March 19, 2025

VIA EMAIL TO: anthony.bruma@ecy.wa.gov

Anthony Bruma
Air Quality Program
Department of Ecology
300 Desmond Drive SE,
Lacey, WA 98503

Re: Chapter 173-448 WAC – Air Quality in Overburdened Communities Rulemaking

Dear Anthony Bruma & Ecology Program Staff:

These comments are submitted on behalf of 350 Tacoma, Communities for a Healthy Bay, Duwamish River Community Coalition, Front and Centered, and Earthjustice. We are environmental, climate, environmental justice, and community-led social justice organizations who represent the interests of thousands of members and supporters across Washington State who want to see improved air quality in communities overburdened by air pollution, which in turn will provide for better health outcomes for Washingtonians across the state.

In this letter we chart a vision for how Ecology can improve air quality for overburdened communities. We explain how poor air quality affects the lives and livelihoods of environmental justice communities in Washington State. We advocate that Ecology set stronger health protective air quality targets in designated overburdened communities. We propose emission control measures, and other methods to reach air quality targets, and we make recommendations on how Ecology can improve its methodology for designating overburdened communities and assessing air quality within those communities.

I. Summary of Recommendations:

- **Procedural Recommendation:** Ecology should develop workshops for this rulemaking on three additional topics, specifically (1) emission controls, (2) other

methods for reducing air pollution, and (3) designating overburdened communities, pollution monitoring, and improving methodology for biennial air assessments.

- **Air Targets:** Relying on science showing disparate health outcomes, Ecology should set stronger air quality standards for $PM_{2.5}$ pollution which harms overburdened communities and directly affects health by shortening the lives of community members. Ecology should look to health protective standards recommended by the World Health Organization for controlling particulate matter pollution.
- **Data Disclosure**: Ecology should publish disaggregated data gathered through the Fleet Reporting Requirement to document the location of trucking fleets and to provide transparency regarding how movement of these fleets impact overburdened communities.
- **Emission Controls:** Ecology must adopt innovative regulatory approaches to curb mobile source pollution through indirect source regulation and promulgating emission standards for mobile sources consistent with California's more protective standards.
- **Emission Controls:** For stationary sources, Ecology must consider the cumulative impacts these sources cause to public health and prohibit construction of new facilities or facility expansion in overburdened communities.
- **Other Methods:** Ecology should exercise its authority pursuant to the State Environmental Policy Act to act as lead agency when preparing environmental review of proposed projects that would increase air pollution in overburdened communities.
- **Other Methods:** Ecology should look to use funding opportunities to encourage public investment into overburdened communities that will result in improved health outcomes for residents.
- **Assessment of Air Quality in Overburdened Communities:** As Ecology prepares to re-assess air quality conditions in overburdened communities for its 2025 report, it should make changes to its methodology for identifying overburdened communities to prioritize public health.

II. About us:

350 Tacoma is volunteer-led 501(c)(3) nonprofit working towards environmental justice in Tacoma and the broader Salish Sea region. Our goal is to make Tacoma a healthier, safer, more equitable and more sustainable place to live and work.

Communities for a Healthy Bay (CHB) is a 501(c)3 nonprofit working with residents, businesses, and government to offer practical, solutions-based environmental leadership in the Puget Sound area. For over 30 years, CHB has been working to engage people in the protection of Commencement Bay, the waters of the South Sound, and the diversity of life they sustain. We strive to mobilize support for decisions that make our communities healthier and more vibrant.

The Duwamish River Community Coalition ("DRCC") is a community steward for environmental justice in the Duwamish Valley, which is one of the most polluted areas in the entire Pacific Northwest following 100 years of industrial dumping of toxic waste and historic disinvestment in the community. DRCC and the community we seek to uplift reside in one of the sixteen identified overburdened communities for this rulemaking. Therefore, we hold uniquely valuable insights on how Ecology can create an equitable rule that supports the community's health and wellbeing, and addresses current air quality conditions.

Front and Centered is a climate justice coalition of organizations led by and serving communities of color in Washington. Our mission is to advocate for the interests of frontline communities, who are first and worst impacted by the climate crisis, in advocating for a just transition from an extractive to a regenerative economy.

Earthjustice is a 501(c)(3) nonprofit environmental law organization that uses the power of law and the strength of partnership to protect people's health, to preserve magnificent places and wildlife, to advance clean energy, and to combat climate change. Earthjustice partners with thousands of groups, supporters, and citizens to take on the critical environmental issues of our time and bring about positive change.

III. Procedural Recommendations

The scoping process for this rulemaking should include consideration of three more workshop topics three issues (1) Emission Controls, (2) Other Methods for reducing air pollution, and (3) designating overburdened communities and improving methodology for biennial air assessments. Rulemaking workshops provide an opportunity for the public to provide in depth analysis and comments on particular issues. Each of these topics are critically important to establishing a final rule that will improve air quality in overburdened communities. We respectfully request that Ecology note these topics for further workshops in this rulemaking docket.

IV. Air pollution harms the health of environmental justice communities

A. Near-Port Communities

Cumulative health impacts are a major issue of concern in overburdened communities, and mobile source pollution in particular, directly harms these communities. If agencies fail to consider cumulative pollution impacts when reviewing permits, then systemic injustice will flourish in industrial projects that continue to target and harm overburdened communities. South Tacoma is a prime example of this. The life expectancy for much of South Tacoma, a previously redlined area which has the highest concentration of Black residents in the city, is 25 years lower than Tacoma neighborhoods with the highest concentrations of White residents.

