# Diane Dick

Thank you for the opportunity to comment on designating communities overburdened by air pollution. Please designate the Longview-Kelso area as an overburdened community. My complete comments with documentation, PDF 19 pp, are attached.

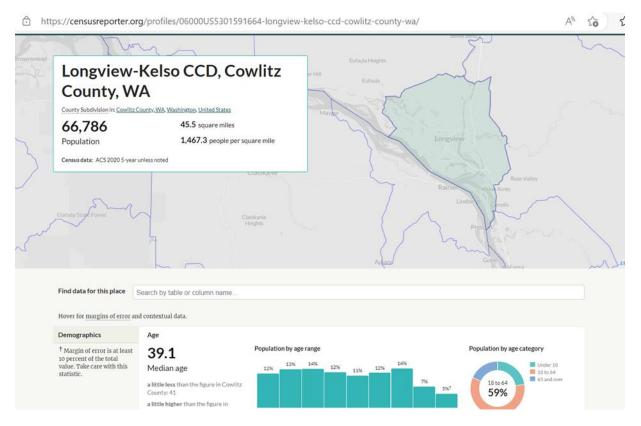
To: Washington Department of Ecology

## **Identifying Overburdened Communities Highly Impacted by Air Pollution**

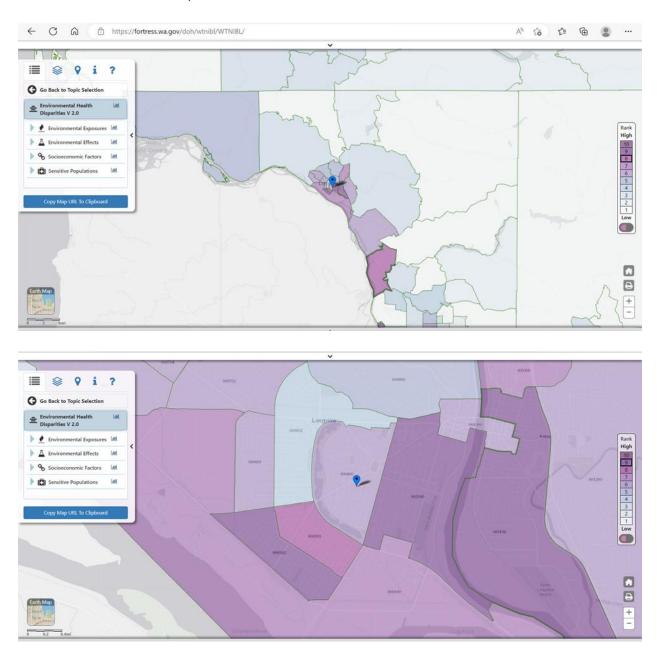
Formal Comments- Diane L. Dick, 13 Saint Helens Lane, Longview, WA 98632 <a href="DICKDL50@gmail.com">DICKDL50@gmail.com</a>

The Longview-Kelso community should be designated an overburdened community from air pollution. With only one regulatory PM 2.5 monitor at sea level, the community should receive additional continuous regulatory monitors dispersed in multiple areas and elevations, and with additional chemical sensors. The county, and some census tracts more significantly, have below average income levels and high-risk health disparities. There are industrial sources with high levels of toxic emissions within a relatively confined geographic area adjacent to disadvantaged neighborhoods.

Longview and Kelso comprise 24 square miles within Cowlitz County's 1,140 square miles and contain 50,543 of the county's 111,524 residents. An alternate county subdivision is the Longview-Kelso CCD. The community lies in a river valley at the confluence of the Columbia, Cowlitz, and Coweeman Rivers. The close in surrounding hills rise to over 500 feet in elevation. Across the Columbia River sits the Oregon community of Rainier. Longview-Kelso contains the major shipping Port of Longview and the Southwest Regional Airport. The community is astride the major transportation routes of the Interstate 5 Highway and the BNSF main north-south rail line. Multiple gas and petroleum distribution and transmission lines traverse the county.

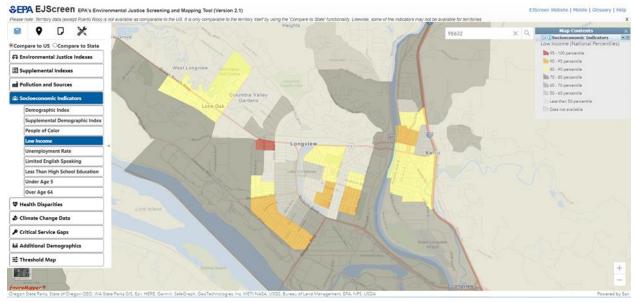


Meeting the community indicator for an overburdened community, on the Washington Environmental Health Disparities (EHD) map, several census tracts in the Longview-Kelso community have a 9 ranking for environmental health disparities.



