RCCL Response to NSW EPA’s “Clean Air for NSW” Consultation Paper
19 January 2017

Introduction
Royal Caribbean Cruise Lines (RCCL) opened its Australian office in Sydney in 2008. The company operates globally with seven cruise brands; two of which, Royal Caribbean International and Celebrity Cruises, have been operating in Australia for over a decade. Royal Caribbean’s fleet totals more than forty cruise ships. We also operate the largest cruise ships in the world, including the three largest classes of ships in the world: Oasis Class (220,000 GRT & 6,000 passengers), Quantum Class (168,000 GRT & 4,900 passengers) and Freedom Class (155,000 GRT & 4,500 passengers). In December we were proud to introduce the most modern and largest cruise ship to the Australian market in Ovation of the Seas, the third Quantum Class ship which was launched in April 2016.

Royal Caribbean in Australia
Over the current cruise season we are operating five cruise ships from Sydney under two brands – Royal Caribbean’s Ovation of the Seas, Voyager of the Seas, Explorer of the Seas and Radiance of the Seas and Celebrity Cruises’ Celebrity Solstice – and offer the most modern fleet operating from Australia. We home-port in Sydney from October to April, turning around exclusively at the Overseas Passenger Terminal (OPT) on 60 occasions carrying approximately 250,000 passengers. We are the single largest user of the OPT.

In the 2015-16 cruise season we also introduced a third cruise line to Sydney: Azamara Club Cruises. Unlike Royal Caribbean and Celebrity, Azamara operates smaller cruise ships carrying approximately 650 passengers that are able to use the White Bay Cruise Terminal. Azamara Journey calls at White Bay on two occasions per year with both calls being overnight stays.

RCCL and Environmental Protection
RCCL has played an extensive role in the cruise industry’s contribution to the development of policy and regulatory responses for the protection of the environment at both national and international levels. Our environmental experts have represented the Industry at International Maritime Organisation (IMO) consultations and were involved in the development of MARPOL, including Annex VI for the protection of Air Quality. With RCCL operating globally and visiting most cruise destinations in the world, we have extensive experience in compliance with a range of emission control jurisdictions.

We have made this expertise available to the New South Wales EPA throughout its consideration of the Marine Emission Management Strategy and the development of the measures taken by the EPA regarding cruise ship emissions within Sydney Harbour.

Whilst we acknowledge the intent of the Consultation Paper to address clean air across the whole gamut of potential measures discussed therein, we would like to confine our comments below to shipping and specifically the cruise shipping industry.

As the EPA explained in some detail in its Diesel and Marine Emissions Management Strategy 2015, which is referenced in the Consultation Paper, MARPOL Annex VI sets limits for sulphur dioxide and oxides of nitrogen emissions from ship exhausts and sulphur in shipping fuel, to protect air quality (our emphasis added). The section goes into some detail regarding the Annex VI proposed 2020 limit of 0.5% sulphur content in fuel and emissions as well as the processes undertaken in Europe and North America for the introduction of Emission Control Areas (ECAs) which from 2015 have imposed even stronger emission standards of 0.1% in the areas covered.
We highlight these sections of the strategy with respect to the Consultation Paper to make two points which should be considered by any Government or Government Agency which seeks to improve air quality outcomes by way of regulation:

1. The MARPOL requirements limit sulphur content in both emissions and fuel; and
2. The MARPOL requirements apply to all shipping.

We raise these points as a matter of practical compliance. The EPA sought comment on their proposed emission restrictions for cruise shipping in Sydney Harbour from both the cruise shipping industry and the fuel suppliers in New South Wales.

**Fuel Availability**

The EPA were advised by the fuel supply Industry that in the absence of sufficient critical mass of demand for low-sulphur fuel (with a sulphur level equivalent to that required in the European and North American ECAs, i.e. 0.1%) then Australian fuel suppliers would not supply such fuels to the AUNZ market. The fuel supply industry stated that there would not be sufficient demand to justify the required fuel supply infrastructure investment required to introduce 0.1% fuel until the MARPOL Annex VI requirements were applied to all shipping in approximately 2020. Cruise shipping represents only 2% of the shipping industry in Australia and therefore measures that are applied solely to cruise shipping rather than all shipping do not provide sufficient justification for the required investment by the fuel supply industry to enable it to provide compliant fuel. This is why the MARPOL processes necessary to establish an ECA, which were followed in Europe and North America, include lengthy procedures to ensure fuel availability.

