

**Statement of Fotini “Sam” Tsavousis Duncombe  
Nassau, The Bahamas**

My name is Fotini Tsavousis “Sam” Duncombe. I was born in the Bahamas and have lived here my entire life. I am a co-founder of the Bahama-based environmental group reEarth. reEarth is a non-profit organization dedicated to raising awareness and inspiring action about the environment and animal issues.

For several years I lived and spent significant time downtown across from the City of Nassau’s cruise ship terminal, called Prince George Dock, where Carnival Corporation’s ships dock. Carnival Corporation brands such as Carnival Cruise Lines, Princess Cruise Lines, Aida, Costa, Cunard, and Holland America Line frequent this port. I currently live ten miles west of City of Nassau. My home is close to the water, in full view of the ocean. From my home I can see the cruise ships as they exit the harbor, which occurs four or five times each week.

It is with great outrage, sadness and grief that I write this today. I have been following the case against Carnival Corporation for months. I am outraged by the impacts Carnival’s environmental crimes have had on my community and the environment we depend upon for food, recreation, and income. Carnival Corporation’s pollution of my backyard affects me very personally.

Carnival has been caught repeatedly illegally dumping effluent wastes, including black water (sewage), grey water, food waste -- including food waste mixed with plastic -- and even pool water, into Bahamian waters where I live. For example, when I was vacationing on Harbor Island, I observed a massive amount of trash that was released from one of the cruise ships covering the beach where I was walking. It was extremely distressing to see that pollution on the beach. I could only think, if this is on land what are the impacts of this level of pollution in the water, and I was highly concerned about the impacts this pollution had on the marine wildlife. I swim and go to the beach frequently and also go boating off the coast. I frequent the areas off Discovery Island where there are dolphin and ray pens. The impact on these animals concerns me, as they are not able to escape the oil-polluted water from the cruise ships which may be contaminating the dolphin and ray pens since the animals are unable to leave the pens to escape the pollution. The impact to people is also a concern as many people fish in this area.

I often swam in the waters close to the Harbour, but have avoided, the beaches close to areas that the cruise ships frequent because those beaches are no longer pristine.

However, other residents do frequent the Western Esplanade Beach which is close-by the cruise ship harbor in Nassau, and many tourists enjoy the beaches even closer to the cruise ship harbor, such as the beach in front of the Hilton hotel.

Here in the Bahamas, our livelihoods are intrinsically connected to the environment. The natural environment IS the draw for millions of visitors. Our global advertising promises pristine beaches and coral reefs. Our coral reefs are a significant part of that, and they are already imperiled. The pathogens, chemicals, and other contaminants in the water pollution streams Carnival recklessly discharged so close the shores that are my backyard pose a serious threat to the coral reefs, our livelihoods, and our way of life.

Untreated bilge water in particular can carry invasive species and the oil it contains has well-known impacts on the reefs in our waters. For example, there is a seven mile fringe reef to the west of Discovery Island which is in decline in part from oil pollution in our waters.

Polluted discharges are also a concern for the health of the people in my community who consume a lot of seafood. A popular dish in the Bahamas is boiled fish and grits and there is a growing concern among the community about the bioaccumulation of water pollutants in the local seafood.

Carnival's pollution is yet another stressor on our already overburdened ecosystem. The trash that Carnival dumped is not only a threat to marine life, but can wash ashore with the winds and currents, fouling the beaches as my experience on Harbor Island shows. As Curacao-based [U.S. Coast Guard](#) officer [Jeff Ramos](#) put it, "If you just dump this out at sea, eventually it gets back up on land."

The air pollution these ships emit also creates serious air quality issues. Studies have estimated that a cruise ship releases approximately the same amount of health-damaging particulate matter pollution as one million idling cars -- every day.

For decades, I have witnessed the impact of Carnival Corporation's cruise ships with black soot and smoke pouring out of their stacks into our harbour in Nassau. People on Paradise Island across the port complain about black soot from these ships coming into their homes and dusting any flat surface.

Carnival's ships run their engines constantly while docked at Prince George Dock, because it does not have shore power.

A mid-sized cruise ship uses an average of 150 - 200 tonnes of one of the dirtiest fuels on earth -- heavy fuel oil -- and emit about the same amount of particulate matter as a million cars each day. And the ships keep getting bigger and bigger, meaning they are burning even more heavy fuel oil to operate and emitting even more pollution. Put another way, one Carnival ship emits as much or more pollution in a day than the entire Commonwealth of The Bahamas.