Despite the existing health disparities, Bridge Industrial was recently given a SEPA Mitigated Determination of Non-Significance for a 2.5 million square foot warehouse complex that could bring up to 12,000 additional vehicles per day through the residential streets of South Tacoma, without even conducting a Health Impact Assessment. What this

says to residents is that your health is non-significant, that diesel emissions taking even more years off your life is non-significant, that the city of Tacoma and the state of Washington view environmental justice as a non-significant priority.

The insult and injury are made worse by the lack of mobile-source emissions being included when projects are analyzed. Thousands of trucks and passenger vehicles idling at intersections, traveling through several school zones to reach freeway entrances, and further backing up existing traffic will significantly increase toxic particulate matter, carcinogens and other harmful emissions. Industry must be accountable for the actual impacts a project will have on a community, and that cannot happen when we pretend pollution stops at a property line.

Similar to the experience of Tacoma residents, communities in the Duwamish Valley are disproportionately exposed to and overburdened by air pollution compared to other communities in King County. Residents in the 98108 area have the highest rates of childhood asthma hospitalization, heart disease death rates are 1.5 times higher, and life expectancy is 13 years shorter when compared to wealthier neighborhoods like Laurelhurst and eight years shorter when compared to the Seattle and County average.

Our community also lives in close proximity to several contaminated waste sites, including the five and a half mile-long Duwamish River Superfund site, and suffers from severe air pollution caused by drayage trucks, industry, Port operations, traffic congestion, manufacturing facilities, 6 Title V Air Operating Permits, two state highways, and one interstate highway. Additionally, South Seattle is home to two international airports - the Seattle-Tacoma International Airport and the King County International Airport – which emit ultrafine particulates (UFP) and utilize leaded aviation fuel. Finally, South Park and Georgetown residents have a mere 140 square feet of accessible green space per resident compared to 387 square feet per resident in Seattle.

In 2013, Just Health Action ("JHA"), the University of Washington School of Public Health ("UW"), and DRCC released the Cumulative Health Impact Assessment ("CHIA"), which examined 15 disproportionate health exposures and impacts affecting people in the Duwamish Valley (the 98108 zip code). As aforementioned, among other disproportionate impacts, the CHIA found that the Duwamish Valley has the highest rates of childhood asthma hospitalizations in the County. This finding was especially alarming to the community given their proximity to roadways, industry, and contaminated and toxic waste sites, and, in 2014, DRCC responded by creating the Duwamish Valley Clean Air Program ("DVCAP").

Many studies have documented the sources of air pollution and the harms they cause to near-port communities such as Tacoma and the Duwamish Valley. These studies show that:

- Communities underneath and downwind of jets landing at Sea-Tac Airport are exposed to a type of ultrafine particle pollution that is distinctly associated with aircraft. The Washington State Department of Health found that "UFPs have many

unique qualities that make them possibly more harmful to human health than larger particles [like $PM_{2.5}$ and PM_{10}]. UFPs are able to travel deeper into the lung than larger particles… Certain groups of people are more sensitive to UFP exposure. These groups include people with preexisting heart and lung disease, infants, older adults, people with diabetes, communities with a lower socio-economic status, and pregnant women."[1]

- In 2019, in collaboration with the United States Forest Service (USFS), the Duwamish Valley Youth Corps (DVYC) completed the Moss Study. The USFS, DVYC, and other partners collected samples of moss – a bioindicator of air pollution – from trees in South Park and Georgetown. All samples were analyzed for 25 heavy metals and other elements in a US Forest Service laboratory. The main findings from the project were 1) levels of Arsenic, Chromium, Cobalt, and Lead in moss sampled in the Duwamish Valley were higher than similar studies of moss in Seattle area parks and in residential areas of Portland, Oregon; and 2) metal concentrations found in the samples were highest in the industrial areas of South Park and Georgetown, especially along the Duwamish River, and lower in the residential areas[2]. These findings, coupled with community pressure to better understand the air quality in the Duwamish Valley, spurred the Puget Sound Clean Air Agency ("PSCAA") to complete an air toxics study.
- From 2021-2022, PSCAA sampled for air toxics at their six regulatory sites (one in the Duwamish Valley) and from July 29 to Sept 2, PSCAA sampled for air toxics at six community-directed locations in the Duwamish Valley. The data – primarily from the regulatory sites – showed that the greatest cancer risk was from diesel particulate matter (85%), then hexavalent chromium (~6%), wood smoke (~4%), and other compounds (~5%). In this study, PSCAA found that in the Duwamish Valley, 73% of the total diesel was from maritime sources (285 per million), and 27% was from on-road sources. In Tacoma, at PSCAA's Tideflats monitor, they found that 35% of the total diesel was on-road (114 per million) and 65% was maritime (213 per million)[3].