Currently two types of shipping fuel are available in Australia, New Zealand and throughout the South Pacific. These are Intermediate Fuel Oil (IFO) at 3.5% sulphur content and Marine Gas Oil (MGO) (Ultra Low Sulphur Distillate) at 0.001% sulphur content. To our knowledge only two cruise ships which regularly visit Australia operate on the latter (this includes our own Radiance of the Seas which is a gas turbine ship operating on MGO). Certainly all of our other ships operate medium speed diesel electric motors which use IFO, which in Australia at present meets the current IMO requirement of 3.5%.

**The Global Context**

It is important that lessons from other jurisdictions that have already implemented lower sulphur emission limits are understood and borne in mind when developing strategies for clean air. Shipping is fundamentally an international activity. The international community through the International Maritime Organisation has recognised over the last decade and a half the importance of reducing shipping’s environmental footprint, including its emissions profile.

Through the development of MARPOL Annex VI it has developed a workable, realistic timeframe and methodologies, given the enormous task of changing the way many thousands of individual ships operate around the globe. As recently as November 2016 the MARPOL Annex VI introduction date for the 0.5% sulphur content requirement was affirmed by the IMO. The requirements will apply to all shipping and to all shipping fuel suppliers. It is imperative for the successful introduction of these workable reductions that the fuel supply industry is able to phase in supplies of compliant fuel in what will be just under three years’ time.

The IMO have developed the MARPOL procedures in a realistic way designed to ensure maximum levels of compliance as well as to provide a level playing field to industry so all within it must comply and can do so because of the availability of compliant fuel.

The MARPOL Annex VI requirements are already seeing a genuine and concerted response from the shipping industry. This has been led to some extent by the cruise shipping industry. I am pleased to say that RCCL has taken a leading role in the development of new technologies and approaches to Advance Emission Purification (AEP) systems and has led the way in installing and operating these systems.
AEP’s are an emerging technology. As the consultation paper acknowledges, it is essential that a thorough understanding of emerging technologies that facilitate cleaner air are appreciated more fully by decision makers and the community generally. We would welcome the EPA’s and AMSA’s closer examination of our AEP systems so that those responsible for environmental management and regulation, including in the maritime settings, have a better understanding of this exciting and effective new technology and the way it improves our environmental performance and reduces our emissions regardless of the fuel source available.

**RCCL’s Operational Compliance**
As we made clear to the EPA and the Government, our ships can operate safely while alongside on MGO. We have operated in a low-sulphur emission regime since the introduction of the regulations and continued to do so voluntarily when advised by the EPA of the constitutional invalidity of the regulations. We continue to observe the low-sulphur requirement through a combination of use of our Advanced Emission Purification (AEP) systems, where installed, or by using MGO when alongside. We are therefore fully in compliance with recently introduced AMSA requirements for berthing in Sydney Harbour.

All of RCCL’s new built ships since 2015 have incorporated our latest AEP systems. We are also installing AEP systems onto our existing fleet of ships, commencing with those ships operating in ECA zones (which must already meet lower emission requirements (0.1%).

**Conclusion**
In summary I would like to reiterate that whole-of-industry measures are more likely to be effective in reducing emissions. Restrictions placed on approximately 2% of the shipping industry will not adequately deal with emissions nor will they provide the necessary incentive to fuel suppliers to provide low-sulphur fuel into the Australian and neighbouring regional markets.

MARPOL Annex VI provides for such an industry wide solution. In some places around the world ECA’s have been introduced but only where the MARPOL processes have been followed and the lower emission standards have been applied to all shipping and compliant fuel is generally available.

RCCL will continue to implement our rollout of Advanced Emission Purifications systems to ensure we are globally compliant when the new 2020 MARPOL requirements come into effect. As a responsible, global organization, RCCL is committed to meeting and exceeding all environmental standards applying to the maritime industry.

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