

J.H. Baxter Health Consultation Summary Factsheet *(Updated 2-23-2023)*

Background

JH Baxter is a wood-processing facility in west Eugene, Oregon adjacent to the Bethel neighborhood. Residents have had concerns about air and odor emissions from the facility for many years. To understand the impact of JH Baxter's operations to the environment and people, the Oregon Department of Environmental Quality (DEQ) and U.S. Environmental Protection Agency (EPA) collected surface soil samples from residential yards and other background locations in September 2021 and May 2022. Both rounds of sampling showed levels of dioxin in soil, in seven residential yards, above health-based screening concentrations. To address community concerns about the health risks of exposure to dioxin, Oregon Health Authority (OHA) evaluated soil data taken from residential areas north of JH Baxter and documented the conclusion and recommendation in this health consultation report.

Health conclusions for people living in the area of investigation:

- Soil with dioxin concentrations over 40 parts per trillion (ppt) could harm the health of children under six years of age who come into contact with bare soil regularly for a year or longer.
- Eating eggs regularly from backyard chickens that live in yards at residences near Baxter that have dioxin levels above 4.7 ppt could be harmful to health. This health risk is for people of all ages and backgrounds.
- There is no risk of health effects from acute exposures (exposures less than 1 year).
- The increased cancer risk from long-term, or chronic, exposures from JH Baxter is low.

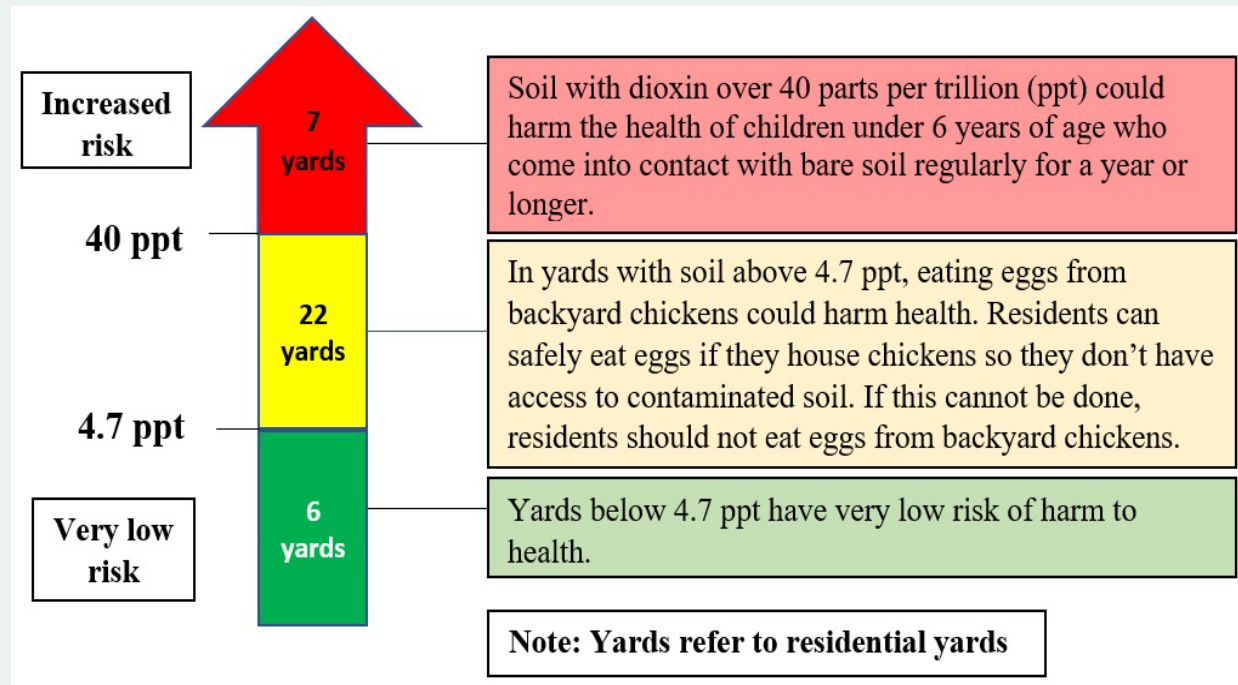
What are dioxins and their health effects?