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[1] See *Summary of Health Research on Ultrafine Particles*. WA State Dep't. of Health. https://doh.wa.gov/sites/default/files/legacy/Documents/4000//334-454.pdf

[2] See Kirkland, J., Jovan, S., and Derrien, M. *The more the mossier: Using community science to map air quality in environmental justice investigations*. 2023. https://research.fs.usda.gov/treesearch/65953

[3] See Carvlin, G., et. al. *Tacoma and Seattle Air Toxics Trends: Technical Report*. The Puget Sound Clean Air Agency. 2023, December. https://www.pscleanair.gov/DocumentCenter/View/5369/2023TacomaSeattleAirToxicsReport?bidId=

B. Southeastern Washington

Industrial sources also play a significant role in air pollution in Southeastern Washington. Food processing plants in the area emit particulate matter and volatile organic compounds (VOCs) from operations such as dehydration and refrigeration. In the Tri-Cities, manufacturing and chemical production facilities release carbon dioxide (CO_2) and nitrogen oxides (NOx) from fuel combustion and industrial processes.[4] Agriculture is also a source of air pollution from pesticide applications, which emits VOCs and particulate matter into the air. These emissions contribute to ozone formation and can affect both environmental and human health, especially for farmworkers and nearby residents.[5] The communities in Yakima, Benton, and Franklin counties, often deal with windblown dust from farm fields, which can make it hard to breathe and worsen conditions like asthma.[6]

Greenhouse gas emissions from the region mostly come from transportation, agriculture, and industry. Farmers rely on fertilizers to grow crops, but these release nitrous oxide (N_2O), a potent greenhouse gas, while livestock operations contribute methane (CH_4) emissions. Large dairy farms, particularly in Yakima and Franklin counties, are major sources of methane due to manure management practices and enteric fermentation from cattle. Many community members depend on cars and trucks for work and daily life, adding to carbon dioxide (CO_2) emissions from fuel use. Lastly, as wildfires become more common, communities are seeing the effects of climate change firsthand, from smoky summers, drier landscapes, and unhealthy air, it is hard for families, outdoor workers, and vulnerable populations to stay safe.[7]

C. The Problem of Mobile Source Pollution

Emissions from the movement of goods in particular, including trucking and shipping, deteriorates air quality in near-port communities including Tacoma, South Seattle and the

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[4] Benton Clean Air Agency. "Air Pollutants and Trends", https://bentoncleanair.org/air-quality/air-pollutants-and-trends, accessed February 19, 2025

[5] Washington State Department of Ecology. "Improving air quality in overburdened communities" https://ecology.wa.gov/air-climate/climate-commitment-act/overburdened-communities, accessed February 19, 2025

[6] Washington State Department of Ecology. "Improving air quality in overburdened communities" https://ecology.wa.gov/air-climate/climate-commitment-act/overburdened-communities, accessed February 19, 2025

[7] Washington State Department of Ecology. "Washington's greenhouse gas inventory" https://ecology.wa.gov/air-climate/reducing-greenhouse-gas-emissions/tracking-greenhouse-gases/ghg-inventories, accessed February 19, 2025

Duwamish Valley, and Vancouver.[8] Ocean-going vessels are a major source of particulate matter, NOx, and sulfur dioxide—air toxins that harm lung function and contribute to smog formation. Shipping accounts for 15% of global NOx emissions, and diesel fuels used by ships can contain up to 500 times more sulfur than on-road diesel.[9] Ocean-going vessels are the largest source of emissions for both diesel particulate matter and greenhouse gasses in the Duwamish Valley, and likely in other near-port communities as well.

Further, heavy-duty trucks that drive goods to and from ports primarily use diesel-engines that emit dangerous air toxins including diesel particulate matter and NO_x, which can cause serious health ailments including heart problems, respiratory disease and cancer. The vast majority of trucks use diesel powered engines—75% of all trucks in America, and up to 97% of the heaviest classes.[10] These heavy-duty diesel vehicles amongst the largest source of diesel exhaust in the state.[11] When diesel fuel is burned, it emits several criteria pollutants known to have serious consequences for the health of both humans and the environment. In particular, pollution from diesel exhaust includes carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), hydrocarbons (HC), as well as other hazardous air pollutants (HAPs) and air toxics.[12] In California, which also has a large trucking industry, heavy duty vehicles alone account for 31% of all NO_x emissions in the state.[13]

Curbing on-road gasoline and diesel emissions is also necessary to achieve Washington's climate goals–consistent with the Climate Commitment Act. The transportation sector is the largest contributor of greenhouse gas emissions in Washington, and accounts for *close to half* of the state's Greenhouse Gas ("GHG") emissions.[14] Transportation-sector

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[8] Ecology identified each of these three communities as overburdened with air pollution, particularly from particulate matter pollution–a byproduct of pollution from mobile sources.

[9] J. Plester, "Dirty diesel: why ships are the worst offenders," *The Guardian*, May 18, 2017, https://www.theguardian.com/uk-news/2017/may/18/dirty-diesel-ships-worst-offenders-pollutionwatch.

[10] *See* Engine Technology Forum, https://enginetechforum.org/press-releases/posts/57percent-of-all-commercial-diesel-trucks-on-the-roads-are-near-zero-emissions-models

[11] Reducing Diesel Emissions, Wash. Dep't. Ecology (2021) https://ecology.wa.gov/air-climate/air-quality/vehicle-emissions/diesel-emissions.

[12] About Diesel Fuels, U.S. Envtl. Prot. Agency (March 1, 2021), https://www.epa.gov/diesel-fuel-standards/about-diesel-fuels.

[13] Staff Report: Initial Statement of Reasons, Public Hearing to Consider the Proposed Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments, Cal. Air Resources Board ES-1 (2020).

[14] Washington State Greenhouse Gas Emissions Inventory: 1990–2018, Wash. Dep't Ecology (2021), https://apps. ecology.wa.gov/publications/documents/2002020.pdf.

emissions are the principal factor causing an increase in total statewide GHG emissions.[15] On-road emissions from gasoline and diesel account for 30.8% of Washington's total GHG emissions, with diesel vehicles contributing 8.7% of the total state-wide GHG emissions.[16]

With the expansion of e-commerce, warehouses and distribution hubs are becoming an increasingly large source of diesel pollution. For example, the Bridge Industrial warehouse in Tacoma would bring an estimated 4,980 additional vehicles (including 1,411 heavy-duty diesel trucks) through a populous residential area. Residences are located as close as 250 feet from the property, and residences are located along the primary and secondary truck routes for the facility.