While the overall EJ Demographic Index does not exceed the 90th percentile, some census tracts do exceed it for the contributing low-income factor.





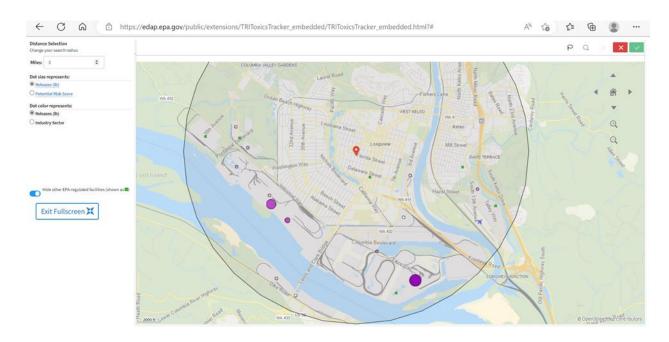
Washington Department of Ecology then requires indicators of air pollution by elevated levels of criteria air pollution derived from Table 2. Criteria Pollutant Thresholds of the Technical Support document Publication 22-02-044. The probability of a general community member to determine such pollutant thresholds as described in the table for their community is likely close to zero.

As previously noted, the Longview area has one monitor sensing only PM 2.5. The last actual ambient air monitoring occurred more than ten years ago. The monitoring reports noted concerns about need for more investigations and inconsistencies in wind directions between reporting sites. There are the additional variables from elevated topographies and confined air inversions in a river valley. There are seasonal shifts in wind direction and daily shifts associated with wind movement in the Columbia River valley.

Another air pollution indicator is "emissions over distance from stationary sources." While Ecology explains their method, they do not supply the results for community use. I also question why ammonia, NH<sub>3</sub>, is not included as a criteria air pollutant, as EPA does.

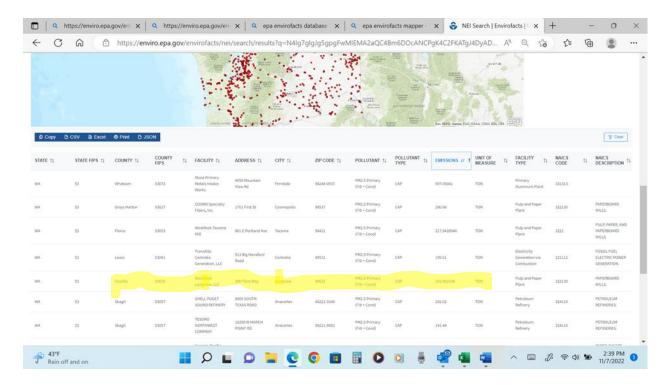
The map below with 3 mile radius indicates stationary industrial sources of significant CAPs. Most of the schools in the Longview and Kelso School Districts lie within this radius. All the stationary industrial sources are within a 3 mile or less radius of previously noted census tracts.



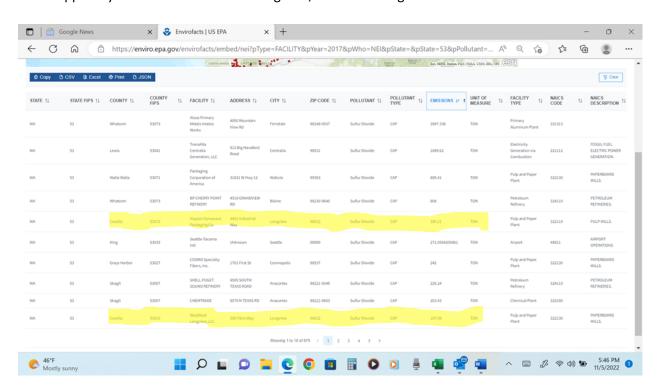


The following data is from EPA 2017 NEI, which shows emissions in the 3 mile Longview-Kelso radius compared to other areas and emitters in the state.

