#### Laboratory and Environmental Assessment Program

### Air Quality Monitoring in The Dalles

#### Tuesday, March 21, 2017 Columbia Gorge Community College



Lori Pillsbury | Oregon Department of Environmental Quality

# Monitoring in The Dalles

#### • Purpose

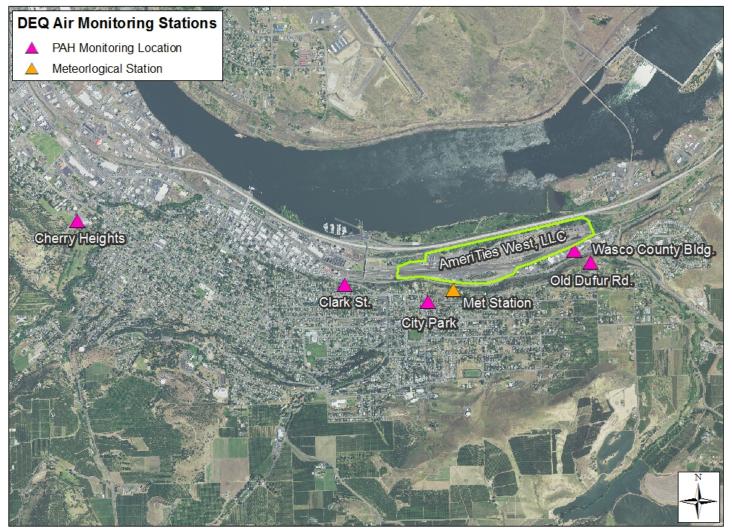
 Collect data to if ambient air sample include compounds that present health risks to the community

#### • Timeline

- June 2016 sampling began
  - DEQ deployed samplers at 3 sites (Cherry Heights, City Park, Wasco County Planning)
  - Sampling for:
    - PAHs
    - wind speed & direction
- August 2016 City Park completed
  - Sampler moved to Old Dufur Rd
- September (late) 2016 Old Dufur Rd completed
  - Sampler moved to Clark Street
- November (mid) 2016 Sampling completed at all sites



### Map of Sampling Locations



0		0.75	1.5		3 Miles	
	1					





### What are PAHs?

#### • Definition

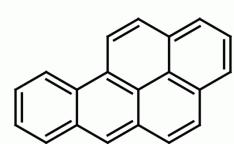
- Class of > 100 chemicals
- Aromatic

#### • Sources

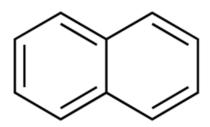
- Naturally occurring in coal, oil, & gasoline
- Formed during incomplete combustion of coal, oil, wood, garbage, etc.

#### Potential Risks

- Short term only in extremely high concentrations
- Potential increase in cancer risk from lifetime exposure