The Bridge Industrial case exemplifies the broader issue of environmental justice, as industrial pollution and associated health risks disproportionately affect historically marginalized communities. The absence of robust regulations to manage indirect pollution sources allows environmental health disparities to persist, highlighting the urgent need for comprehensive policy reforms that proactively address all facets of pollution tied to industrial development. Without stronger air quality safeguards, South Tacoma and similar communities will continue to bear the brunt of industrial expansion without adequate protections against its harmful effects.

Emissions from diesel exhaust can have disastrous effects on the human respiratory, cardiovascular, and immune systems.[17] Diesel particulate matter and nitrous oxide ("NOx") emissions can harm respiratory function—causing asthma and asthmatic attacks, inflammation in the lungs, and decreased lung functionality.[18] These air toxins also harm the heart—causing alterations in blood pressure and heart rate, heart disease, and can lead to plaque instability.[19] Diesel particulate matter and NOx can also increase the prevalence and severity of allergic reactions to environmental conditions.[20] Further, diesel pollution can aggravate health harms for people with pre-existing asthmatic conditions and otherwise compromised pulmonary systems.[21] Diesel exhaust can cause cancer. The U.S. Centers for Disease Control and

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[15] *Id.*

[16] *Id.*

[17] A. Sydbom et al., *Health Effects of Diesel Exhaust Emissions*, 17 Eur. Respiratory J. 733 (2001).

[18] *Id.*

[19] Simon Wilson et al., *Effects of Diesel Exhaust on Cardiovascular Function and Oxidative Stress*, 28 Antioxidants & Redox Signaling 819, 826-27 (2018).

[20] *Id.*

[21] Sydbom, *Health Effects* at 741.

Prevention (CDC) notes that up to 65% of diesel PM is made up of a group of organic compounds that includes several known carcinogens.[22]

Diesel engines also emit large quantities of NOx, a criteria pollutant regulated under the Clean Air Act because of its harmful health effects. NOx irritates airways in the human respiratory system, and chronic exposure can contribute to the development of asthma. Further, NOx can react with other air toxins including particulate matter and ozone to form smog—a noxious mix of air toxins that harm respiratory function.[23] One study found that in a single year, high levels of NO_x emissions from diesel engines contributed to 10,000 premature deaths across Europe.[24]

Lastly, chronic exposure to diesel is more deadly that short-term or acute exposure. Every 10 micrograms per cubic meter increase in the concentration of diesel exhaust over an extended period of time is associated with an 11% increase in cardiovascular mortality.[25]

D. Port related activities and emissions

In 2021, Port activities – the Ports of Anacortes, Everett, Olympia, Seattle, and Tacoma and the Northwest Seaport Alliance ("NWSA") – contributed 1,586,676 carbon dioxide equivalents[26] ("CO_2e") to the Puget Sound's airshed. The largest contributors to these emissions were Ocean-going vessels ("OGV") (609,081 CO_2e), Harbor vessels (476,977 CO_2e), Heavy-duty vehicles (238,471 CO_2e), and recreational vessels (132,379 CO_2e). In the region, OGVs are the highest contributing source of nitrogen oxide ("NO_X") and sulfur dioxide ("SO_2 ") emissions[27].

More granularly, in 2021, the Port of Seattle contributed 22,696 CO_2e to the atmosphere. The largest contributors to these emissions were OGV (20,609 CO_2e),

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[22] Carcinogenic Effects of Exposure to Diesel Exhaust, Ctrs. for Disease Control & Prevention, https://www.cdc.gov/niosh/docs/88-116/.

[23] U.S. Envt'l Prot. Agency, *Basic Information About NO_2*, https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects.

[24] J. E. Johnson et al., *Impact of Excess NO_x Emissions from Diesel Cars on Air Quality, Public Health and Eutrophication in Europe*, 12 Envtl. Res. Letters 1, 9 (2017), https://doi.org/10.1088/1748-9326/aa8850.

[25] Wilson, *Cardiovascular Function* at 821.

[26] CO_2e is a greenhouse gas unit of measurement that accounts for carbon dioxide, nitrous oxide, and methane.

[27] See *Puget Sound Maritime Air Emissions Inventory: Volume 1*. Puget Sound Maritime Air Forum. 2021 https://s3.us-west-2.amazonaws.com/nwseaportalliance.com.if-us-west-2-or/2024-06/FINAL%202021%20PSEI%20Report%20Volume%201%20(3%20April%2024)scg.pdf

recreational vehicles (802 CO_2e), cargo-handling equipment (552 CO_2e), and fleet vehicles (434 CO_2e). At the Port of Seattle, OGVs are the largest source of NO_X, SO_2, $PM_{2.5}$, and PM_{10} emissions. In 2021, the NWSA contributed 192,955 CO_2e to the atmosphere. The largest contributors to these emissions were OGV hoteling and maneuvering (91, 473 CO_2e), cargo-handling equipment (52,204 CO_2e), Locomotives (29,627 CO_2e), and Heavy-duty vehicles (18,629 CO_2e). At the NWSA, OGVs are the largest-source of NO_X, volatile organic compound (VOC), carbon monoxide (CO), SO_2, $PM_{2.5}$, PM_{10}, and diesel particulate matter ("DPM") emissions[28].

