

Questions and Answers: Jantzen Beach Letter Health Consult, May 2016

1. Who is ATSDR?

The Agency for Toxic Substances and Disease Registry (ATSDR), is a federal public health agency of the U.S. Department of Health and Human Services, based in Atlanta, Georgia with staff in 10 regional offices. ATSDR's mission is evaluate exposures to contaminants to determine if there is an impact on health.

2. Why is ATSDR involved?

The Oregon Health Authority (OHA) and Multnomah County Health Department asked ATSDR to lead the evaluation on the results from EPA's air monitoring and sampling investigation. OHA is one of the 25 Cooperative Agreement Programs ATSDR funds 25 Cooperative Agreement Programs to give partners the resources to build their capacity to assess and respond to site specific issues involving human exposure to hazardous substances in the environment. At this time OHA's Cooperative agreement Program is focused on evaluating air emissions of metals from glass manufacturing facilities in Portland. As their capacity increases, OHA will resume the lead and assess future data collected by DEQ at Jantzen Beach/Hayden Island.

3. What did ATSDR do?

ATSDR evaluated residential exposures to air contaminants to determine the potential health threat from strong odors affecting a community near Jantzen Beach.

ATSDR determined if those exposures are at levels of health concern for people, especially sensitive populations (e.g. people with asthma or other respiratory conditions or illnesses) and can provide people with information on what they can do to protect their health.

4. What are the community concerns?

Residents near Jantzen Beach industrial area have reported complaints about chemical odor and health effects (i.e., reported health effects include headache; nausea; irritation of mouth/throat, eyes, and nasal passages (up to bloody noses), respiratory symptoms, and dizziness).

5. Who is the responsible party?

There are many possible sources of these contaminants in the area. DEQ/EPA are taking steps to determine the source(s).

6. To better understand what chemicals may impact the health of our community, what information does ATSDR recommend that DEQ, with EPA support, sample for?

We largely don't know what is being emitted from area facilities. ATSDR recommends a combined approach of figuring out what chemicals are being emitted from the facilities and measuring chemicals in outdoor air of affected communities.

- ATSDR would like to see the compounds tested for in the previous sampling efforts sampled for again to evaluate for short-term impacts. Sampling should include hydrogen sulfide, sulfur dioxide, chlorine, and possibly sulfur containing hydrocarbons.

- For longer-term health impacts hydrogen sulfide, sulfur dioxide, VOCs, SVOCs, particulate matter, and other sulfhydryl hydrocarbons.

7. Is the Environmental Protection Agency involved?

EPA is providing support to OR DEQ. In response to complaints, EPA has evaluated if chemicals in air are an immediate health threat to the residents in the area. The information collected has given insight into what to look for in the future.

8. How will ATSDR assess risk from exposures to chemicals in the air?

ATSDR and OHA will review the data generated from air monitoring samples collected by EPA. We will look to see what the average concentration for each contaminant of concern is over time, estimate how much and for how long a person has been exposed to the contaminants, and estimate health risk given what we know about the toxicity and effects of the chemicals examined.

9. What did the air monitors measure for?

EPA placed a real-time monitor in a houseboat community on Hayden Island and another at the Heron Lakes Golf Course. They measured continuous levels of total Volatile Organic Compounds (VOCs), and gases (i.e. hydrogen sulfide, chlorine, ammonia, oxygen, carbon monoxide), and explosive atmosphere limits (that is, the limits before a fire or explosion can occur). EPA also collected five short-term air samples to measure individual VOCs.

10. How long were the monitors in place?

The continuous monitors began collecting information November 3, 2015. Monitors were removed January 8, 2016. The short-term air samples were collected on December 22 and 27, 2015.

11. What did the monitors find and what is the effect on health?

Based on EPA's current air screening and sampling results, ATSDR found there are contaminants present at levels of potential health concern; but, the information on chemical concentration and duration during events had limitations and uncertainty. Therefore, the real-time monitoring and short-term results should be considered preliminary.

The levels of hydrogen sulfide did not last long enough to be poisonous (acutely toxic) or life-threatening; however, exposure to levels of hydrogen sulfide on four occasions are high enough to result in increased frequency or worsening of respiratory problems for people with conditions such as asthma.

12. Does ATSDR have any recommendations for the community?

ATSDR recommends community members take precautionary measures to prevent airborne chemicals from entering their homes. We recommend keeping an odor diary and/or submitting complaints regularly into DEQ's complaint system to establish patterns of releases and health effects.

During odor events, close windows and doors to reduce outdoor air into home. After odor events, to dilute any chemicals left in the air in the home; open windows and doors to circulate indoor air.

ATSDR highly recommends that community members report odor events, what it smells like and how it affects them.

13. Who can I call if I have questions about my health or want more information?

For questions about your health, we recommend you contact your local physician. For questions about ATSDR's activities, please contact Dr. Rhonda Kaetzel, ATSDR's Regional Director in Region 10 by phone at (206) 553-0530 or by email at rkaetzel@cdc.gov.

For information about odors, hydrogen sulfide, and chlorine gas, visit the following ATSDR Webpages:

<http://www.atsdr.cdc.gov/odors/index.html>

<http://www.atsdr.cdc.gov/toxfaqs/tfacts114.pdf>

<http://www.atsdr.cdc.gov/toxfaqs/tfacts172.pdf>

For media inquiries, contact ATSDR's Office of Communication by phone at (770) 488-0070 or by email at envhealthmedia@cdc.gov.

For questions about DEQ's complaint system, please call 1-888-997-7888.