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4 March 2021

To: House Committee on Energy and Environment

### RE: Oregon House Bill 2814, Indirect Source Rule

Chair Marsh, Vice-Chair Helm, Vice-Chair Brock Smith, and members of the Committee,

Guided by the values and expertise of medicine and public health, Oregon Physicians for Social Responsibility (PSR) works to protect human life from the gravest threats to health and survival. We are an organization of over 2,800 health professionals and public health advocates statewide working collaboratively with community partners to educate and advocate for societal and policy change that protects human health at the local, state, national, and international level. We seek a healthy, just, and peaceful world for present and future generations.

We enthusiastically support the passage of House Bill 2814 and encourage you to vote yes on this bill, which would direct the Oregon Environmental Quality Commission to establish an indirect source review program to control emissions of air contaminants from or associated with indirect sources of air pollution.

Oregon PSR was one of the 21 environmental and public health groups that submitted a petition to the Environmental Quality Commission in December 2019 to establish a cap on diesel emissions from indirect sources. We were disappointed when the Environmental Quality Commission rejected this petition and now urge the legislature to take action to address this important issue of air quality that affects regions across the state of Oregon. The aggregate diesel pollution from on-road vehicles and nonroad vehicles and engines at sites like railyards, trucking distribution centers, and large construction sites has a major detrimental impact on respiratory health and HB 2814 would ameliorate the issue.

In early 2020, health professional members of Oregon PSR weighed in on the indirect source rule petition filed with the Environmental Quality Commission. Here are some observations that Dr. Ann Turner, MD shared with the Environmental Quality Commission in January 2020 on the impacts of diesel pollution from aggregate sources (emphasis added):

“As a physician, I focused on helping patients manage their chronic illnesses, such as heart disease and asthma. I didn’t think much about



what toxins and pollutants in our environment might be causing or exacerbating their problems. Now I have a much deeper understanding of the significant negative health impacts of air pollution and the importance of focusing on prevention from an environmental standpoint...

...Diesel emissions have been shown to increase the risk of lung and bladder cancer, heart disease and stroke.<sup>1</sup> In children, it increases the risk of autism, ADHD, and other learning disabilities;<sup>2</sup> in older persons, it is associated with an increased risk of dementia and Parkinsonism.<sup>3,4</sup> It increases the risk and severity of asthma and exacerbates chronic lung diseases.<sup>5</sup> It increases the incidence of miscarriages and low birth weight babies.<sup>6</sup> In Oregon, diesel emissions cause more than four hundred deaths each year and 3.5 billion dollars in economic losses. In Portland, DEQ's environmental justice analysis demonstrated that there are disproportionate impacts from air toxics for minority and low-income populations in the Portland region.<sup>7</sup>

Reducing diesel emissions does improve health. We know this from a study in Tokyo in 2016.<sup>8</sup> **In areas where diesel emissions were controlled, mortality from lung cancer, heart disease and stroke and the incidence of lung diseases was significantly lower than areas where diesel emissions were not reduced.** We have strong evidence that it makes sense to reduce diesel emissions in our cities. This change in rules will go a long way toward meeting both our health and our climate goals. The mayors of the cities of Portland, Eugene and Milwaukie and the chairwoman of Multnomah County agree.

As a physician and resident of Portland, I urge you to please vote "Yes" to reduce our diesel emissions and improve the health of our communities."

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<sup>1</sup> WHO 1—World Health Organization <http://www.who.int/mediacentre/factsheets/fs313/en/#>

<sup>2</sup> In children increases in ADHD, Autism, Learning Disabilities, and decreases in IQ documented related to PM 2.5 and associated toxicants like PAHs that they carry (Perera et al 2012)

<sup>3</sup> BC and other traffic related air pollution seen to be associated with dementia incidence and cognitive impairment (Oudin et al. 2016; Power et al. 2011; Chen et al. 2017);

<sup>4</sup> In older adults, BC associated with increases in Parkinson's Disease (Ritz et al 2016)

<sup>5</sup> Inhalation of BC creates inflammation that results in the start of, and exacerbation of asthma in children and adults. It also means increases in prevalence and severity of disease in people with emphysema, COPD, and pneumonia (Ristovski et al 2012)

<sup>6</sup> Increase in miscarriages, low birth weight babies, infertility and other pregnancy problems in women with exposure to high concentrations of traffic-related air pollution (Frutos et al 2015).