V. Ecology Should Set Health Protective Air Quality Targets For Overburdened Communities.

Ecology is promulgating this rulemaking pursuant to the Environmental Justice Review provision of the Climate Commitment Act, codified at RCW 70A.65.020. Pursuant to that section, Ecology is required to (i) identify communities overburdened with air pollution—specifically criteria pollutants, (ii) deploy an air monitoring network in those communities, and (iii) identify within those communities what are the greatest sources of criteria air pollutants. RCW 70A.65.020(1). Additionally, Ecology must determine the levels of criteria pollutants and greenhouse gas emissions in those overburdened communities, and identify an assessment of health impacts resulting from that pollution. RCW 70A.65.020(2)(a). It must conduct biennial reviews to update this review. RCW 70A.65.020(2)(a).

Based on the data developed, Ecology must establish air quality targets to achieve the most health protective air quality in those communities, which is either—compliance with the National Ambient Air Quality Standards, or the air quality of communities unburdened by air pollution. RCW 70A.65.020(2)(b). The statute then requires Ecology achieve these air quality targets through "adoption of air quality standards, emission standards, or emissions limitations on criteria pollutants[.]" RCW 70A.65.020(2)(b)(iii), (iv). Ecology may also "consider alternative mitigation actions that would reduce criteria pollution by similar amounts." RCW 70A.65.020(2)(b)(iv). Ecology is required to regulate pollution from both stationary and mobile sources. RCW 70A.65.020(2)(b)(ii). The statute also requires Ecology to work with local air authorities to ensure compliance with air quality targets. *See id*. Lastly, upon adoption of these air quality standards and emission control measures, Ecology has the power to issue enforcement orders to mitigate air pollution consistent with air quality targets. RCW 70A.65.020(2)(b)(v).

[28] See *Puget Sound Maritime Air Emissions Inventory: Volume 2*. Puget Sound Maritime Air Forum. 2021 https://s3.us-west-2.amazonaws.com/nwseaportalliance.com.if-us-west-2-or/2024-06/FINAL%202021%20PSEI%20Ports%20Report%20Voume%202%20(6%20April%202024)scg.pdf

Specifically with regard to setting air quality targets, the Climate Commitment Act provides that Ecology must:

> "Establish air quality targets to achieve air quality consistent with *whichever is more protective for human health*: (A) National ambient air quality standards established by the United States environmental protection agency; or (B) The air quality experienced in neighboring communities that are not identified as overburdened;"

RCW 70A.65.020(2)(b)(i) (emphasis added).

As explained above in Part II, overburdened communities in Seattle, Tacoma, and Southeastern Washington breathe dirtier air compared to less polluted communities in Washington. According to Ecology's analysis, communities overburdened by air pollution experienced more frequent exceedances of air quality standards for $PM_{2.5}$ pollution compared with other Washington communities.[29] These higher levels of pollution translated into worse health outcomes for overburdened communities–shortening lifespans, and doubling the risk of death for individuals over 65 years old.[30] This means that grandparents over 65 years-old living in Tacoma are twice as likely to die prematurely than grandparents living on Camano Island.

The national ambient air quality standards ("NAAQS") have failed to prevent these communities from experience disproportionately worse health outcomes than communities with cleaner air. Washington is already in compliance with the NAAQS for criteria pollutants, meaning these standards are insufficient to adequately protect public health because overburdened communities continue to experience disproportionate health harms caused by air pollution despite compliance with these regional air quality standards. We urge the Department of Ecology ("Ecology") to use its authority pursuant to RCW 70A.65.020(2)(b)(i) to set stronger air quality targets in overburdened communities.

The Climate Commitment Act ("CCA") requires Ecology to strengthen air quality targets if disparities in health outcomes exist in overburdened communities. In setting stronger air quality targets, the CCA directs Ecology to consider the "air quality experienced in neighboring communities that are not identified as overburdened" when setting targets. RCW 70A.65.020(2)(b)(i). The statute does not define the term "air quality experienced" nor does it define the term "neighboring communities." Given the intent of the CCA and the plain language of the statute, Ecology should interpret these terms in a manner that is most protective of human health. RCW 70A.65.020(2)(b)(i). Here, this means that Ecology should

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[29] Washington State Dept. of Ecology, Pub. No. 24-02-011, *Focus on: Air Quality Environmental Justice Report* 1 (2024), https://apps.ecology.wa.gov/publications/documents/2402011.pdf.

[30] *Id*.

set health protective targets for overburdened communities that will reduce pollution levels in those communities, which are causing health harms and health risks.

When determining what the "air quality experienced" in a neighboring community is, Ecology should determine the comparison point for each pollutant individually. Further, to be most protective of human health, Ecology should also consider the cumulative impact of air pollutants, as well as the potentially exacerbating effects of pollution hot spots. Finally, to determine the "air quality experienced by neighboring communities not identified as overburdened," Ecology must expand its current air monitoring network in order to better capture air quality experiences across the state.

Ecology has acknowledged it lacks sufficient monitoring data to determine air pollution levels in communities with cleaner air.[31] Ecology should first develop its air monitoring network[32] to establish baseline information regarding the "air quality experienced in neighboring communities." Without real-time monitoring data that documents the air quality in neighboring communities, Ecology risks setting air quality targets at levels insufficient to protect public health.