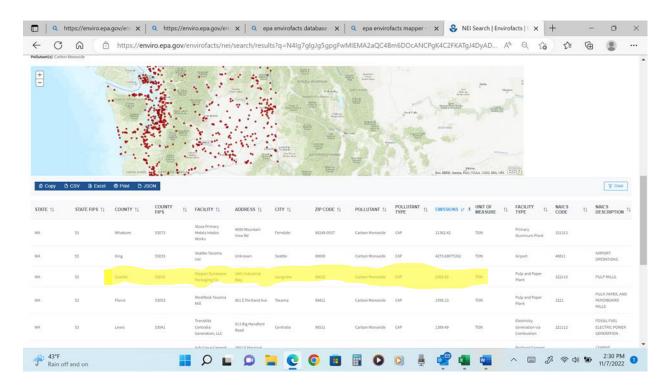
**PM 2.5** WestRock Longview, 5<sup>th</sup> highest emitter in the state



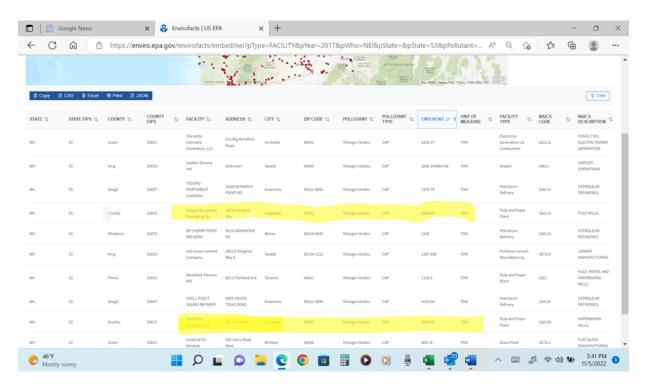
### **SO**2- Nippon Dynawave and WestRock Longview, 5<sup>th</sup> and 10<sup>th</sup> highest emitters



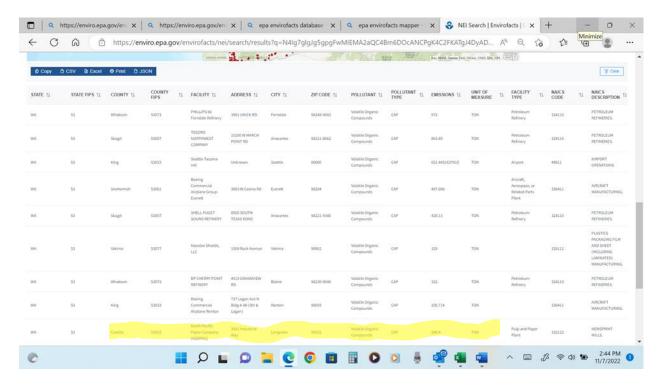
### **CO**- Nippon Dynawave, 3<sup>rd</sup> highest emitter



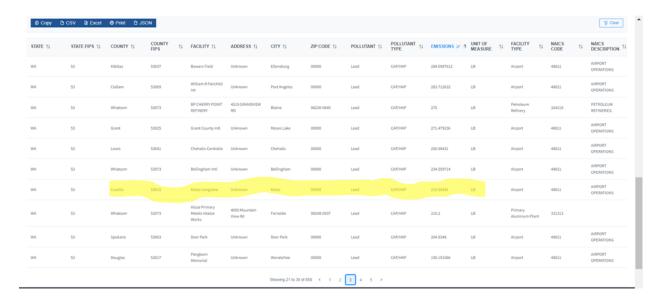
## **NO**<sub>x</sub>- Nippon Dynawave and WestRock Longview, 4<sup>th</sup> and 9<sup>th</sup> highest emitters



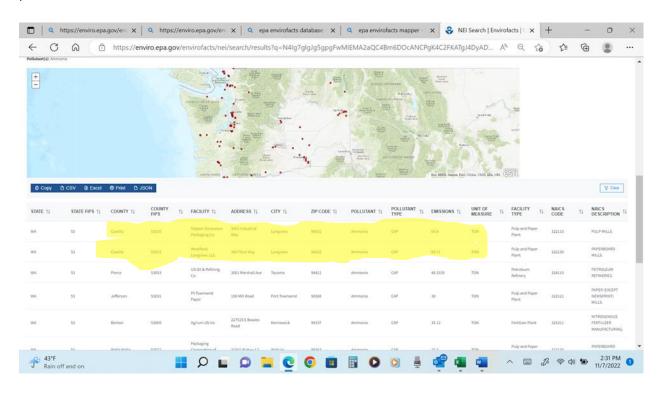
#### VOCS- NORPAC, 9th highest emitter



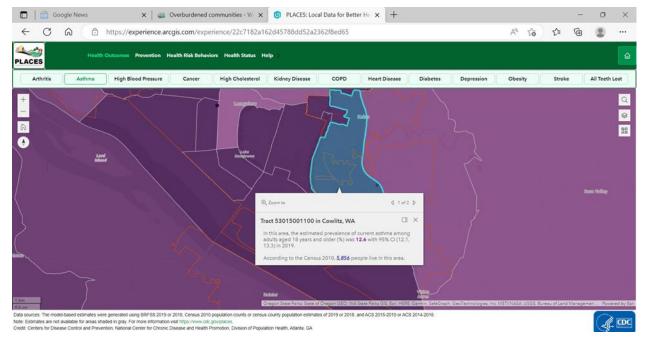
**Pb**- While no single stationary sources in Longview-Kelso ranked high in state for lead emissions, the Southwest Regional Airport in Kelso emitted 220 pounds of lead per 2017 NEI. Airport operations have picked up since then. Next highest was Nippon Dynawave with 74. 4 pounds.

