

The Honorable Peter Steinbrueck  
Commissioner, Port of Seattle  
The Honorable Courtney Gregoire  
Commissioner, Port of Seattle  
The Honorable Fred Felleman  
Commissioner, Port of Seattle  
The Honorable Ryan Calkins  
Commissioner, Port of Seattle  
The Honorable Stephanie Bowman  
Commissioner, Port of Seattle

Port of Seattle  
PO Box 1209  
Seattle, WA 98111

November 12, 2019

Dear Commissioners:

We, the undersigned organizations, oppose the Port of Seattle's proposed Terminal 46 cruise ship terminal due to the risk of significant climate disruption, marine pollution, and public health impacts from cruise ship emissions.

Washington State prides itself on being at the forefront of climate leadership and, consistent with this, the Honorable Commissioners of the Port of Seattle just last year passed the Energy and Sustainability Motion. This motion directed the Port to develop and implement initiatives that will reduce greenhouse gas emissions and enhance the sustainability of the port. Expanding port infrastructure to support more cruise ships of ever-increasing size is incompatible with the climate leadership this State is striving toward and the spirit of the motion passed last year to reduce climate emissions.

The need to dramatically reduce global greenhouse gas emissions is both urgent and real. In 2018, The United Nations Intergovernmental Panel on Climate Change warned that the world had only 12 years, i.e. by 2030, to stem catastrophic levels of climate disruption.<sup>1</sup> It called for radical and immediate action to decarbonize all sectors if humanity is to avert this global crisis.

The maritime sector produces more climate pollution than many major countries, including Canada, Germany, Brazil, South Korea, and Mexico. If it were a country, it would be the sixth largest emitter of greenhouse gases. Yet, despite the massive

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<sup>1</sup> Miller, B.(Oct 8, 2018). *CNN: [Planet has only until 2030 to stem catastrophic climate change, experts warn](#)*

amount of climate pollution produced, the shipping industry was omitted from the Paris Climate Agreement. If left unchecked, the sector is on track to be responsible for 17% of global greenhouse gas emissions by 2050.

Cruise ships as they exist today are the antithesis of decarbonization. These massive vessels are floating cities, and are almost wholly fueled with one of the dirtiest fossil fuels on earth -- heavy fuel oil. Heavy fuel oil is a waste product of the world's oil refineries, quite literally the bottom-of-the-barrel toxic sludge left over after other petroleum products are distilled from crude. And cruise ships use *a lot* of fuel.

The world's largest cruise line operator Carnival Corporation & plc, which owns the Holland America Line, Princess Cruises, and Carnival Cruise Line brands that frequent Seattle, burned 3.3 million metric tons of fuel in 2018 alone.<sup>2</sup> In January 2020, despite new fuel regulations coming into play, over 85% of its ships will continue to use heavy fuel oil -- as the company has led the charge in installing 'emissions cheat'<sup>3</sup> open loop scrubber systems. In addition, nearly 54% of Royal Caribbean Cruises, Ltd., 41% of Norwegian Cruise Line Holdings, Ltd., and 65% of MSC Cruises ships will continue filling their tanks with the dirtiest fuel available.

Converting air pollution into ocean pollution with open-loop scrubbers is not a solution to the enormous negative impacts of operating these behemoths, which function essentially as glorified hazardous waste incinerators for the world's oil refineries.

Further, at a time when vessel traffic noise pollution is crippling the ability of critically endangered Southern Resident Killer whales to hunt salmon,<sup>4</sup> and the pollutants that have bioaccumulated up the food web are damaging their ability to survive and reproduce, introducing more toxins and more mega-ship traffic into their habitat could well push these iconic animals closer to the brink of extinction.

Finally, the human health risks associated with increased cruise ship traffic are real and deeply concerning. Ship exhaust from all ship types poses serious risks to human health globally. Seventy percent of all ship emissions occur within 250 miles of shore, and winds carry the pollution far inland -- exposing millions of unsuspecting people to dangerous levels of particulate matter and other harmful toxins. The impacts on port communities and coastal areas in heavily trafficked seas are even more dire. Globally,

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<sup>2</sup> Dolvan, T. & A. Harris (January 31, 2019). *The Miami Herald*: [Cruise lines have a solution for a new clean fuel regulation. But is it the greenest option?](#)

<sup>3</sup> Crisp, W. (September 29, 2019). *The Independent*: [Thousands of ships fitted with 'cheat devices' to divert poisonous pollution into sea.](#)

<sup>4</sup> Mapes, L.V. (May 19, 2019). *The Seattle Times*: [The Roar Below: How our noise is hurting orcas' search for salmon](#)

an estimated 14 million cases of childhood asthma and 400,000 premature deaths are attributed to ship exhaust exposure.<sup>5</sup>

The Port of Seattle already hosts two heavily used cruise ship terminals adjacent to the densely populated downtown area. The new terminal would be situated next to the sports stadiums and iconic Pioneer Square. There is a cynical irony of situating a massive polluter next door to the places where elite athletes train and play their sports.