In the interim, while it develops the air quality monitoring network, Ecology can look to health protective air quality standards set by the World Health Organization.[33] Specifically, Ecology can look to WHO's recommended air quality standard for $PM_{2.5}$, since this was the primary pollutant of concern identified by Ecology in its initial assessment of air quality in overburdened communities. The WHO recommends setting the annual $PM_{2.5}$ standard at 5 ug/m^3, and it recommends setting the 24 hour maximum standard at 15 ug/m3, which allows for 3-4 exceedances of the standard per year.[34] These guidelines from the WHO are based on scientific data that prioritizes reducing health harms.

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[31] *See* Washington State Dept. of Ecology, Pub. No. 23-02-115, *Improving Air Quality in Overburdened Communities Highly Impacted by Air Pollution: 2023 Report* 20 (2023) (noting that the need for better air quality monitoring to obtain more detailed data about air quality across the state).

[32] As the department places more sensors, they must work with local community members to identify the areas of most concern and place sensors in a location that is capable of best monitoring those spaces. RCW 70A.65.020(4)(a)(ii). In addition, the department should focus on investing in sensors that are able to gather data on both criteria air pollutants and air toxics so as to better understand where the sources of pollutants are coming from, rather than just concentrations of pollutants.

[33] World Health Organization, "What are the WHO Air quality guidelines? Improving health by reducing air pollution" https://www.who.int/news-room/feature-stories/detail/what-are-the-who-air-quality-guidelines (accessed March 3, 2025).

[34] *Id*.

VI. Ecology should reduce pollution from mobile sources.

Given the substantial contribution of mobile sources to particulate matter pollution throughout the state, Ecology should prioritize reducing emissions from mobile sources through stronger tailpipe emission standards, and indirect source regulations. Vehicles used in goods movement–ships and trucks in particular—contribute a significant amount of diesel pollution into near port communities.

Importantly, diesel pollution includes both criteria pollutants ($PM_{2.5}$ and NOx), as well as air toxics in the form of diesel particulate matter. The Puget Sound Clean Air Agency ("PSCAA") found that 85% of the potential cancer risk from air toxics in the Seattle and Tacoma area is caused by diesel particulate matter.[35] "This is because of the high toxicity of diesel particulate matter and relatively high concentration."[36] Given that diesel pollution both contributes to smog formation, and is the most toxic air pollutant in the state, Ecology should regulate this pollutant to reduce emissions.

Emission Standards: First, Ecology should adopt mobile source standards from California to reduce diesel pollution including (1) the At Berth rule to reduce emissions from ships, and (2) the Commercial Harbor Craft rule. Each of these rules are designed to reduce emissions from vehicles used in goods movement, particularly ships. Ecology has the authority to adopt these emission standards promulgated by California pursuant to the federal Clean Air Act.

Indirect Source Regulation: Second, Ecology should adopt indirect source regulation to control diesel particulate emissions that come from distribution hubs. Control of diesel pollution from distribution hubs is especially important for warehouses and logistics centers located near to residential neighborhoods. Ecology can look to examples from California on how to regulate and control indirect sources of air pollution, such as the Warehouse Indirect Source Rule developed by the South Coast Air Quality Management District.

Warehouses and logistics centers directly affect the health of nearby communities because they concentrate diesel pollution in residential neighborhoods. Bridge Industrial (Bridge Point Tacoma) is developing a 2.5 million square foot warehouse facility in South Tacoma, located on a historically contaminated site known as the Commencement Bay, South Tacoma Channel Superfund Site. This project illustrates an important gap in current air quality regulations—how to address non-point emission sources interacting with large-scale industrial developments.

In December 2023, Ecology issued a Construction Stormwater General Permit (CSGP) for the project, accompanied by an administrative order outlining conditions to protect water quality and mitigate air quality/traffic impacts from diesel trucks. Although Bridge Industrial appealed these conditions, both the order and permit remained effective during the appeal

[35] PSCAA, Tacoma and Seattle Air Toxics Trends Technical Report at 16 (2023).

[36] *Id*. at 77.

process. As part of an eventual settlement agreement, Bridge Industrial agreed to withdraw its appeal and pay $8.95 million to address traffic and air pollution in South Tacoma. Ecology plans to use these funds to implement protective measures and enhance local air monitoring in the affected neighborhoods. In the coming months, they will seek community input on the best use of the settlement funds to address these issues, including permanent air quality monitoring actions. Additionally, the administrative order accompanying the project's construction

In the settlement agreement, Ecology noted that "[l]ocal, state, and federal requirements and enforcement are insufficient to mitigate the adverse air quality and human health impacts attributable to the Project."[37] "[T]here is no air permitting pathway to sufficient mitigation of the impacts associated with increased emissions of diesel particulate matter and nitrogen oxides."[38]

Without an indirect source rule, Washington lacks regulatory mechanisms to protect communities like South Tacoma who are vulnerable to indirect source emissions from warehouses and logistics centers. Warehouses and logistics centers are anticipated to increase given the high demand for e-commerce. To regulate this serious air pollution problem, California's South Coast Air Quality Management District (South Coast AQMD) Indirect Source Review (ISR) Rule implemented a system to reduce air pollutants associated with warehouse operations. This rule requires warehouses to take measures to reduce diesel emissions from trucks that use the warehouse as a home base, thereby improving air quality in communities near to these facilities.[39]

Data Disclosure – Fleet Reporting Requirement: Given the substantial impact of mobile source pollution, and diesel pollution particularly on overburdened communities, Ecology should make available information on fleets gathered through the Fleet Reporting Requirement. Owners of vehicle fleets that operate five or more trucks must report on the trucks operated within their fleets. WAC 173-423-083. Fleet owners must disclose average number of trips per day, typical destinations, vehicle home base, model year of the engine, and other data. *Id*. This information is valuable in determining how many trucks operate in overburdened communities, and whether these vehicles should be prioritized for receiving electrification rebates. To improve transparency regarding mobile source emissions in overburdened communities, Ecology should make this data public in a disaggregated format, that allows communities to see how much trucking activity occurs in their neighborhoods.

