

# ATSDR's Findings on Contaminants in Air Measured Near Port Townsend Paper Corporation

This fact sheet describes the findings from the Agency for Toxic Substances and Disease Registry (ATSDR) exposure investigation (EI) near Port Townsend Paper Corporation (PTPC) in 2018. We recommend that community members concerned with environmental odors read this fact sheet.

## Why did ATSDR investigate these exposures?

- **Community members have reported odors coming from PTPC.**  
From 2016–2021, nearly 2,000 odor complaints were recorded by the Washington Department of Ecology (ECY) and PTPC. The complaints specifically mention the smell of rotten eggs and “pungent acid” odors coming from PTPC facilities.
- **ATSDR computer modeling predicted elevated levels in the air for some contaminants.**  
Models based on emission data from PTPC and meteorological conditions in the area indicated there could be elevated levels of some contaminants in the air. Some contaminants produced by PTPC may be at levels that can cause environmental odors and/or harmful health effects.

## What is an exposure investigation (EI) and why is ATSDR in your community?

- An EI is the collection and analysis of samples to determine whether people have been exposed to hazardous substances.
- In 2015, the Washington Department of Health (WDOH) requested that ATSDR conduct an EI in Port Townsend, WA to address complaints about environmental odors near PTPC.

## The History of Port Townsend Paper Corporation



Photo of Port Townsend Paper Corporation. Photo taken by ATSDR staff.

- PTPC produces kraft pulp, paper, containerboard, and specialty products. Construction on the mill began in 1927, and it began operating in 1928. The mill has operated continuously since it was built.
- Most of the people in the surrounding areas are located to the north and west of the facility, with a small number of houses to the south of the facility (referred to as *Glen Cove*).

## What did ATSDR measure?

ATSDR measured chemicals in outdoor air based on community complaints, the modeling results, and information about facility emissions. Those chemicals were sulfur compounds, particulate matter, and

aldehydes. Eight sampling locations were selected, including 6 residential homes, 1 public school, and 1 business. Sampling locations were all within 3 miles of PTPC.

## What are the conclusions of the exposure investigation?

- Short-term exposure to a mixture of sulfur compounds may cause respiratory effects. Sulfur compounds are associated with the environmental odors described in complaints from community members.
- Contaminants and odors were measured at higher levels (concentrations) in the air around PTPC when the facility was operating than when it was shut down.
- Sulfur dioxide concentrations near PTPC rarely reached levels that can cause severe respiratory effects. Chronic exposure to sulfur dioxide is not expected to harm people's health.
- Breathing hydrogen sulfide near PTPC is not expected to harm people's health. Hydrogen sulfide in outdoor air can cause environmental odors.
- Breathing small, dust-like particulate matter near PTPC is not expected to harm people's health, but people who are unusually sensitive should take precautions (see Port Townsend Health Consult).
- Breathing aldehydes near PTPC is not expected to harm people's health. There is a low cancer risk from breathing formaldehyde.

## What does ATSDR recommend?

- ECY should continue to monitor odor complaints.
- ECY and PTPC should consider making additional efforts to reduce environmental odors coming from PTPC that impact areas outside facility boundaries.
- ECY and PTPC may consider implementing a community-based outdoor air monitoring program to inform policy makers and community members of exposures in the area.
- When environmental odors are strong, individuals sensitive to the odors can reduce exposure by limiting outdoor activities or leaving the area for a few hours if needed.
- Community members should report odors from the Port Townsend Paper Mill to Washington Department of Ecology's Environmental Engineer, Emily Toffol, via email ([emily.toffol@ecy.wa.gov](mailto:emily.toffol@ecy.wa.gov)) or phone (360-790-8363). Please provide the following information: date, time, location, odor description, and any health impacts experienced.
- Learn more on ECY's webpage for PTPC at <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Industrial-facilities-permits/Port-Townsend-Paper>

## Who should I contact for more information?

Debra Gable

ATSDR Region 10

Office of Community Health Hazard Assessment

Phone: 206-553-1796 Email: [dfg0@cdc.gov](mailto:dfg0@cdc.gov)