The exhaust from cruise ships is particularly problematic, and the open loop scrubbers - or as the industry refers to them, 'Advanced Air Quality Treatment Systems' - are intended only to reduce sulfur emissions. There may be some marginal co-benefits regarding other types of air pollution (again, air pollutants from exhaust are then discharged as water pollution), but these systems do not and are not designed to address particulate matter and other health-damaging emissions.

Earlier this year, a Johns Hopkins Bloomberg School of Public Health professor released a study he conducted of air pollution on the decks of Carnival's subsidiary brand ships.<sup>6</sup> He found that air pollution on the decks behind the smoke stacks, *while the ships were underway*, rivaled and at times far exceeded ultrafine and nanoparticulate pollution measured in some of the world's most polluted cities, such as Beijing, China and Santiago, Chile.

In addition, cruise ships emit on average three times the amount of climate-disrupting, health-damaging black carbon particulate pollution as their cargo ship counterparts.<sup>7</sup>

For the health of our children, our city, our oceans, our endangered orcas, and our climate, now is not the time to add more infrastructure to bring more of these polluting mega-ships to our shores.

We call on you to suspend the Terminal 46 cruise ship terminal selection process and direct Port staff to develop and issue a revised Request for Qualifications (RFQ) and Request for Proposals (RFP) that aligns with the goal of zero-emissions, zero-discharge cruising and that cruise ships companies like Carnival Corporation, Royal Caribbean and Norwegian:

- Stop the use of pollutant-intensive heavy fuel oil across their entire global fleets.

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<sup>5</sup> Roberts, K.B. (February 6, 2018). *Phys.org*: Study finds cleaner ship fuels will reduce childhood asthma by 3.6 percent globally.

<sup>6</sup> Kennedy, R. (January 24, 2019). [An investigation of air pollution on the decks of 4 cruise ships.](#)

<sup>7</sup> Comer, B., Olmer, N., et al. (2017). *The International Council on Clean Transportation*. [Black Carbon Emission and Fuel Use in Global Shipping 2015](#)

- Switch their current fleets to a proven hybrid technologies, and -- in the immediate short-term -- to cleaner marine gas oil with catalyzed diesel particulate filters.
- Commit to state-of-the-art, low-carbon, zero emissions battery or hydrogen fuel cells propulsion systems in new ships.<sup>8</sup>
- Operate below key whale-related decibel frequencies in whale migration or feeding habitats.
- Demonstrate a commitment to Free, Prior, Informed Consent of Indigenous Peoples (FPIC), incorporating a social and racial equity lens in all decisions, including infrastructure investments and expansions.

Sincerely,

Kendra Ulrich, Stand.earth

Stacy Oaks, 350 Seattle

Shannon Wright, Executive Director, RE Sources for Sustainable Communities

Kriss Kevorkian, Founder, Legal Rights For The Salish Sea

Thomas Meyer, Regional Organizing Manager, Food & Water Action

Kara Sweidel, Mosquito Fleet

Emily Martin, Our Climate

Harry Katz, Sunrise Movement Seattle

Benita & Darren Moore, Native Daily Network

Anne Miller, South Seattle Climate Action Network

Salish Sea Whale Sanctuary

Grace Hope, 350 Tacoma

Paul Chiyokten Wagner, Protectors of the Salish Sea

Deborah Steward, Climate Reality Project Seattle-King County Chapter

Dakota Case, Water Warrior Movement

Grace Stahre, Climate Action Families

Claudia Reidener, Redefine Tacoma

Blair Englebrecht, Puget Soundkeeper Alliance

Catherine Carey, Seattle Citizens Climate Lobby

Elizabeth Burton, People for Climate Action - Seattle

Lynn Fitz-Hugh, Faith Action Climate Team

CC: Mike Merritt, Chief of Staff, Port of Seattle Commission

Aaron Pritchard, Policy Manager, Port of Seattle Commission

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<sup>8</sup> Gerretsen, I. (October 3, 2019). CNN Business: Shipping is one of the dirtiest industries. Now it's trying to clean up its act



# The Case Against the Port of Seattle's Proposed Terminal 46 Cruise Ship Terminal

## The Urgency of the Climate Crisis and the Global Climate Impacts of Ships

We face an unprecedented climate crisis. Scientists agree we are risking a period of abrupt climate breakdown, a disaster that will threaten the future of our children and grandchildren. Melting glaciers, rising sea levels, dying coral reefs, and collapsing ecosystems are all warning signs that we are in the midst of a mass extinction of our own making.

