

ROYAL CARIBBEAN CRUISES LTD

Written evidence for Southampton City Council -

Air Quality Scrutiny Panel

January 2015

- **A brief intro to Royal Caribbean, highlighting its presence in Southampton**

Royal Caribbean Cruises Ltd. (NYSE/OSE: RCL) is a global cruise vacation company that owns Royal Caribbean International, Celebrity Cruises, Pullmantur, Azamara Club Cruises and CDF Croisieres de France, as well as TUI Cruises through a 50 percent joint venture. Together, these six brands operate a combined total of 42 ships with an additional seven under construction contracts, and two on firm order. They operate diverse itineraries around the world that call on approximately 490 destinations on all seven continents. RCL's ships have been calling at Southampton, England since 1997, and have been sailing full seasons based in Southampton since 2005. In the 2015 summer season, three RCL ships will homeport in Southampton: Royal Caribbean International's 4,900-guest Anthem of the Seas and 3,114-guest Explorer of the Seas, and Celebrity Cruises' 2,850-guest Celebrity Eclipse. For 2016, so far, we have announced that Celebrity Eclipse will once again homeport in Southampton for the summer season.

- **Steps that have been taken by Royal Caribbean to reduce emissions in Southampton – this could include improvements to cruise ships?**

As you know, Southampton has been part of an International Maritime Organisation's North Sea Emission Control Area (ECA) since 2007, which limited the percentage of sulfur allowed in the fuel (2007- 2010 1.5%, 2010 - 2015- 1.0%) that ships use in their operation. The North Sea ECA encompasses the English Channel from 5 degrees west, eastward. As of January 1, 2015, the North Sea ECA now requires a 0.1% maximum sulfur content in ships' fuel. In addition, since 2010, all RCL ships, while at berth (alongside) in Southampton have adhered to the EU Marine Fuel Directive, by using fuel with a sulfur content of 0.1%.

Since 2005, RCL has made great progress in reducing overall emissions across our fleet. Our newer ships can effectively be called as much as 30-40% more efficient than our ships were before 2005. Two of the three ships that RCL will homeport in Southampton this summer are among our newer ships.

- **Is there anything you have planned that will help improve the air quality in Southampton?**

We are planning to install an advanced emissions purification (AEP) system (also known as a scrubber) on Celebrity Eclipse as part of a major retrofit to 19 of our ships taking place in 2015-2017. Royal Caribbean International's Anthem of the Seas, debuting in April 2015, is being built with an AEP system. These systems remove more than 97% of the sulfur dioxide emissions generated by the ships' diesel engines.

- **How well do you feel Royal Caribbean, the Port Authorities, and Southampton City Council all work together to address air quality in Southampton and what improvements do you think there could be?**

Whilst the cruise industry and port have looked at various topics and worked together

in the past dealing with issues such as the ECA implementation, we have not had any dialogue with the city council. Moving forward, it would be ideal to collaborate on how we collectively continue to share responsibility to improve air quality through a range of measures not solely centered around the ships themselves. As Southampton is primarily a turnaround port for RCL (i.e., a port where our vessels start and end their cruise) with up to 9,500 people entering or exiting the city, the council and RCL should look at ways to improve the journeys that guests are making to and from the port itself. The use of public transport, coaches and park & ride facilities should be explored and promoted as alternative ways to start/end the cruise experience and reduce the impact that vehicles have on the air quality as well. This would also benefit the local infrastructure, reducing the impact that residents and the local workforce notice when multiple cruise vessels are alongside the port. We would welcome a further discussion with Southampton City Council on park & ride facilities in the M271 area to the west of the city, which we see as the primary entry point into our cruise terminal in Western Docks.

- **The hoteling of ships has an impact on local air quality- what could be done to improve this? – is there any other ports which are seen as best practise and this has already been addressed?**

Overall reduction of energy use and protection of natural resources are critical to overall planet health, including that of the air. Our 100%-waste-repurposing initiative has grown from its best-practice region of Florida, USA, to now include Southampton, as well as Cape Liberty (Bayonne), New Jersey, USA, meaning that all solid operational waste offloaded in Southampton is repurposed (recycled, reused, donated, or converted to energy).

- **Is there anything that the council / city could do to help you to improve air quality?**

Two areas come to mind: shore power and liquid natural gas (LNG). However, even if the council/city were to implement new processes and infrastructure to accommodate each of these, it would likely be years before most major cruise ships could make the most of them. More details are provided below.

Shore power - If Southampton were to explore installing shore power, it would be important to note that ships may not come equipped to use it. The European Union has stated that emissions reductions of only 1-3% of emissions are seen during a seven-night cruise during which a ship could use shore power at every port on the itinerary. As of now, of the 490+ destinations RCL visited last year, only six offer shore power. That, and the fact that AEP systems operate everywhere a ship's engines are running, and shore power is only available during the hours a ship is docked, is part of why RCL opted to invest in installing AEP systems. Also, for shore power to truly be air-quality-neutral, the source of the shore power and the backup power required when multiple ships would be in port using it, is critically important - the source must be a largely emission-free one, such as wind or thermal power.

LNG - If Southampton were to explore making LNG available and accessible at the port, it would likely be more beneficial to harbor craft and point-to-point ferries than to most major cruise ships, at least in the foreseeable future (5-10 years), as the majority of ships (including cruise ships) and port terminals around the world are not currently set up to accommodate LNG.

*Tavia Robb - Corporate Responsibility and Sustainability Communications –
Royal Caribbean Cruises Ltd.*