The heavy fuel oil that Carnival uses to power its ships is made from a waste product of the oil refining process, and is considered hazardous waste on land. Heavy fuel oil can contain up to 3,500 times more sulphur than diesel that is used for land traffic vehicles. Even more, the ships don't have the needed exhaust abatement technologies to address particulate matter and other harmful emissions, such as catalyzed diesel particulate filters and SCR-catalysts, technologies that are built in trucks or passenger cars as a standard.

By burning this hazardous waste without the appropriate emission abatement technologies, huge amounts of dangerous air pollutants like black carbon, sulphur dioxides (SO<sub>x</sub>) and nitrogen oxides (NO<sub>x</sub>) are emitted. Those substances can be carried far inland, and can damage sensitive ecosystems, and contribute to the acidification of coastal areas.

Moreover, these pollutants are known to be severely damaging to human health, increasing the risk of severe illnesses such as cancer, asthma, and cardiovascular diseases. Tens of thousands of premature deaths globally have been attributed to ship exhaust exposure. The air pollutants these ships emit, especially black carbon and nitrous oxide (also a potent ozone-depleting substance), not only pose human health risks, but contribute massively to global warming.

According to the World Health Organization, daily variations in black carbon exposures are associated with short-term health impacts, including all-cause and cardiopulmonary mortality, and cardiopulmonary hospital admissions. That same study showed that long-term exposures are also associated with increases in all-cause mortality and cardiopulmonary mortality. The people of the Bahamas are breathing that in on a daily basis, including children. There are at least eighteen schools located within a mile of the cruise ship terminal.

As the World Health Organization put it in its 2018 report, *Air pollution and child health: prescribing clean air*, "Children are uniquely vulnerable to the damaging health effects of

air pollution. . . The evidence is clear: air pollution has a devastating impact on children's health."<sup>[1]</sup>

According to a 2018 study, ship exhaust is responsible for 14 million cases of childhood asthma every year.<sup>[2]</sup> A 2017 study of the Bahamas found that asthma ranked twelfth in a list of health problems causing the most disability, and air pollution was the eleventh highest risk factor for death and disability combined.<sup>[3]</sup>

Carnival ships are enormous, and produce a huge amount of garbage, sewage, and other harmful wastes. Unfortunately, **Carnival's business model appears to depend on externalizing the costs of their pollution of the air and dumping waste into the ocean for free, and without concern for the consequences**. Carnival Corporation puts marine and coastal ecosystems, whether intentionally or by gross negligence, at serious risk.

To say that Carnival's intentional dumping of plastics, illegal effluent discharges, and air pollution are heartbreaking is an understatement. It was undeniably preventable. Carnival Corporation makes me feel like a second class citizen in my own country: someone whose health, livelihood, and community are an easily ignored inconvenience for the multi-billion dollar international corporation. The Bahamas is not a wealthy country. We have neither the financial resources nor the regulatory infrastructure to closely monitor the cruise ships that visit our islands year-round. As the recently released Court Appointed Monitor report shows, Carnival has repeatedly treated the Bahamas like a dumping ground. It shows a disregard for our people and fragile coral ecosystems. It is a violation of our trust. It feels like Carnival is taking advantage of an economically depressed country. It shows us they put profit above our communities and our environment.

The Bahamas cannot afford for Carnival's cruise ships to degrade or help to destroy our invaluable natural resources, and to expose our population to risk from air and water emissions. Carnival's pollution threatens not only the health of our children and vulnerable populations, but also the viability of our fisheries and tourist industry.

Carnival should face significant penalties for its environmental crimes, including but not limited to: significant fines - including reparations for the communities and countries its

crimes and pollution have damaged; funding for third-party health studies of its emissions impacts; and being barred from entry into sensitive ecosystems.

A large, stylized handwritten signature in black ink, appearing to read "Art Dworkin". The signature is written in a cursive, flowing style with some overlapping loops.

---

Date: May 30, 2019

---

[1] Air pollution and child health: prescribing clean air. 2018. WHO reference number: WHO/CED/PHE/18.01 <https://www.who.int/ceh/publications/air-pollution-child-health/en/>

[2] Castro, A. (2019). Childhood asthma from a health equity perspective: The case of Latin America and the Caribbean. *Annals of Allergy, Asthma & Immunology*. 122. 445-446. DOI: <https://doi.org/10.1016/j.anai.2019.02.029>

[3] Institute for Health Metrics and Evaluation. The Bahamas. 2007-2017. <http://www.healthdata.org/bahamas>