The urgent need for transformative climate action is real. The United Nations warned in 2018 that the world had only 12 years to avoid catastrophic levels of global warming.<sup>1</sup> We have a decade or less to turn it around, reduce our greenhouse gas emissions, and stop the expansion of the fossil fuel industry.

Bringing more cruise ships into the Port of Seattle is totally incompatible with a climate-stable future and the Port's claims to prioritize sustainability.

## Why Do We Object to Terminal 46?

### 1. The Shipping Industry: A Major Polluter

If the shipping industry were a country, it would be the world's sixth largest polluter. By 2050—just 30 years from now—the International Maritime Organization (IMO) projects that emissions will grow by between 50% and 250% if vessels continue to burn fossil fuels unchecked.<sup>2</sup> Shipping is projected to produce as much as 17% of global greenhouse gas emissions.<sup>3</sup>

According to an April 2019 study by the Environmental Defense Fund, absent bold leadership, the rising carbon dioxide emissions of international shipping and aviation

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<sup>1</sup> CNN: ["Planet has only until 2030 to stem catastrophic climate change, experts warn"](#)

<sup>2</sup> IMO: [Third IMO Greenhouse Gas Study 2014](#)

<sup>3</sup> European Environment Agency: [Aviation and shipping emissions in focus](#)

could consume nearly one-third (15 to 30 percent) of our remaining “allowable warming” – the amount of additional warming that can occur before the world’s average temperature surpasses 2 degrees Celsius above pre-industrial levels – by the end of the century.<sup>4</sup>

Across the shipping industry - from cargo to cruises -- operators must rapidly decarbonize, with complete carbon neutrality no later than 2050. Cruise operators are the antithesis of climate action, as these companies are building bigger and bigger vessels whose vast energy needs are filled with climate-disrupting fossil fuels. The overwhelming majority of cruise ships burn one of the dirtiest fossil fuels on earth - heavy fuel oil.

## 2. Increasing Greenhouse Gas Emissions

**The climate impacts of the cruise sector are enormous. As noted in a recent publication:**

*Research has also found that cruise travel makes an outsized contribution to climate change—and it begins before the ship leaves port. A single passenger flying from New York to Vancouver or Seattle (the two busiest departure ports for Alaska cruises) produces about a tonne of carbon dioxide. Double that if you’re flying round trip. Once on board the cruise ship, the climate cost soars. The International Council on Clean Transportation (ICCT), a nonprofit research group with offices around the globe, found even the most efficient cruise ships emit three to four times more carbon dioxide per passenger kilometers than a jet.<sup>5</sup>*

Building a *third* cruise ship terminal in the Port of Seattle will encourage the growth of the global cruise ship fleet and result in a net increase in global greenhouse gas emissions. It will increase the amount of carbon in the atmosphere, support the expansion of the fossil fuel industry, and move us further from decarbonizing the shipping industry and addressing the climate crisis.

Other cities are limiting the number of cruise<sup>6</sup> ships, and Seattle must join them. We’re calling on the Port and the City to demand that cruise lines like Carnival Corporation

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<sup>4</sup> EDF: [“What role do emissions from international shipping and aviation play in the global climate?”](#) and [“Climate benefits of proposed carbon dioxide mitigation strategies for international shipping and aviation”](#)

<sup>5</sup> Hakai Magazine: Coastal Sciences and Societies. Leviathans in the Harbor.

<sup>6</sup> Bloomberg: [“Cruise Ship Companies Are Finding It Hard to Quit Carbon”](#) and Insider: [“7 places being ruined by cruise ships”](#)

commit to sustainable zero-emission cruising if they want to continue doing business here.

Seattle should not allow more cruise ships until they:

- Stop the use of pollutant-intensive heavy fuel oil across the entire global fleet.
- Switch current fleets to proven hybrid technologies, and -- in the immediate short-term -- to cleaner marine gas oil with catalyzed diesel particulate filters.
- Commit to state-of-the-art, low-carbon, zero emissions battery or hydrogen fuel cells propulsion systems in new ships.<sup>7</sup>
- Operate below key whale-related decibel frequencies in whale migration or feeding habitats.
- Demonstrate a commitment to Free, Prior, Informed Consent of Indigenous Peoples (FPIC), incorporating a social and racial equity lens in all decisions, including infrastructure investments and expansions.