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[37] [37] *Department of Ecology, "Settlement Agreement: Sierra Construction Company Bridge Point Tacoma LLC," Exhibit A, pg 12,* https://ecology.wa.gov/getattachment/7b161b64-4f06-47ea-a11a-1f2fdccb0849/2024-11-04_BridgePoint_Settlement_FullyExecuted.pdf

[38] *Id*.

[39] Earthjustice, "Southern California's Air District Votes to Electrify and Clean Up Air Pollution from Mega-Warehouses," May 7, 2021, https://earthjustice.org/press/2021/southern-californias-air-district-votes-to-electrify-clean-up-air-pollution-from-mega-warehouses.

VII. Ecology should control pollution from stationary sources:

No new permits: To control pollution from stationary sources in communities identified as overburdened, Ecology should restrict issuance of new permits for facilities that would emit $PM_{2.5}$ pollution. This includes prohibiting issuance of new permits, and prohibiting modification of existing permits that allow for an increase of emissions. Overburdened communities already experience adverse health outcomes from poor air quality. Adding additional sources of pollution into these communities will further deteriorate air quality and worsen disproportionate impacts.

When reviewing notice of construction applications that request to operate a new polluting source, Ecology must consider "whether the operation of the new air contaminant source at the location proposed will cause any ambient air quality standard to be exceeded." RCW 70A.15.2210(4). Further, Ecology has authority to deny permit applications if they fail to comply with Washington's clean air laws. RCW 70A.15.2210(3) ("If on the basis of plans, specifications, or other information required under this section the department of ecology or board determines that the proposed new source will not be in accord with this chapter or the applicable ordinances, resolutions, rules, and regulations adopted under this chapter, it shall issue an order denying permission to establish the new source."). If Ecology determines that overburdened communities require more stringent air quality targets, as is consistent with the evidence before it, Ecology has the authority in this rulemaking to restrict new permit applications and permit modifications that would increase particulate matter pollution overburdened communities.

Cumulative Impacts: Ecology should develop rules to incorporate cumulative impact analysis into the review of all air permits issued in Washington state. As discussed above, RCW 70A.65.020(2)(b)(iii) provides the department with the authority to achieve air quality targets through the use of methods other than just emissions control strategies. Ecology therefore should promulgate regulations directing regional air agencies and the department to incorporate cumulative impact analysis into the permit review process for all air permits issued in Washington state.

Cumulative impact analysis should incorporate the consideration of pollution from sources located within or sources whose outputs flow into overburdened communities, as well as the population characteristics, such as socioeconomic factors, that may influence how the environmental and public health stressors added by the permitted facility currently affect or would affect community members' health, well-being, and quality of life. By incorporating cumulative impact analysis into air permit reviews, the department, as well as regional air agencies, will have a fuller understanding of the impacts of a proposed project on the communities in which a facility is to be located and would therefore be able to make a decision that is more rooted in the interest of protecting human health.

SEPA Review: Ecology should act as lead agency or co-lead agency for any proposed project in an overburdened community that requires SEPA review and would have probable significant impacts on air quality or greenhouse gas emissions. "Any local government or

state agency in Washington can be lead SEPA agency as long as all agencies with jurisdiction agree. A lead agency is not required to have jurisdiction on the proposal."[40]

VIII. Funding and Investment

Pursuant to RCW 70A.65.030(1), Ecology must establish a minimum of 35 percent and a goal of 40 percent of investments that provide direct and meaningful benefits to vulnerable populations within the boundaries of overburdened communities when allocating funds from Climate Commitment Act accounts. The article further establishes that such benefits can be achieved through:

> "(a) The direct reduction of environmental burdens in overburdened communities; (b) the reduction of disproportionate, cumulative risk from environmental burdens, including those associated with climate change; (c) the support of community led project development, planning, and participation costs; or (d) meeting a community need identified by the community that is consistent with the intent of this chapter or RCW 70A.02.010." RCW 70A.65.030(1).

While the Climate Commitment Act sets forth the intent for the Washington State Legislature, it is ultimately the responsibility of administering agencies to meet the 35 percent threshold. The Legislature has fallen short of explicitly allocating 35 percent of Climate Commitment Act investments in the 2023-2025 biennium and 2024 supplemental budgets. It now falls on Ecology to prioritize community-identified and community-centered programs and investments in overburdened communities.

Thus far, the Legislature has appropriated $3 billion of Climate Commitment Act revenue. This presents numerous opportunities for Ecology to direct air quality improvement efforts to overburdened communities. For example, the Medium and Heavy-Duty Vehicles Incentive Program under development by the Department of Transportation would distribute point-of-sale vouchers for zero emission medium and heavy-duty vehicles. Ecology should collaborate with the Department of Transportation to prioritize investment of these vehicle rebates in overburdened communities—especially near-port communities. Consistent with the goals of the CAA, distribution of rebates should prioritize reducing emissions and improving air quality in overburdened communities. By directing rebates to trucks that depot in or drive through overburdened communities, Washington can achieve reductions in $PM_{2.5}$—of which diesel particulate matter is a major source. Further, Ecology has information available to assist with prioritizing overburdened communities. As part of the rulemaking on the

[40] Dep't of Ecology, "Lead agency determination and responsibilities," https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/guide-for-lead-agencies/lead-agency-determination-and-responsibilities.