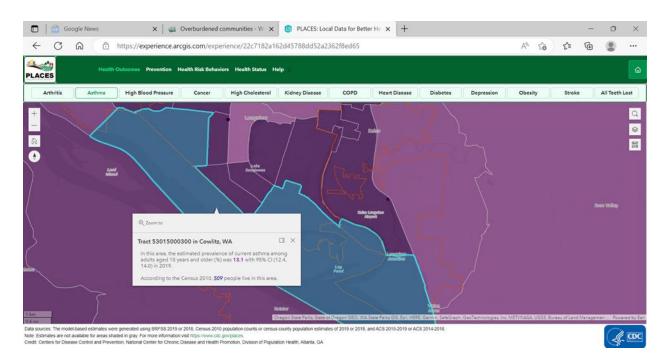


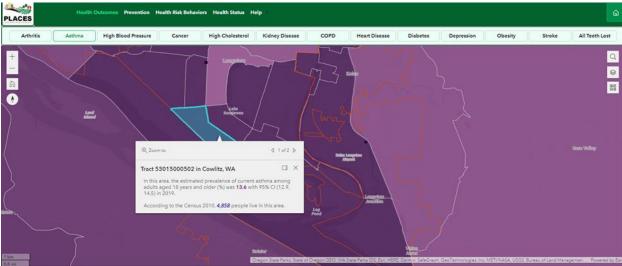
**NH3**- As EPA considers ammonia a CAP, this pollutant bears noting. Nippon Dynawave and WestRock Longview are the two highest emitters in the state. As noted further on, across the Columbia River at Deer Island, Oregon, about 15 miles upstream from Longview-Kelso, Dyno Noble released over 6 million pounds, or 3000 tons, of ammonia on-site to the air.



Below is data for Longview-Kelso census tracts for asthma and COPD from PLACES: Local Data for Better Health showing rates higher than the national average.

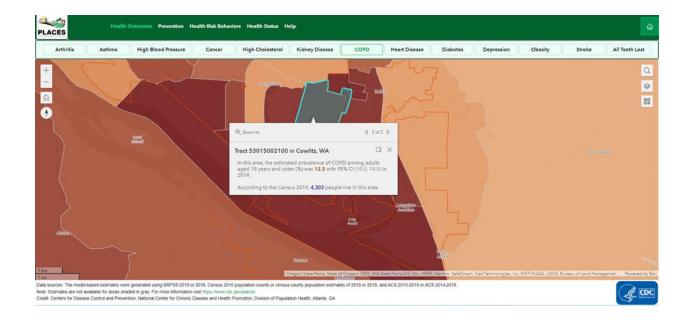




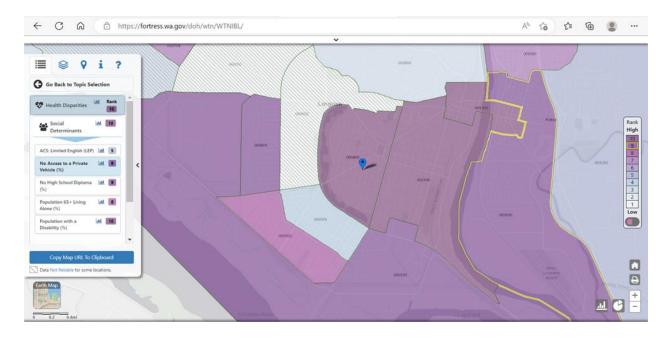


A COC

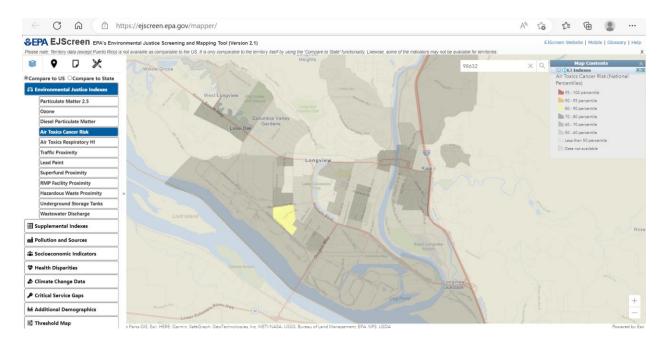
sources. The model-based estimates were generated using BRFSS 2019 or 2018. Census 2010 population counts or Estimates are not available for areas shaded in gray. For more information valls trips://www.ocic.gov/places.