The people of Seattle, of the State of Washington, and of the communities living along the West Coast of North America deserve strong environmental and public health leadership. It is the Port of Seattle's responsibility to uphold these standards to stabilize our climate and protect the millions of people living in this region.

### 3. An End to 'False Solutions'

The cruise industry has invented technical 'solutions' that pay lip service to sustainability while allowing these companies to continue business as usual. We do not accept these diversions as solutions.

- **Scrubbers** So-called Exhaust Gas Cleaning Systems - otherwise known as 'scrubbers' and 'emissions cheat devices' - are flawed systems that have proven unreliable. They fail to deliver the air pollution control for which they are designed, and have repeatedly failed to meet water quality standards. 'Scrubbers' convert air pollution to water pollution, and divert poisonous pollution from the air into the sea. These systems are only designed to reduce sulfur emissions to the air. In other words, this technology is not designed to reduce the

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<sup>7</sup> Gerretsen, I. (October 3, 2019). CNN Business: Shipping is one of the dirtiest industries. Now it's trying to clean up its act

output of the many other harmful pollutants in ship exhaust, including particulate matter, heavy metals, and endocrine-disrupting chemicals.

Ships with 'scrubbers' still emit some sulfur oxides to the air, plus carbon dioxide, nitrous dioxide, and particulate matter. A study published in June 2019 of cruise ship emissions found that Carnival Corporation brands emitted 10 times more SOX off the coasts of Europe than all of the 260 million European cars did in 2017 -- despite fuel sulfur restrictions and the use of scrubbers equivalent to those used in the U.S. and Canada.<sup>8</sup> Converting air pollution into water pollution and dumping toxic scrubber effluent into the world's oceans is unacceptable. Cruise ship operators like Carnival Corporation that continue using heavy fuel oil, the cheapest and dirtiest fuel available, and skate around stricter air pollution control measures by installing "emissions cheat" scrubber systems, should not be welcome in the Port of Seattle. We certainly should not be building yet another terminal to accept more and larger cruise ships for the benefit of these polluting corporate criminals!

The Panama Canal Authority recently joined other critically important countries and ports, including China, Singapore, and the Port of Fujairah, in banning the discharge of polluting scrubber effluent within its waters. We applaud the individual ports, canals, and countries taking leadership by banning the use of scrubbers. Scrubber effluent poses a threat to marine ecosystems the world over, and as such, scrubbers should be banned by the Port of Seattle.<sup>9</sup>

- **Liquefied Natural Gas (LNG)** LNG is a dirty fossil fuel that—when extraction and transportation is factored in—is as bad, if not worse, for the environment and climate than the petroleum fuels currently in use due to persistent, unintentional releases of climate-super-pollutant methane throughout the fuel cycle -- from well to wake.<sup>10</sup>

#### **4. The Equity Case Against the Port of Seattle's Proposed Third Cruise Ship Terminal**

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<sup>8</sup> Transport & Environment: Luxury cruise giant emits 10 times more air pollution (SOx) than all of Europe's cars – study

<sup>9</sup> TradeWinds: [Panama Canal scrubber effluent ban draws opposing views](#)

<sup>10</sup> "On-road tests show gas trucks up to 5 times worse for air pollution"

Trucks powered by liquefied natural gas (LNG) pollute the air up to five times more than diesel trucks, according to on-road tests commissioned by the Netherlands government. Surprising how bad the NOx is in LNG-powered trucks: <https://mailchi.mp/eeb/news-releaseon-road-tests-show-gas-trucks-up-to-5-times-worse-for-air-pollution?e=dab1def11b>



Benefiting financially while externalizing the environmental, public health and climate costs of a new cruise ship terminal is immoral and unethical. It is an equity issue.

Cruise ships are purportedly a financial boon for the Port and City of Seattle -- though residents of cities around the world that are already struggling with cruise passenger overtourism may well argue that the negatives (such as significantly increased marine and air pollution, soaring rents, strained public services and infrastructure, traffic congestion, and local businesses shutting down to be replaced with international chains and tacky souvenir shops) outweigh the supposed good.<sup>11</sup> The actual economic benefit of cruise ship passengers to the ports of call may be much lower than the Port of Seattle believes, according to independent researchers.<sup>12</sup>

The Port argues that it will use the cash from building a new -- and third - cruise terminal with shore power and "green" buildings to upgrade Terminal 5 to be a state-of-the-art cargo terminal. . If the current cruise traffic are contributing the millions of dollars to the Seattle economy that the port states, then it should be applying the vast profits it already has to upgrading existing terminals -- for both cargo and cruise ships.