Dioxins are often found in higher amounts in industrial areas, and persist in the environment because they do not easily break down. They bind to organic matter such as decaying material or compost in soils. Exposure to high doses of dioxin over several years can cause skin effects, liver damage, and increase the risk of cancer over a

lifetime. The concentrations found in all residential yards sampled are too low to cause any of these health effects.

Dioxin levels measuring over 40 ppt in residential yards near JH Baxter could cause reproductive effects in adulthood following long-term exposure as a young child under 6 years of age.

This graphic shows the health risk of dioxin levels in soil of residential yards



This level of dioxin in soil is measured in parts per trillion (ppt). Health risk assumes a person is swallowing and touching soil.

Note: Department of Environmental Quality (DEQ) or U.S. Environmental Protection Agency (EPA) have already contacted residents whose yards have been or are planned to be tested

Health conclusions by environmental exposure pathways for all scenarios

Exposure	Possible harm to health		
	Cancer* risk from chronic§ exposure	Non-cancer† risk from chronic exposure	Non-cancer risk from acute§§ exposure
Soil	Low	Yes, children under 6 years of age	No
Surface Water	Low	No	No
Groundwater	Low	No	No
Backyard Fruits and Vegetables	Low	No	No
Backyard Chicken Eggs	Low	Yes	No

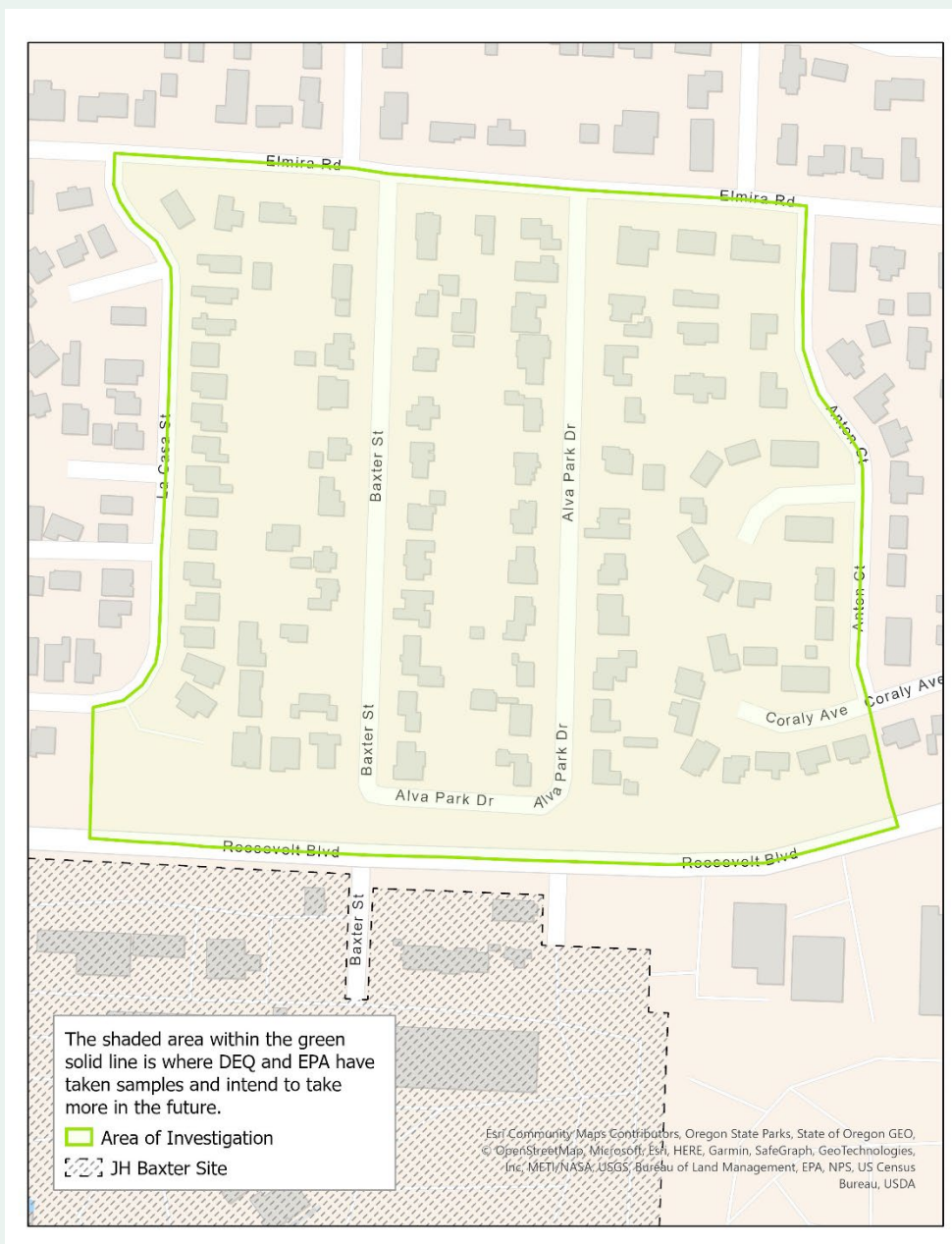
Note -*Cancer risk refers to the probability to develop cancer over a lifetime related to contaminant exposure from JH Baxter.