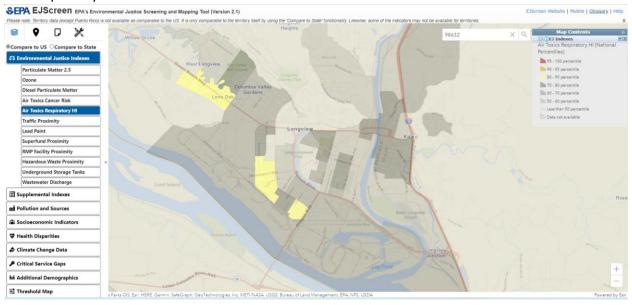
### Households with no access to private vehicle-



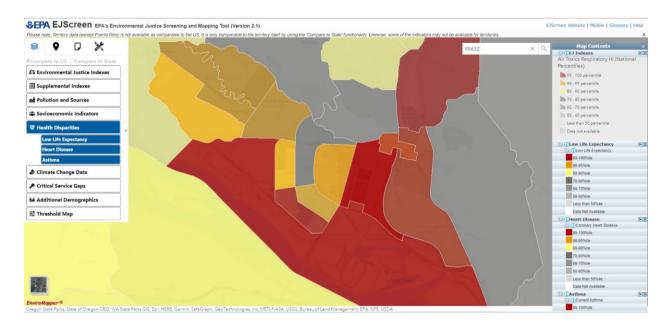
According to the EPA environmental justice mapping tool, almost all of Longview-Kelso is above the 50th percentile for air toxics cancer risk, with neighborhoods closest to industry sites and transportation corridors reaching the 70<sup>th</sup> to 90<sup>th</sup> percentiles.



The Respiratory Hazard Index is even worse.

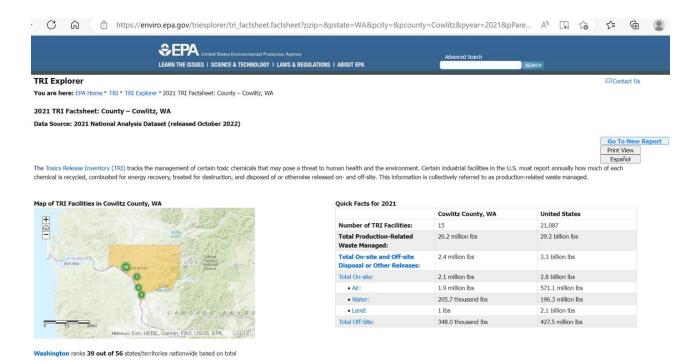


Add in the health disparities and the outlook is bleak.



According to the EPA Toxics Release Inventory, of the 315 TRI facilities in Washington reporting to the EPA, 15 of the facilities are within Cowlitz County.

The 15 facilities in Cowlitz County released 1.9 million pounds of toxic chemicals into the air in 2021. These 1.9 million pounds are out of the 6.1 million pounds of air releases for the entire state. Almost a third of all toxic on-site air releases in Washington are coming from Cowlitz County, as reported to EPA.





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The Toxics Release Inventory (TRI) tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, Certain industrial facilities in the U.S. must report annually how much of each chemical is recycled, combusted for energy recovery, treated for destruction, and disposed of or otherwise released on- and off-site. This information is collectively referred to as production-related waste m





Washington ranks 39 out of 56 states/territories

TRI mapping shows all 15 facilities in the Longview metropolitan area, ranking this area 155 out of 893 urban areas in the country based on all releases per square mile.

2021 TRI Factsheet: Metropolitan areas - Longview, WA Data Source: 2021 National Analysis Dataset (released October 2022)



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	Longview, WA	<b>United States</b>
Number of TRI Facilities:	15	21,087
Total Production- Related Waste Managed:	26.2 million lbs	29.2 billion lbs
Total On-site and Off-site Disposal or Other Releases:	2.4 million lbs	3.3 billion lbs
Total On-site:	2.1 million lbs	2.8 billion lbs
• Air:	1.9 million lbs	571.1 million lbs
• Water:	205.7 thousand lbs	196.3 million lbs
• Land:	1 lbs	2.1 billion lbs
Total Off-site:	348.0 thousand lbs	427.5 million lbs

Longview, WA ranks 155 out of 893 urban areas in the country based on total releases per square mile (Rank 1