Even if it is assumed that these cruise ships would follow the rules and regulations while moored at the Port's imagined "green" cruise ship terminal or operating in the already highly-regulated and restricted Salish Sea, the environmental and social impacts of cruise ships are still externalized. Those paying these health and public service costs are the residents of Seattle and the many small communities these ships will visit on the way to Alaska after they leave this port. The vast majority of these communities do not have the financial or regulatory resources of this wealthy city to cope with the increased pollution and infrastructure issues that more mega-ship cruise traffic will cause.

Cruise ships are still permitted to use scrubbers in the Salish Sea, which means that those with these cheat systems installed are burning this highly-polluting fuel here. The combustion of heavy fuel oil results in significant releases of health-harming pollution -- including approximately three times the amount of soot (also called black carbon) and shocking levels of ultrafine and nano particulate matter. A recent study from a Johns Hopkins Bloomberg School of Public Health professor found levels of the latter particulate matter on the decks of Carnival brand ships (Holland America, Princess, and Carnival Cruise Lines) rivaled that -- and at times far exceeded -- measurements taken in some of the world's most polluted cities, such as Beijing, China and Santiago, Chili. Every ship in this study had scrubbers installed, which clearly shows that these systems are wholly inadequate to protect the public from health-damaging pollution from cruise ships. When traveling in Alaska, the soot settles on the ice and snow, darkening the

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<sup>11</sup> Ship Technology: A cruise too far: how overtourism impacts the world's top destinations

See also, Juneau Empire: Cruise ship tourism is damaging our way of life

See also, The Guardian: A rising tide: 'overtourism' and the curse of the cruise ships

See also, Insider: 7 places being ruined by cruise ships

<sup>12</sup> Kayahan, B., Vanblarcom, B. & Klein, R.A. Overstating Cruise Passenger Spending: Sources of Error in Cruise Industry Studies of Economic Impact. *Tourism in Marine Environments*, Vol. 13, No. 4, pp. 193–203. DOI: <https://doi.org/10.3727/154427318X15417941357251>

surface and increasing the absorption of solar radiation. This accelerates the melting of glaciers and sea ice.

After cruise ships leave the Salish Sea, these ships dump vast amounts of scrubber effluent, graywater, and treated sewage along the coast of Canada and Alaska.<sup>13</sup> Carnival Corporation was even illegally dumped untreated graywater in the beloved Glacier Bay National Park while it was on probation for its seven felony convictions for intentionally illegally dumping oily waste for nearly a decade.<sup>14</sup>

In addition to health-harming air pollution and vast volumes of marine ecosystem-damaging effluent dumping, these ships also emit significant levels of climate-disrupting greenhouse gases. Carnival Corporation alone produces over 10 million tonnes of CO<sub>2</sub><sup>15</sup> annually.

The Port of Seattle will be complicit in supporting the continued growth and expansion of the fossil fuel industry and supporting the market for the oil industry's waste product - heavy fuel oil - if it continues with its plan to build yet another cruise ship terminal to accommodate even bigger cruise ships. The Port of Seattle would reap the financial benefits, while knowingly and willfully passing the environmental and social costs on to residents in Seattle and well as other port communities, marine life, and future generations.<sup>16</sup>

While the Port of Seattle and the Commissioners' intentions are good and valid, this proposed expansion reveals a myopic view of their responsibilities to Seattle and the world. Building a new cruise ship terminal would make the Port of Seattle complicit in exporting air pollution, water pollution, and climate pollution. This is an issue of equity and justice.

## **5. Size Matters: No Super-sized Cruise Ships!**

The Terminal 46 cruise ship terminal is intended for the newest mega cruise ships, which have capacities between 4,000 - nearly 7,000 passengers, over 220,000GT, and

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<sup>13</sup> Vard Marine, Inc. GREYWATER GENERATION ESTIMATES FOR THE BC COAST.  
[http://d2akrl9rvxl3z3.cloudfront.net/downloads/greywater\\_generation\\_estimates\\_for\\_the\\_bc\\_coast\\_report.pdf](http://d2akrl9rvxl3z3.cloudfront.net/downloads/greywater_generation_estimates_for_the_bc_coast_report.pdf)