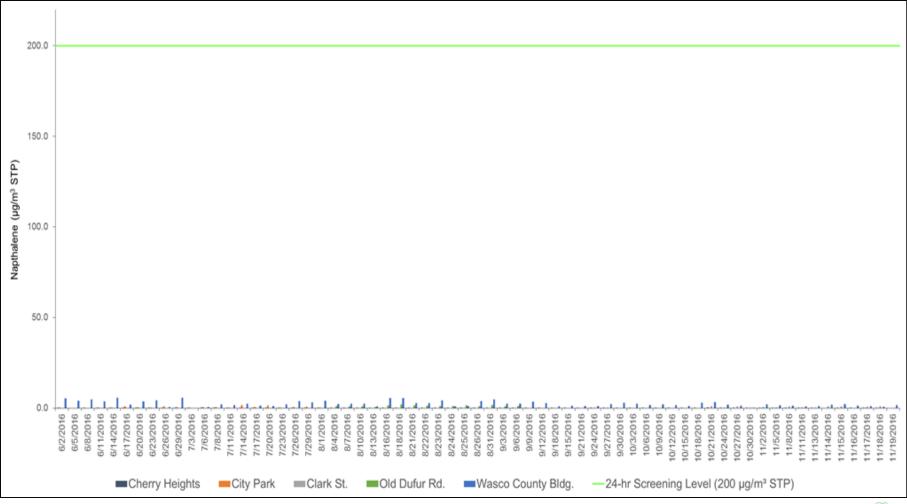






### Naphthalene

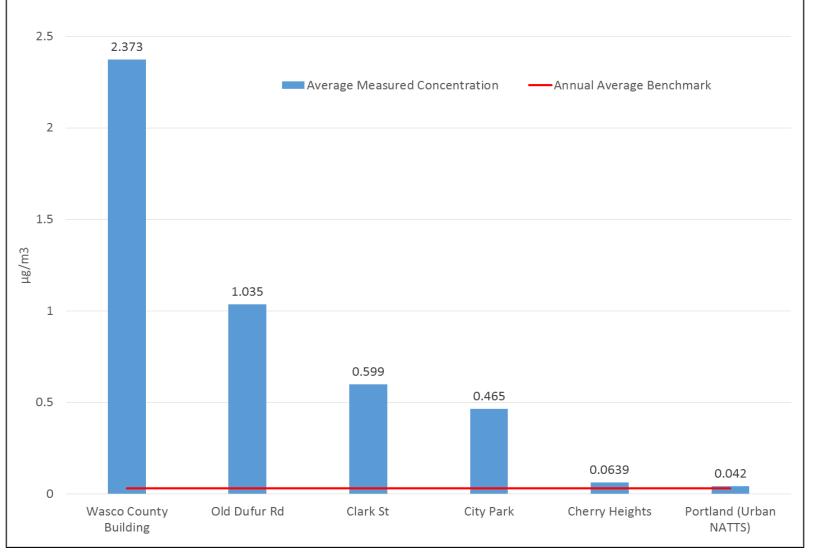
(Evaluating daily samples for short term risk)





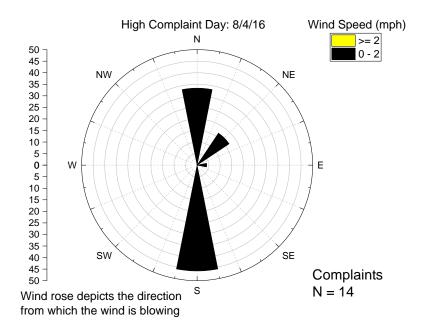
### Naphthalene averages

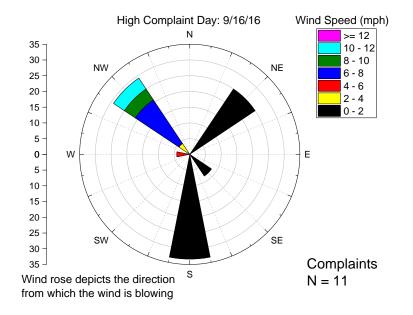
#### (compared to Annual Average Benchmarks)





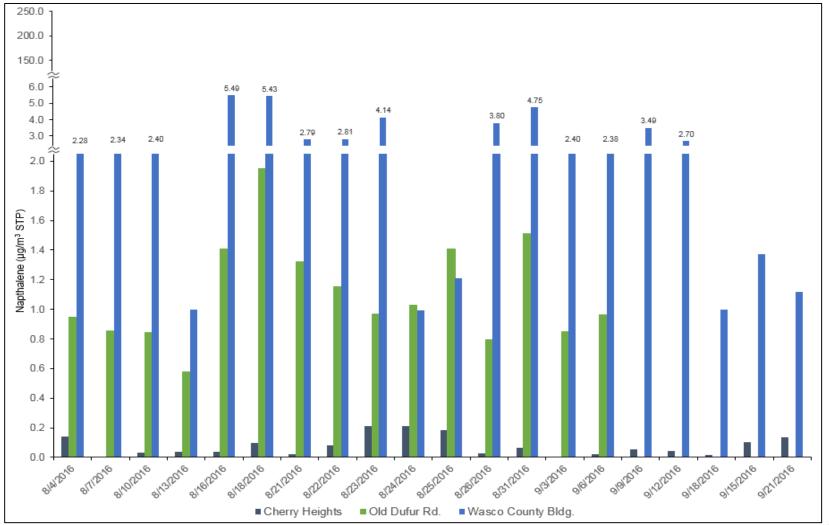
# Wind vs Complaints





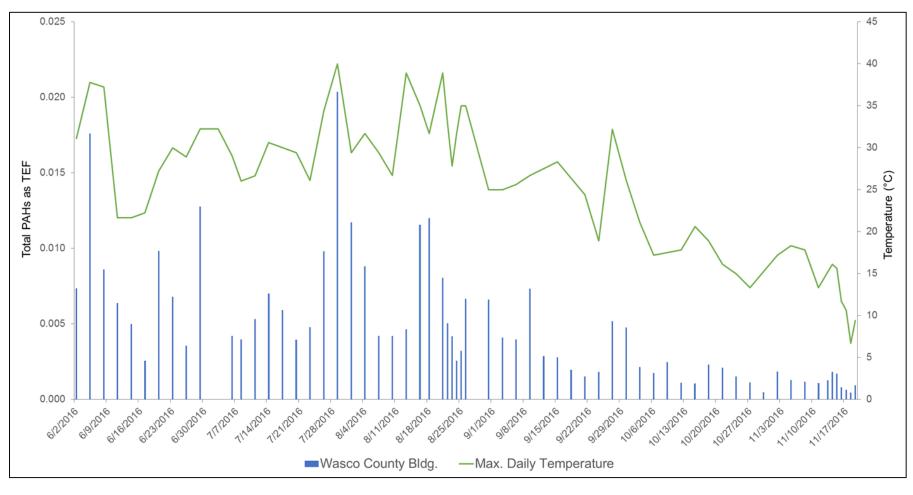


### Naphthalene





# Total PAHs vs. Temperature





# Follow-up Monitoring

#### Purpose

- Determine if emissions from tie production facility have changed based on the change in formulation of the preservative
- Timeline
  - July August 2017 follow-up sampling
    - DEQ will deploy samplers at 3 sites
      - (Cherry Heights, Old Dufur, Wasco County Planning)
    - Sampling for:
      - PAHs
      - wind speed & direction (at on-going met station)