Looking at production-related waste managed over time helps track progress in reducing waste generated and moving toward safer waste management methods. EPA encourages facilities to first eliminate waste at its source (source

The ten facilities in the Longview 98632 zip code with 2021 reports to EPA are-EAGLE US 2 LLC - LONGVIEW 3541 INDUSTRIAL WAY, LONGVIEW, WA 98632 **FXI INC. - LONGVIEW** 1205 PRUDENTIAL BLVD, LONGVIEW, WA 98632

GLACIER NORTHWEST INC LONGVIEW READY-MIX PLANT 1100 THIRD AVE, LONGVIEW, WA 98632 3401 INDUSTRIAL WAY GATE 10 AREA 42, LONGVIEW, WA 98632 HASA INC

INTERFOR LONGVIEW DIV 540 THIRD AVE, LONGVIEW, WA 98632

NIPPON DYNAWAVE PACKAGING CO. 3401 INDUSTRIAL WAY, LONGVIEW, WA 98632

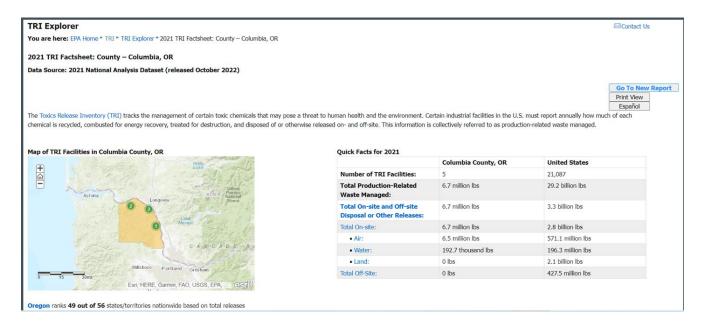
NORTH PACIFIC PAPER CO LLC LONGVIEW 3001 INDUSTRIAL WAY, LONGVIEW, WA 98632

SKYLINE STEEL LLC-LONGVIEW 9 INTERNATIONAL WAY, LONGVIEW, WA 98632 **SOLVAY CHEMICALS INC** 3500 INDUSTRIAL WAY, LONGVIEW, WA 98632

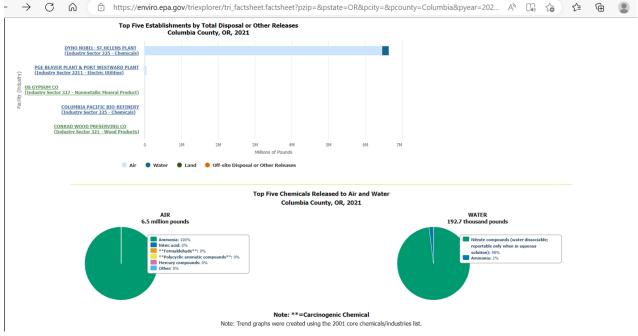
WESTROCK LONGVIEW LLC 300 FIBRE WAY, LONGVIEW, WA 98632 One facility is in Kelso 98626-FOSTER POULTRY FARMS KELSO PLANT 1700 S 13TH AVE, KELSO, WA 98626

There are two reporting just across the Columbia River in Rainier, OR 97048 CONRAD WOOD PRESERVING CO 29175 DIKE RD, RAINIER, OR 97048 US GYPSUM CO 29073 DIKE RD, RAINIER, OR 97048

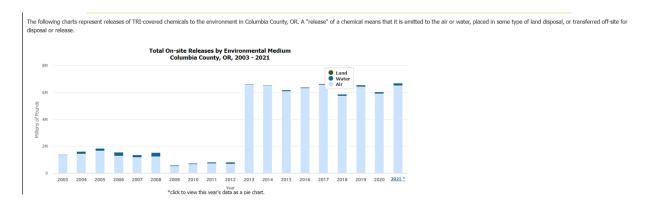
Across the Columbia River, Columbia County, OR released 6.5 million pounds of toxic chemicals to the air, or more than the entire state of Washington reported in 2021. There is no magic fence line in the Columbia River that separates the Columbia County air shed from residents in Cowlitz County.



Most of the Columbia County emissions are ammonia, NH<sub>3</sub>, an EPA CAP, released from Dyno Nobel at Deer Island, about 15 miles upstream from Longview-Kelso.

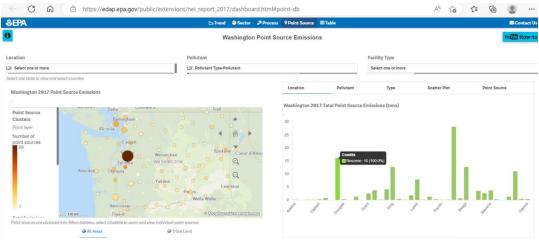


The astronomical increase in emissions began in 2013.