See also UNDERSTANDING THE IMPACTS OF CRUISE SHIP DUMPING IN SOUTHEAST ALASKA  
[https://www.seacc.org/cruise\\_ship\\_impacts](https://www.seacc.org/cruise_ship_impacts)

<sup>14</sup> Miami Herald: Federal judge threatens to temporarily block Carnival ships from docking at U.S. ports.  
<https://www.miamiherald.com/news/business/tourism-cruises/article229069589.html>

<sup>15</sup> According to Carnival Corporation disclosure, in 2017, the company produced: Direct (Scope 1) GHG Emissions= 10,642,209 Tonnes CO<sub>2</sub>e. Energy Indirect (Scope 2) GHG Emissions - Location-based = 45,437 Tonnes CO<sub>2</sub>e. Energy Indirect (Scope 2) GHG Emissions - Market-based = 43,589 Tonnes CO<sub>2</sub>e. According to Carnival Corporation disclosure, in 2018, the company produced: Direct (Scope 1) GHG Emissions= 10,647,189 Tonnes CO<sub>2</sub>e. Energy Indirect (Scope 2) GHG Emissions - Location-based = 50,413 Tonnes CO<sub>2</sub>e. Energy Indirect (Scope 2) GHG Emissions - Market-based = 48,153 Tonnes CO<sub>2</sub>e.

<sup>16</sup> Forbes: As Arctic Cruise Tourism Booms, Are The Risks Worth It?

are up to 1,188 ft long and 238 ft high.. Inviting more and bigger cruise into Puget Sound and Elliot Bay is the last thing our orcas, our oceans, and our climate needs.<sup>17</sup>

## **6. Seattle Already has Two Cruise Ship Terminals**

Seattle does not need a third cruise ship terminal in Seattle. Cruise ships already have two terminals in the port: Terminal 66 and Terminal 91. Piers 66 and 91 hosted approximately 213 cruise ships between April and October 2019. Seattle had over one million cruise ship passengers in 2017, and 2018 and 2019 were projected to see 1.1 million passengers and 1.2 million passengers respectively.

## **7. Carnival Corporation: Criminal Polluters.**

We oppose doing business with egregious polluters like Carnival Corporation. As the largest cruise ship company in the world, with a fleet of more than 100 cruise ships, Carnival's nine brands control over forty percent of the global market<sup>18</sup>. Carnival ships collectively burn over 2 million tons of heavy fuel oil (HFO) every year. Heavy fuel oil (HFO) is a waste product of the oil industry. HFO is the thick, bottom-of-the-barrel sludge left over after crude oil is refined. It is one of the dirtiest fuels in the world, and is considered toxic waste on land.

If we consider HFO a toxic waste on land, why do we tolerate Carnival burning HFO at sea? Carnival cruise ships are polluting our air, our water, our climate, and our communities.

Friends of the Earth awarded Carnival Corporation brands an overall grade of F, based on the company's performance on sewage treatment, reducing air pollution, water quality compliance, transparency, and criminal violations.<sup>19</sup>

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<sup>17</sup> *The Guardian*: [The world's largest cruise ship and its supersized pollution problem](#)

<sup>18</sup> <https://cruisemarketwatch.com/market-share/> Statista: Cruise Industry Market Share Worldwide

<sup>19</sup> Friends of the Earth [Cruise Report Card](#)

Cruise Line	Sewage Treatment	Air Pollution Reduction	Water Quality Compliance	Transparency	Criminal Violations	2019 Final Grade
Disney Cruise Line	A	D+	A	A		A-
Norwegian Cruise Lines	A	D-	A	F		C-
Celebrity Cruises	A	D-	N/A	F		D+
Silversea Cruises	D	F	A	F		D
Royal Caribbean Int'l	A	F	N/A	F		D
Regent Seven Seas Cruises	C-	F	A	F		D
Oceania Cruises	C-	F	C+	F		D-
MSC Cruises	C-	F	N/A	F		F
Seabourn Cruise Line	A	F	B+	F	✓	F
P&O Cruises	D-	F	N/A	F	✓	F
Costa Cruises	F	F	N/A	F	✓	F
Princess Cruises	B	C	A-	F	✓	F
Holland America Line	B+	D-	A	F	✓	F
Cunard Cruise Line	A	F	N/A	F	✓	F
Crystal Cruises	F	F	N/A	F		F
Carnival Cruise Lines	F	D	A	F	✓	F

<https://foe.org/cruise-report-card/>

Even more concerning, Carnival Corporation is currently on criminal probation in the US for illegally dumping oily waste into the ocean and covering it up for nearly a decade. The criminal activity was only revealed after a whistleblower came forward to report it to the UK authorities. Carnival has since also pleaded guilty to violating that probation by dumping more wastewater and the intentionally dumping plastic waste into the ocean. The Port of Seattle should not do business with convicted felons like Carnival Corporation.