# Air Quality Information

Visit our online map for data and information

http://www.oregon.gov/deq/aq/Pages/Air-Quality-Map.aspx

	Find Data Measure	15	
<	The Dalles Cherry Heights 🖌 🖌 1 of 2	×	
<b>^</b> ⊙	The Dalles Cherry Heights		The Dalles Municipal Airport Dallesport
+	Layer: Focused Air Monitoring	~	
	Facility Information:		30 Dr
St	Project: The Dalles (PAHs Only)		Monest The Country of
5	Station Location: The Dalles		
	Monitoring Dates: 05/31/2016 to 11/19/2016		So W 10 M St
	N/A to N/A	~	E 10th St
	Samples collected: PAH		Sorosis E 16th p
<b>,</b> 22	View Additional Details Edit Feature		Styline Rd C 16th g

## Next steps for Health: Interpreting Health Risks

Ehap.info@state.or.us



ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT PROGRAM (EHAP)

www.healthoregon.org/ehap

#### **Overview**

- OHA and ATSDR's roles
- Short-term health risks
- Long-term health risks → Health Consultation (HC) Process
- Community ask/input: Timing of the HC



### **AGENCY ROLES**



#### Advise Analyze Make recommendations



Monitor Permit Regulate

### **Short-term health risks**



No <u>short-term</u> risk for exposure to naphthalene or total Polycyclic Aromatic Hydrocarbon (PAHs) from air data collected around AmeriTies



### Long-term health risks?



Some data do exceed screening levels for lifetime exposure

Health Consultation will do an indepth analysis



#### What is a Health Consultation??

**Environmental** Data

Community Characteristics and Input

What arr cont

How do people contact contaminants? - exposure

**Could exposure lead** to illness?

Are there relevant health data?

Is the exposure a problem? What needs be done?

ARHT.

### **Screening values**

- Identifies contaminants of concern for further investigation
- Eliminates contaminants that don't pose health risks



 HC uses values established by ATSDR



# What environmental data will be considered in the HC?



Before new formulation 2016

June-November

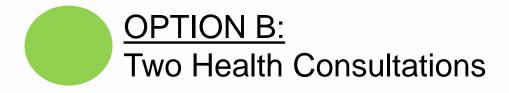
After new formulation 2017 To be Determined (TBD)



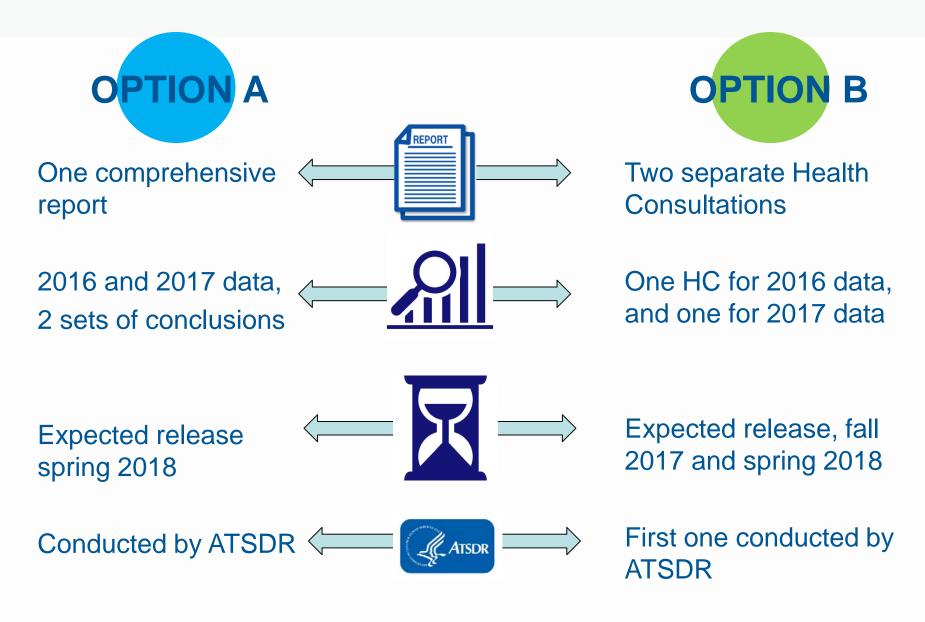
### We would like your input:













# Ehap.info@state.or.us 971-673-0977 www.healthoregon.org/ehap



### **DEQ AmeriTies Web Page**

www.oregon.gov/deq/Programs/Pages/AmeriTi

es-West.aspx