

BAD AIR DAYS

Eugene neighborhoods are downwind from polluters

BY CAMILLA MORTENSEN



JOANNE GROSS

PHOTO BY TODD COOPER

Joanne Gross is a stay-at-home mom with two sons. She and her husband, Scott, bought a house in west Eugene where Scott can bike to work, and she can grow food in her garden. Standing in front of her house on a hot summer evening, while her sons, Ian and Connor, play with their friends on the quiet street, Joanne points to the food she grows in her front yard. What look like decorative shrubs are sweet potatoes, artichokes and herbs. Hops wend their way up the chimney — Scott is a home brewer — and kiwis, figs and grapes adorn the yard. Joanne says it's the garden that lets them afford to have her stay home, and Scott's bike commute to the mill keeps him in shape and keeps them a one-car family.

Joanne Gross just wishes she knew a little more about what pollutants are in the soil. If the soil is contaminated, what about the food she feeds her kids?

Turn 180 degrees away from Joanne's front yard and look across Roosevelt Boulevard and you see a steady plume arising from the nearby Flakeboard America plant. According to its most recent report filed with the Lane Regional Air Protection Agency (LRAPA), the flakeboard plant has the potential to emit 17.7 tons a year of formaldehyde, 107 tons of methanol and 2.17 tons of phenol into the airshed. The nearest home is 500 feet from the plant. Methanol depresses the nervous system and can cause blindness or death. Formaldehyde is considered by the Environmental Protection Agency (EPA) to be a probable human carcinogen.

The flakeboard plant "has done a lot to improve their facility," Joanne Gross says. And indeed its LRAPA

operating report shows it has reduced its hazardous air pollutants by 63.9 tons a year. Kelly Shotbolt, president and CEO of Flakeboard, says, "We still use formaldehyde as an adhesive for most of our products, but we use less today than before" due to the proprietary technology that was installed a few years ago.

But Gross still wonders what might be in a garden that sits so close to this and other industries with a history of emitting chemicals like creosote, formaldehyde, lead, dioxin and other toxics.

And as she looks at her garden she says, "If the air quality is bad with all the factories, then it stands to reason that the soil might be affected." But when Gross checked into it, she found out it would cost \$70 for one soil sample to be tested for only one chemical, so testing for multiple chemicals in multiple samples is prohibitively expensive.

1 J.H. BAXTER (Wood treatment and chemical manufacturing plant) 85 N. Baxter Road

NEARBY: 7,000 residents live within 1 mile of the plant and it's 100 feet from the nearest home. Fairfield Elementary is .6 miles away.

EMISSIONS: EPA's Toxic Release Inventory (TRI) shows 36,000 pounds of "fugitive ammonia" and 943 pounds of creosote released in 2010. Eugene's Toxics Right-to-Know database lists only 8 pounds of air toxics, but according to Beyond Toxics, Baxter says it is exempt from reporting its release of creosote compounds to the Right-to-Know database. J.H. Baxter is a Superfund site, has a history of groundwater contamination off-site and was fined \$6,000 in 2011 for violating its air permit.

EFFECTS: Ammonia can cause extreme fatigue and respiratory problems. Creosote (made of chemicals such as naphthalene) is a probable carcinogen and can cause neurological effects and anemia. Baxter also lists pentachlorophenol on the TRI database. Penta is also a carcinogen and can cause miscarriages and neurological effects.

2 TRAINSONG/ UNION PACIFIC RAILYARD 1035 Bethel Drive

NEARBY: The nearest homes are a few yards away.

EMISSIONS: The Oregon Department of Environmental Quality says of the railyard "oil and groundwater contamination on the railyard consists mainly of petroleum hydrocarbons, industrial solvents and metals. Outside the railyard, low levels of solvents are found in groundwater underlying portions of the adjacent Trainsong and River Road neighborhoods." The DEQ says the well water in the area is safe for "outdoor use." DEQ warns "Solvent vapors from contaminated groundwater can make their way up and into buildings." Union Pacific has been doing conducted groundwater cleanup since 2005, and the DEQ says "currently vapor intrusion in the Trainsong neighborhood is not a threat."