<sup>7</sup> Portland Air Toxics Solutions Report and Recommendations by DEQ (Page 2 of 21 PATSAC Report and Recommendations) <https://www.oregon.gov/deq/FilterDocs/PATS2012.pdf>

<sup>8</sup> Yorifuji, Takashi, Saori Kashima, and Hiroyuki Doi. "Fine-particulate Air Pollution from Diesel Emission Control and Mortality Rates in Tokyo: A Quasi-experimental Study." *Epidemiology* (Cambridge, Mass.) 27, no. 6 (2016): 769-78.



Dr. Theodora Tsongas, PhD, MS, an environmental health scientist/epidemiologist with Oregon PSR wrote the following in her January 2020 comments to the Environmental Quality Commission (emphasis added):

“Climate disruption is a public health emergency<sup>9</sup> and calls for immediate action. The human health impacts of climate change include injuries, fatalities, and mental health impacts from severe weather, rising sea levels, floods; heat related illness; asthma, cardiovascular disease, COPD and respiratory allergies from air pollution and increased allergens; increases in vector borne diseases from changes in vector ecology; increases in waterborne diseases from changes in water quality; malnutrition, diarrheal disease, forced migration, civil conflict and mental health impacts from environmental degradation and impacts on water and food supply.

How does this relate to indirect source emissions? As you have heard from the petitioners and other commenters, diesel emissions contain black carbon, a potent climate forcer. Because black carbon remains in the atmosphere for only a few weeks, its climate effects are strongly regional and its climate effects would dissipate quickly if black carbon emissions were reduced.<sup>10</sup> **Reductions in diesel emissions through the regulation of indirect sources, will help to reach our climate goals and help to reduce the worst impacts on our climate and health.** Reducing black carbon emissions would most directly benefit communities that invest in policies to reduce these emissions, would reduce air pollution, resulting in fewer premature deaths and fewer missed work and school days, and have an immediate cooling effect on the Earth’s climate, potentially delaying temperature increases in the short run.”

Additionally, Dr. Andy Harris, MD who serves on our Board of Directors writes:

“I live in North Portland on the bluff directly above Union Pacific rail yards and the Swan Island UPS and FedEx trucking distribution centers. My house is just four blocks from I-5, and air pollution from diesel emissions in our neighborhood is among the highest in Oregon...

According to the U.S. EPA, **the toll on the health and productivity of Oregonians from diesel exhaust is estimated to be \$3.5 billion each year...**

HB 2814 will direct EQC to develop rules to regulate indirect sources of diesel emissions. The legislation is greatly needed to protect the health of Oregonians.”

The COVID-19 pandemic has especially ravaged communities with high exposure to air pollution and the resultant respiratory ailments that such exposure causes. DEQ’s own

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<sup>9</sup> [https://www.apha.org/-/media/files/pdf/topics/climate/190429\\_declaration\\_climate\\_health.ashx](https://www.apha.org/-/media/files/pdf/topics/climate/190429_declaration_climate_health.ashx)

<sup>10</sup> <https://www.c2es.org/site/assets/uploads/2010/04/what-is-black-carbon.pdf>



environmental justice analysis shows that there are disproportionate impacts from air toxics for Black, Indigenous, and people of color (BIPOC) and low-income populations.<sup>11</sup> HB 2814 offers Oregon a second chance at taking action to reduce diesel pollution from major emissions hotspots at a time when we know better than ever the importance of clean air for all Oregonians. We hope that you all will take the opportunity to support this forward-thinking, much-needed bill. Thank you for your time and consideration.

Sincerely,



Damon Motz-Storey, Healthy Climate Program Director  
Oregon Physicians for Social Responsibility

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<sup>11</sup> Portland Air Toxics Solutions Report and Recommendations by DEQ (Page 2 of 21 PATSAC Report and Recommendations) <https://www.oregon.gov/deq/FilterDocs/PATS2012.pdf>