We want Carnival Corporation to put the planet before their bottom line. As a critical first step to rehabilitating the company's dismal reputation, we call on Carnival to switch from heavy fuel oil (HFO) to relatively cleaner-burning marine grade oil (MGO).

Further, the Port should prohibit or disqualify any of the three Cruise Ship Consortiums that include companies with criminal records, and should require all qualifiers to disclose any and all violations of criminal federal, state, and local laws and regulations occurring within the last ten years, as well as any and all civil liabilities and lawsuits of

the parties involved. Any consortium involving Carnival Corporation should be disqualified.<sup>20</sup>

<https://content.govdelivery.com/accounts/WASEATTLEPORT/bulletins/242ca14>

## **8. Impact on Whales**

In the Salish Sea, the population of Southern Resident Orcas is in serious decline. Just seventy-three orcas remain in Puget Sound, a 35-year low.<sup>21</sup> Though ferries and other vessel traffic may play a bigger role, it cannot be denied that the tremendously loud noise from cruise ships are certainly a contributing factor to the Orcas' decline. Among other factors, engine noise from massive cruise ships inhibits their ability to communicate and echolocate. They're cut off from each other, and effectively blinded by the sound.<sup>22</sup>

Further, upon passing through the Strait of Juan de Fuca, cruise ships begin discharging thousands of gallons of treated sewage, greywater, scrubber effluent, oily bilge water, solid waste, and hazardous waste into the ocean, all of which have a negative effect on the Orcas' habitat.

## **9. The Port needs better outside overview and accountability.**

The objective of any public process should be to empower the public to participate in government integrity, accountability, and transparency in our political system. No public agency should be policing itself. For the sake of transparency and accountability, the SEPA (State Environmental Policy Act) process should be transferred to WA Department of Ecology.

## **10. Regional Tribes are entitled Free, Prior, and Informed Consent**

The principles of Free, Prior and Informed Consent (FPIC) require engaging in government-to-government consultation with regional tribes, including obtaining Free, Prior and Informed consent from the Duwamish, as the port is within this nation's ancestral lands.

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<sup>20</sup> "Felons of the Seas: Smoke, Mirrors and Obfuscation," *Yellow Tourism: Crime and Corruption in the Holiday Sector* (ed. A. Papathanassis, S. Katsios, R.N. Dinu). Pp. 3-17. Cham, Switzerland: Springer Nature. <https://www.springer.com/gp/book/9783319946634>

<sup>21</sup> *Seattle Times*: [Two More Puget Sound Orcas Predicted To Die In Critically Endangered Population](https://www.whaleresearch.com/july2019population)  
<https://www.whaleresearch.com/july2019population>

<sup>22</sup> *The Guardian*: [Ships Noise Is Serious Problem for Killer Whales and Dolphins Report Finds](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4800784/)  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4800784/>  
<https://www.ncbi.nlm.nih.gov/pubmed/19173379/>

The Port of Seattle staff have ignored the Port Commissioners' March 12, 2019 guidance to acknowledge historical and cultural roots of the region in any terminal development. The department has chosen not to engage in government-to-government consultation with regional tribes in a way that accounts for the impacts of the proposed cruise terminal expansion, and has failed to honor tribes' waterfront heritage.

## **11. Public health impacts**

The long-term health impacts of increasing the number of large cruise ships visiting Seattle has not been sufficiently investigated. Thousands of people live and work within a mile of Terminal 46, including a half dozen schools. Diesel fumes are rated as a level one carcinogen by the World Health Organization (WHO), in the same category as smoking tobacco. Cruise ships pump out toxic fumes from their engines that can cause permanent damage to children's lungs. Even if shore power is provided, Seattle residents are still exposed to cruise ship emissions as the vessels enter and leave port. The amount of air pollution from one of these new mega-ships has not yet been calculated, but even these ships' smaller counterparts release a staggering amount of pollution. To put this into context, a mid-sized cruise ship emits as much pollution as a million cars.<sup>23</sup>

Air pollution in the US alone has been linked to over 30,000 deaths and impacted lifespans.<sup>24</sup> It causes permanent lung damage in children, issues with dementia and cognition, untold suffering for people with asthma, birth defects, heart attacks and strokes, chronic and acute bronchitis, and cancer.