EFFECTS: Beyond Toxics says diesel particulates from the train locomotives can cause cancer, heart disease, asthma and pneumonia and warns the pesticides regularly sprayed along the tracks are a public health hazard.

3 MURPHY PLYWOOD 2350 Prairie Road

NEARBY: West Eugene neighborhoods

EMISSIONS: Murphy Plywood emits 14,000 pounds of methanol a year, an estimated 29 tons of fine particulate matter (PM 2.5) and 34 tons of PM 10. It emits 74,000 tons of greenhouse gases a year, according to the data collected by Beyond Toxics. The TRI database shows Murphy Plywood emits ammonia and formaldehyde as well.

EFFECTS: Methanol can cause severe body pain, loss of vision and sleep disorders. Formaldehyde is a carcinogen, allergen and asthma trigger. Ammonia can cause extreme fatigue and respiratory problems. Fine particulates can penetrate deeply into the lungs. Short term PM 2.5 can cause coughing and irritation, long-term it's linked to lung cancer and heart disease.

4 GEORGIA-PACIFIC CHEMICAL (Koch Industries) 2665 Highway 99 N.

NEARBY: Golden Gardens Park, neighborhoods.

EMISSIONS: Under its Lane Regional Air Protection Agency (LRAPA) permit, Georgia-Pacific emits 36,000 pounds of air toxics.

EFFECTS: Beyond Toxics says the top three chemicals are epichlorohydrin, a carcinogen that can cause sterility and liver, lung and kidney problems; phenol, which is a neurotoxin and can cause kidney and liver damage; and methanol.

5 SENECA SAWMILL CO., SENECA SUSTAINABLE ENERGY 90201 Highway 99 N.

NEARBY: The closest home is 1,500 feet away. Irving Elementary is 1.5 miles away, Spring Creek Elementary is 1.9 miles away and Willamette High School is 2.4 miles south.

EMISSIONS: The sawmill and the biomass plant are connected but have different LRAPA permits. The sawmill emits 73,000 pounds of air toxics and the biomass plant 17,900 pounds, according to Beyond Toxics.

EFFECTS: The plant emits significant amounts of carbon and nitrogen oxide. Beyond Toxics reports the top three chemicals at the plant are acrolein, which is associated with respiratory congestion, and eye nose and throat irritation; styrene, associated with increased risk of leukemia and lymphoma, and with liver, kidney and eye and nasal irritation; and formaldehyde.

6 STATES INDUSTRIES (Hardwood panel products) 29545 East Enid Road

EMISSIONS: 42,800 of air toxics according to LRAPA data.

EFFECTS: Acetone can cause kidney damage, breathing problems and low blood pressure; cumene is a carcinogen that can cause skin rash and reproductive problems; and methanol.

7 MCFARLAND CASCADE 90049 Hwy 99 N.

EMISSIONS: EPA's TRI reports 209 pounds of pentachlorophenol. LRAPA reports 40,734 pounds of air toxics.

EFFECTS: Hexachlorobenzene can cause neurological, teratogenic, liver and immune system effects; dioxin can impair the immune system, the developing nervous system, the endocrine system and reproductive functions; and pentachlorophenol.

8 FLAKEBOARD AMERICA, INC. 50 N. Danebo Ave.

NEARBY: Sunshine Preschool is .7 miles away; Danebo Elementary, 1.1 miles; and Kalapuya High School .9 miles. The nearest home is 500 feet.

EMISSIONS: EPA's TRI database shows 112,530 pounds of air toxics, including methanol and the LRAPA permit shows 220,800 pounds of air toxics.

EFFECTS: The chemicals have included methanol, formaldehyde and ammonia. Flakeboard America has reduced its formaldehyde emissions, and the company says it doesn't necessarily emit to the maximum levels in its permit.