carbon scrubbers. The inlet and outlet sampling locations and the instrumentation used to monitor system performance were described. Ron Kohler described the operation of the chemical feed systems for the odor control.

Q. What is the accuracy of measuring H₂S from the Sycamore unit vs. the Jerome analyzer?

A. The lowest range reading of the Sycamore unit is 5ppb with a range of accuracy of +/- 5ppb. The lowest range reading of the Jerome analyzer is 3ppb with a range of accuracy of +/-1ppb.

Q. Why not use the Jerome analyzer at the stacks?

A. The Jerome analyzer is a hand held monitoring device that is more sensitive than the Sycamore unit. It is not intended for continuous monitoring applications.

Q. What is the duration of the purge cycle between samples?

A. The time that it takes the Sycamore unit to purge and analyze samples is 10 minutes between samples.

e. **Agenda item #7 – Demonstration of H₂S Monitoring with Jerome Analyzer:**

Carol Nelson gave a demonstration of H₂S monitoring with the Jerome analyzer and ammonia testing with Sensidyne tubes.

Multiple tests were conducted with the Jerome analyzer to analyze the levels of hydrogen sulfide. The readings were:

Ambient air reading – below 3 ppb detection limit

Flower – below 3 ppb detection limit

Compost – 5.9ppb

Mud from pond edge – 5.1ppb

Boiled eggs – 8.2ppm

One test was conducted with the Sensidyne tube using Lysol wipes, resulting in <1ppb ammonia. Carol also showed a used Sensidyne tube that gave a positive reading of ammonia.

f. **Agenda item #5 – Tour of Control Room:**

Sean Kehoe provided a tour of the control room.

Q. Many treatment plants experience foaming from the aeration basins during startup, foaming events can generate odors. Has the County considered measures to address foaming?

- A. Yes, the plant is being biologically seeded in advance of receiving sewage to help establish the biological process. In addition, we have foam control chemicals available to control foaming events.

C. Board Actions

- a. **Meeting Notes** - The meeting notes from the August 11th meeting were approved.
 - b. **Board Charter** - The Board Charter was approved.
- Q.** Two invited Board members have not attended the Board meetings thus far. The Board agreed that maintaining full membership would provide better representation of the community. It was proposed that further contact be made with Snohomish County Fire District 7 and with the community member to encourage their participation.
- A.** Gary Hajek volunteered to contact the Fire District. One of the community members has been unable to attend due to prior commitments. Stan will confirm if she is able to serve on the Board. If she is unable to be an active member of the Board, Snohomish County will be asked to nominate another community representative.

Update: Since the meeting, Gary Hajek has contacted Snohomish County Fire District 7. They have replied that they are not interested in participating in the Board. Confirmation declining participation was requested.

D. Standing Items

- a. **Next Meeting** - Tuesday, September 27th, 4:00-6:00 p.m.
- b. **Proposed Meeting Items:**
 - a. Odor Monitoring and Response Plan presentation and review
 - b. Review of technology, air dispersion modeling
 - c. Odor control system operational status report
 - d. Report of any complaints and results of any investigations since start-up