Advanced Clean Truck rule, Ecology promulgated a fleet reporting requirement. Data from this rulemaking can, and should be used to prioritize distribution of vehicle rebates.[41]

Similarly, investing in heat pumps for frontline communities in Washington state is crucial for environmental and economic justice. These communities often face higher energy burdens and will benefit from heat pumps' efficiency, lowering their energy burden. By targeting investments in these areas, we can reduce energy costs, improve indoor air quality, and reduce reliance on fossil fuels.

Ecology can greatly accelerate the improvement of air quality in overburdened communities by guiding implementation of Climate Commitment Act programs and projects. Thus, we urge Ecology to direct investments aimed at reducing air pollutants to overburdened communities in accordance with RCW 70A.65.030(1).

IX. Recommendations for Future Assessments

Front and Centered originally provided comments on the process the Department used to identify communities overburdened by air quality across Washington and finds it necessary to repeat them again, in the context of this rulemaking on air quality target setting.

Ecology's process for identifying overburdened communities for the purposes of administering RCW 70A.65.020 was flawed from the beginning: instead of identifying all overburdened communities across the state, improving air monitoring within those communities, and then identifying which were most impacted by air quality, Ecology used its existing air monitoring network. The department itself acknowledged that the network needed improvements in order to more accurately reflect the air quality experienced in communities.[42]

Given the overly stringent criteria that Ecology decided to use to define "overburdened communities," multiple commenters on Ecology's initial identification proposal suggested that Ecology consider opening alternative pathways for communities to qualify as an overburdened community and therefore receive increased air monitoring. In response, Ecology argued that "Ecology believes it has a reliable path forward to start this effort but acknowledges and

[41] "As the transportation sector continues to electrify and transition to less-polluting vehicles, the collected information will be useful in designing and targeting incentive programs to assist fleet owners and operators in electrifying their fleets and transitioning to low-pollution technologies." Dep't of Ecology, *Fleet Reporting Platform Guidebook for Fleet Managers*, 2023, https://apps.ecology.wa.gov/publications/summarypages/2302068.html.

[42] *See* Washington State Dept. of Ecology, Pub. No. 23-02-115, *Improving Air Quality in Overburdened Communities Highly Impacted by Air Pollution: 2023 Report* 20 (2023) (noting that the need for better air quality monitoring to obtain more detailed data about air quality across the state).

understands that there will be need for improvement and adjustments."[43] Further, Ecology plans to re-evaluate both the indicators used and the communities identified every 5-7 years, which it links to the amount of time it takes to gauge changes in air quality.[44]

Multiple parties noted that this 5-7 year gap is inadequate when dealing with overburdened communities, many of whom will continue to face the negative health impacts of cumulative pollution exposure in those interim years. As such, many commenters suggested that Ecology implement an alternative pathway to recognition as an overburdened community. Instead, Ecology responded that it was not directed to create an alternative process for communities to be considered through self identification, nor nomination and that communities should wait until "expanded air monitoring provid[es] a more granular level of information" to be reconsidered.[45]

When one looks at the list of communities identified by Ecology for the purposes of Section 3, 10 of the 16 identified already have existing air monitors, and 3 more have nearby air monitors.[46] Front and Centered is in support of updating and increasing the number of air monitors in the communities identified, but also questions whether Ecology can truly claim that it is "expanding" air monitoring. Instead, it appears that Ecology has identified communities with poor air quality given existing air monitors and has elected to put more air monitoring equipment in those areas, rather than doing the work of finding areas that may be overlooked by Ecology's existing air quality monitoring network.

Given the circular process used by Ecology, it is even more important that there be an alternative pathway to recognition as an overburdened community before 5-7 more years have passed. It is unlikely that Ecology will identify communities outside of the communities it has already identified if it narrows its definition by looking only at overburdened communities "highly impacted by air quality," but then does nothing to expand air quality monitoring outside of those areas.

While Front and Centered acknowledges that there are resource constraints felt by agencies when embarking on statewide measures, such as the air monitoring Ecology must perform as part of its CCA Section 3 duties, Front and Centered also believes agencies have a responsibility to identify communities without consideration to resources. Only once those communities have been identified should resources come into consideration–it is at this point

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[43]Washington State Dept. of Ecology, Pub. No. 23-02-018, *Response to Comments Section 3, Climate Commitment Act The Improving Air Quality in Overburdened Communities Initiative* 25 (2023).

[44] *Id.*

[45] *Id.*

[46] Washington State Dept. of Ecology, Pub. No. 23-02-017, *Community Summary Report: Improving Air Quality in Overburdened Communities Initiative* 15-16 (2023).

that agencies can truly begin a meaningful dialogue with communities about where money and time should be spent, given resource constraints.

In other words, agencies should follow the simple maxim of: identify need in full, then acknowledge resource constraints. This will help not only agencies understand their limitations, but will also provide greater transparency to communities, as well as highlight to the legislature which projects may need more funding.

X. Conclusion

350 Tacoma, Front and Centered, The Conversation 253, DRCC, Communities for a Health Bay, and Earthjustice offer these comments with the spirit of collaboration, and the goal of working with Ecology to improve air quality in overburdened communities. We look forward to continuing this conversation with Ecology, and urge Ecology to adopt these measures to control air pollution in overburdened communities that will quite literally save lives.

Respectfully Submitted,

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