Exposure to shipping exhaust has been attributed with an excess 60,000 annual excess deaths globally. In the U.S., Seattle is already the most heavily impacted city. A recent study by the International Council for Clean Transportation found that: *“. . . within the United States, the areas of Seattle and San Francisco lead in terms of early deaths per 100,000 residents (1.8 and 1.6), or more than double the global average, due to air pollution from the ports of Seattle, Tacoma, Oakland, and San Francisco.”*<sup>25</sup>

Dispersion modeling should be commissioned by the Port and conducted by a technical expert to understand the potential exposure of local residents to cruise ship pollution, prior to any decision regarding an additional cruise terminal being made.

## **12. Cultural impact**

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<sup>23</sup> CBC A cruise ship's emissions are the same as 1 million cars: report

<sup>24</sup> [Science Daily Air pollution in US associated with over 30,000 deaths and reduced life expectancy](#)

<sup>25</sup> The International Council for Clean Transportation Silent but deadly: The case of shipping emissions

Once these cruise ships leave the port of Seattle, these mega-vessels will travel to locations around the world, but the majority of them travel north -- up the British Columbia coast to Alaska. Many of the ports of call are small communities, where the ships will unleash a flood of tourists, swamping local infrastructure and create a host of social and cultural issues -- in addition to pollution and whale strikes.<sup>26</sup>

For example, in the small villages on the Cinque Terre coast of Italy, public bathrooms are scarce, so tourists—the bulk of whom arrive on cruise ships—have been caught “urinating—or worse—in... gardens and in doorways.” The Italian government has since decided to drastically reduce the number of tourists allowed to visit the islands on cruise ships.<sup>27</sup> When major cities like Seattle tacitly endorse the building of ever-larger cruise ships, they should consider the downstream effects on the smaller, less well-funded communities those ships will eventually visit.

### **13. Labor standards**

An investigation by the ITF (International Transport Workers Federation) has found serious abuses of workers' rights on board many major cruise ships including Carnival Corporation, Royal Caribbean, P&O Princess Cruises (a part of Carnival Corporation & plc) and Malaysia's Star Cruises.<sup>28</sup> Wages can be as low as US\$45 per month for waiters and waitresses and contracts are short and insecure. An ITF survey of 400 cruise ship employees showed that 95 percent are working seven days a week with time off restricted to turnaround in port. Over a third surveyed worked up to 12 hours a day, while just under a third worked up to 14 hours. Holidays are not included during the contract period. Instead, workers return home and wait for two or three months for the next contract. Moreover, the medical care of employees on cruise ships is often substandard; Michael Guilford, who has practiced maritime law for more than 30 years, says that cruise lines penalize doctors who arrange for too much shoreside care. Injured employees are routinely given painkillers and instructed to keep working.<sup>29</sup>

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<sup>26</sup> Hakai Magazine: Coastal Sciences and Societies. Leviathans in the Harbor.

<sup>27</sup> *The Guardian*: Italy To Impose Limits On Visitors To Cinque Terre With Tourist Ticket System

<sup>28</sup> *Sweatships: What it's really like to work on board a cruise ship.*

<https://waronwant.org/sites/default/files/sweatships.pdf>

<sup>29</sup> <https://story.californiasunday.com/below-deck>

## In Conclusion

We urge the Port of Seattle to:

- Immediately suspend the Terminal 46 cruise ship terminal selection process.
- Immediately suspend the Terminal 46 cruise ship terminal SEPA review.
- Immediately disqualify any consortiums that include environmental felon Carnival Corporation and any others consortiums that include any companies with a history of environmental crimes. The Port of Seattle should avoid doing business with convicted environmental criminals.
- Issue a revised Request for Qualifications that aligns with the points and principles made above, including:
  - Consultation with the Duwamish tribe and a requirement for free, prior and informed consent prior to any Consortium or the Port moving forward with the cruise terminal expansion.
  - The responsibility of the Port of Seattle to not only address the global climate by reducing its own Scope 1 GHG emissions, but also the Scope 3 GHG emissions that will result from increased cruise passenger flights into Seattle and from the mega cruise ships once these vessels depart from the Port. It is an inescapable reality that increasing port capacity for super-sized cruise ships will increase both upstream and downstream GHG emissions.
  - Cruise ships' air, water, and climate pollution along the coast of British Columbia and Alaska once they leave the Salish Sea.
  - Additional health impacts and costs for Seattle residents and those that will be impacted in the ports of call these ships will visit.
  - The equity, moral, and ethical implications of more cruise ships.
  - Measures to address the dismal labor conditions on board cruise ships.

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