†Non-cancer risk refers to the risk to develop a health effect other than cancer under various exposures scenarios related to JH Baxter. See text of report for details on health effects.

§ Chronic refers to exposures that last longer than one year.

§§ Acute refers to short-term exposures, less than a year.

Map below outlines the area of investigation



Residences in the Bethel and other west Eugene neighborhoods that are outside of the areas of investigations are unlikely to have been contaminated by dioxin emissions from J.H. Baxter.

Recommendations

OHA recommends remediation (cleanup) of residential yards with dioxin levels above 40ppt. Remediation means removing contaminated soil and replacing it with clean soil so that dioxin cannot harm the health of residents who use their yards.

OHA recommends people limit exposure to dioxin-contaminated soil. Ways you can do this are to:

- Remove shoes and wipe feet before entering the house to avoid tracking in dust from outside.
- Wipe visible dirt off your pets before letting them into your home.
- Wash hands with soap and water right after doing landscaping or gardening, even if you use gloves.
- Use indoor cleaning methods that reduce overall dust. For example, damp-mopping floors, using vacuum cleaners with HEPA filters.
- Avoid using or playing in areas with bare soil.
- Avoid activities that disturb large amounts of soil, such as digging holes or leaving piles of exposed soil.

OHA recommends people house backyard chickens to minimize contact with bare soil. Backyard chickens can concentrate dioxins from the soil in their bodies and pass them on through their eggs in a process called bioaccumulation. OHA recommends that anyone who has chickens on property with dioxin levels above 4.7 ppt (or on a property that is awaiting testing) house their chickens so they do not have access to contaminated soil. Chickens' contact with soil can be minimized by fencing the chicken coop and run area and covering the fenced-in ground with six inches of coarse wood chips or other material that acts as a barrier to the soil. If this cannot be done, residents should not eat backyard chicken eggs.

OHA recommends standard urban gardening guidance to protect from other contaminants, such as lead, that are commonly found in urban soil. Urban gardeners should:

- Wash hands after gardening.
- Take off shoes before entering the home to avoid tracking soil inside.
- Wash homegrown produce before consuming it.

Next steps

As DEQ or EPA conducts soil sampling in 2023 for dioxin contamination in additional residential yards near JH Baxter, OHA will evaluate new soil dioxin data and will work with DEQ on plans for future remediation.

What is a health consultation?

A health consultation (HC) is how Oregon Health Authority's (OHA) Environmental Public Health Assessment Program (EHAP) responds to concerns about human health risks from exposure to environmental chemicals at contaminated sites and makes recommendations to protect public health. EHAP relies on environmental sampling data from partner agencies to use in its HCs.

WE WANT TO HEAR FROM YOU!

The public comment period for the HC is open until **June 2, 2023**.

Send your comments to ehap.info@dhsoha.state.or.us or mail them to the address below.

Oregon Health Authority - EHAP
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Portland, OR 97232

To read the full report –
[click here](#)

To access health gardening resources –
[click here](#)

Learn more about Cleaner Air Oregon –
[click here](#)

For more information about this health consultation, please contact OHA's Environmental Health Assessment Program at ehap.info@dhsoha.state.or.us or call toll-free: 1-877-290-6767

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