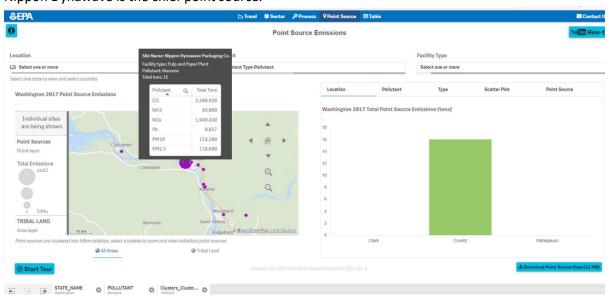


While the air pollution overburdened communities program is focused on criteria air pollutants, hazardous air pollutants can also be indicative and should be included in pollutants affecting communities.

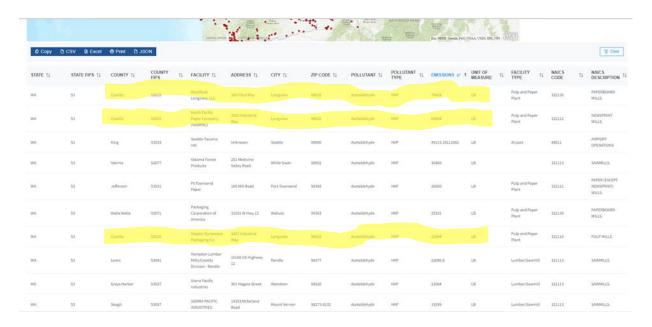
**Benzene** is of concern and Cowlitz County ranks high in point source emissions.



Nippon Dynawave is the chief point source.

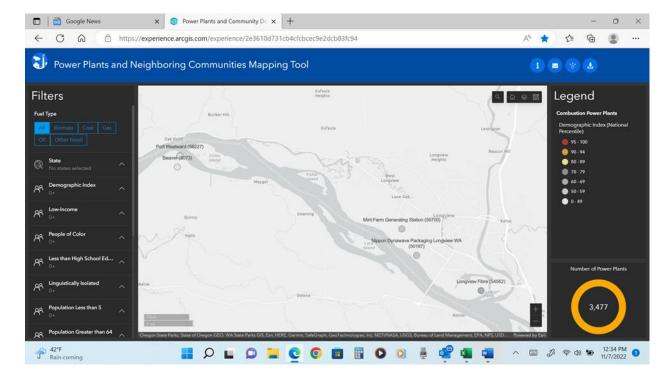


Another is **acetaldehyde**. Cowlitz County emitters rank 1<sup>st</sup>, 2<sup>nd</sup>, and 7<sup>th</sup> in the state.



For **methanol** Cowlitz Co emitters rank 1<sup>st</sup>, 3<sup>rd</sup>, and 7th in the state. For **mercury** 6<sup>th</sup> and 9<sup>th</sup>. For **formaldehyde** 6<sup>th</sup> and 7<sup>th</sup>, according the 2017 NEI. This summary is not exhaustive.

The Longview-Kelso area is also home to several electric power generators, consuming gas, biomass, and coal, with their concomitant emissions.



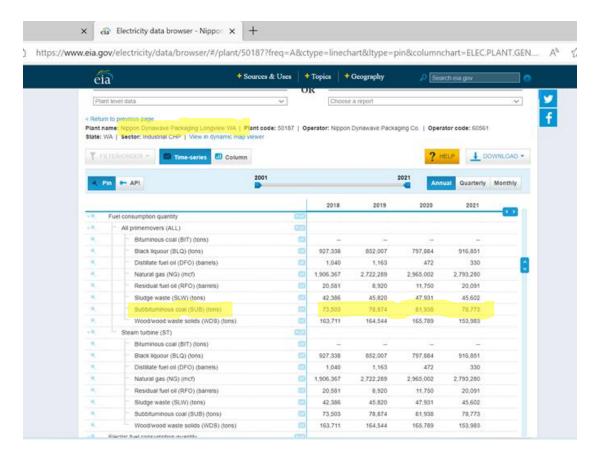
It is inexcusable any electricity in Washington should be generated by coal (accepting TransAlta coal-fired generation will soon be shuttered). Yet Nippon Dynawave (formerly Weyerhaeuser) has been burning coal in its boilers forever along with black liquor and other fossil fuels. Weyerhaeuser/Nippon

Dynawave owns its own gas pipeline to the site and uses gas for cogeneration, as does WestRock/Longview Fibre. Nippon sells this power back to the Bonneville power grid.

Nippon Dynawave consumes about 80,000 tons of coal per year, which is railed in open rail cars to the Northwest Alloys, formerly Millennium, site. It is supposed to be stored under cover. Lately the full rail cars sitting along the rail line brings that contracted requirement into question. We should all be well versed by now in the air pollution caused by coal dust.

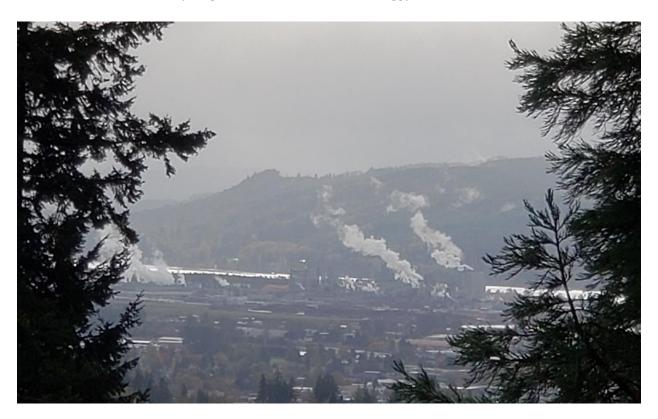
Regardless of other emissions, using an EPA conversion table, burning 80,000 tons of sub-bituminous coal per year produces about 150,000 tons of CO<sub>2</sub>.

An additional note about coal dust from unit trains of coal. The south Kelso census tract, already indicated as overburdened by several factors, is adjacent not only to the regional airport, but is bordered by the BNSF rail line on the west and I-5 on the east. Unit trains of coal continue to traverse this route to Canadian export ports.



The air shed over the relatively small geographic area of Longview and Kelso is pumped with air pollutants from multiple sources, both point and non-point. Surrounded by high hills, the community oftentimes sits in a bowl of air. In the 37 years I have lived here at 850' elevation and with a view of the entire river valley to Kalama, I have seen the air currents sweep the lower-level fogs out in the morning and in in the evening. Winter prevailing winds often come in from the south. In summer from the north or northwest. At times I am above the fog that sits in the valley and at other times the air rises and envelops the higher elevations. Smokestack plumes do not dissipate their pollutants above and out of

residential air spaces. I know downtown residents who regularly complain their air stinks. The same is true for the rarified air in my neighborhood, often when it is foggy.





The recent wildfires have brought evidence the one regulatory PM 2.5 monitor in Longview is insufficient to monitor ambient air levels of the many pollutants in the Longview-Kelso area. When comparing multiple readings over several days of the Longview monitor to the Purple Air network monitors, with conversions and averages, it became apparent the Longview monitor regularly underreported particle emissions. Part of this may be due elevations of the monitoring stations. Folks with health concerns who relied on the Longview data on the AirNow website and in the newspaper were badly informed about the real-time health impacts from the outside air. I have recently installed a Purple Air monitor at my residence, the highest in elevation of the now three PAMs in the Longview area. I will be glad to share data I've been collecting. I have already shared these concerns with Dept. of Ecology and SWCAA, Uri Papish. At the very least, an additional monitor should be sited in south Kelso, and another at a couple hundred feet elevation.

I'd like to say this is all, but it's not. Currently there is a comment period for an AOP modification and NOC Order 21143 for WestRock Longview for a new cardboard plant and new natural gas boiler. Expected additional air pollution impacts for the area are-

- Carbon monoxide, 2.9 tons per year (tpy)
- Nitrogen oxides, 1.4 tpy
- Particulate matter less than 10 micrometers in diameter, 2.3 tpy
- Particulate matter less than 2.5 micrometers in diameter, 1.3 tpy
- Total suspended particulate, 7.8 tpy
- Sulfur dioxide, 0.1 tpy
- Volatile organic compounds, 10.7 tpy
- Lead, 0.000065 tpy
- Toxic air pollutants, 0.95 tpy
- Greenhouse gases (as carbon dioxide equivalents), 14,421 metric tpy

Also in the works is a project at Longview Mint Farm Industrial Park for an anaerobic biodigester with injection of RNG into the Cascade Gas pipeline, by Divert Inc. This company does not have a good track record on previous projects for air pollution controls. Their SEPA checklist anticipates a 2 million BTU/hour gas boiler, flare stack, multiple toxic emissions, and almost 20,000 tons/yr GHG emissions. Air discharge permit application to SWCAA CO-1058.

Please designate Longview-Kelso a community overburdened by air pollution. Please assign new continuous air monitoring stations to our area.

Thank you,

Diane L. Dick Longview, WA