1. Why has Carnival chosen not to use low-sulphur fuel at present?

Low sulphur fuel – Marine Diesel Oil 1.5% – is currently unavailable in large quantities. Shell has told EPA that it has capacity to produce it at its Geelong plant but this would require significant investment in a storage facility and associated transport requirements.

The supply issue can also be expected to put upward pressure on the local price due to a limited amount of producers having to supply a large number of customers forced by regulation to use Marine Diesel Oil 1.5%.

Prior to the opening of the White Bay Cruise Terminal (WBCT) Carnival Australia engaged an air quality expert to provide a detailed assessment of the potential effects of its operations on air quality in the vicinity of the terminal.

The assessment used advanced air dispersion modelling techniques based on actual measured ship emissions data. The results of the assessment indicated that assessable air pollution levels from the operations of Carnival's ships at the WBCT would be below applicable NSW criteria. Given confirmed level of compliance, the significant cost of low sulphur fuel would constitute a very expensive option.

2. How could the NSW Government assist Carnival facilitate use of low-sulphur fuel in all cruise ships?

The NSW Government could ensure availability of low sulphur fuel at a commercially competitive and acceptably affordable price. It could also consider the offer of incentives for voluntary use of low sulphur fuel bearing in mind that the cost of berthing in New South Wales has already been impacted by the new berthing fee structure.

3. Would retrofitting of new exhaust gas cleaning systems, or 'scrubbers', to existing cruise ships be feasible for Carnival's fleet in the immediate future?

Carnival Australia has scheduled the installation of scrubber technology on all of its vessels in Australia from 2017 to 2019. The technology will be installed during the ships' scheduled dry docks. Installing scrubbers before these scheduled dry docks would involve significant commercial consequences as scrubber technology requires the ships to be taken out of service and dry docked.

As itineraries are planned 18-24 months in advance, unscheduled dry docks would have a significant commercial impact and would involve considerable inconvenience for passengers due to the necessary cancellation of multiple cruises.

4. How could the NSW Government assist Carnival Australia to facilitate the installation of scrubbers for its fleet?

If it took action that required unscheduled dry docks for the scrubber technology to be installed, the Government could commit to compensating Carnival Australia for any lost revenue as a consequence of dry docking outside the scheduled cycle as set out in the answer to Question 3.

5. Despite Carnival's 'Good Neighbour Commitment Policy' (p 5), noise from both the operation of cruise ships and from passengers continues to impact on the residents of the Balmain peninsula. Does Carnival propose to take any action to address the community's concerns regarding noise pollution?

In line with its 'good neighbour' commitment to the local community, Carnival Australia has taken every reasonable operational step to minimise noise. These measures are over and above what would be expected of cruise shipping in other international ports where our ships operate. These measures include no outside public address announcements onboard other than safety-related messages.

- 6. Carnival Australia's submission states that the company is currently undertaking research and development into a range of technologies that address emissions from ships to comply with international 2020 emissions targets. (p 4)
- a. What has been the current progress made as a result of this research?

Carnival Corporation is currently trialling a number of clean exhaust gas technologies and will continue to develop the technology with a view to having the technology ready and implemented by 2019 in its entire Australian fleet.

b. When does Carnival expect these new technologies to be implemented for use by ships visiting NSW?

2019

7. Is Carnival Australia aware of any agreement with Ports Authority of NSW in relation to implementing and monitoring their "Good Neighbour Policy"?

Carnival Australia's "good neighbour" commitment is an example of industry commitment. It involves significant changes to normal operational procedures on a voluntary basis. These are of a nature that do not warrant specific enforcement by Port Authorities

8. Does Carnival Australia monitor compliance of the cruise ship arrivals in White Bay and their activities in relation to the "Good Neighbour Policy?

Bearing in mind that White Bay is a working port, Carnival Australia has implemented significant changes to operational procedures in line with its commitment to the "good neighbour" commitment. The policy was developed independently by Carnival Australia on a voluntary basis and involved some cost. Noise monitoring at White Bay Cruise Terminal is conducted by the Port Authority of NSW. We regularly update our senior deck crew on adherence to our voluntary obligations under the "good neighbour" commitment.

a. If so, how does that monitoring take place?

As above, noise monitoring at White Bay Cruise Terminal is conducted by the Port Authority of NSW.

b. Does Carnival Australia publish the results of that monitoring?

As above, noise monitoring at White Bay Cruise Terminal is conducted by the Port Authority of NSW.

c. Please provide a copy of that monitoring to the inquiry

As above, noise monitoring at White Bay Cruise Terminal is conducted by the Port Authority of NSW.

9. Are there alternatives to Carnival Australia to refuelling at White Bay to reduce impact on residents?

Carnival Australia does not accept that there is impact from refuelling operations at White Bay Cruise Terminal because the equipment used for refuelling operates as a closed loop circuit which ensures that no vapour can be released.

Refuelling at White Bay is part of normal vessel turnarounds and has no identifiable impact on the local community. Refuelling options other than at the berth would involve significant and unacceptable risks for the harbour environment and the wider community.

10. Do any of your ships have vapour recovery or emission capture via carbon canister system when being refuelled?

The equipment used for refuelling operates as a closed loop circuit which ensures that no vapour can be released.

11. What is the reason that cruise ships are berthed prior to 7am?

Our ships rarely berth at White Bay before 6:30am but this is sometimes necessary for operational requirements and to ensure that a full turnaround can be completed on the same day. Domestic and international passengers prefer to fly out of Sydney on the same day as the cruise finishes. Arriving in the morning provides the most flexible solution for passengers and the requirements for a normal turnaround such as providoring.

12. Why do some cruise ships depart after 6pm?

Most departures from White Bay happen during the late afternoon (most around 4pm) after the completion of disembarkation, embarkation and ship providoring operations. Later departures might sometimes be necessary for operational reasons.

13. Would you support a system of polluter pays for use of the cruise terminal so that quieter and more environmentally friendly ships are rewarded by lower berthing costs?

We are unable to assist the Committee with commentary on this without knowing the full details of any such policy proposal.

14. How many days in total have Carnival Australia cruise ships berthed overnight at White Bay at either Wharfs 5 & 4 since operations commenced on April 15th 2013?

Four.

15. How many Carnival Australia cruise ships will stay overnight in White Bay at either Wharfs 5 or 4 and for how many days in total during 2014?

Eight.

16. Are you aware of any cruise ships have stayed for six and seven nights at Wharf 4 and not been logged into the Ports Authority of NSW Daily Vessel Movements System?

This question is best directed to the Port Authority of NSW. We are not aware of any Carnival Australia ship that has remained at the berth for such an extended period.

17. Does Carnival Australia support moving to ship to shore power at White Bay?

Ship-to-shore power would involve prohibitive cost in requiring major capital investment on the part of taxpayers (via the NSW Government) and the cruise industry to augment power supply to the Balmain Peninsula. This would likely require construction of a new substation to double local supply to cater for the needs of residents, businesses and ships berthed at White Bay. There is also the issue of ship to shore power compatibility. The power frequency used on the ships is different from the frequency used in the local power system, a situation that also applies in Europe. Shore power would only be of use if it was generated by renewable energy. Ships calling seasonally would be unlikely to call given the significant conversion costs required.

18. Does Carnival Australia support moving away from the use of bunker fuel at White Bay?

Carnival Australia is committed to fulfilling its international MARPOL obligations (to which Australia is a signatory nation) and the 2020 deadline in relation to air emissions from marine fuels.

19. Are any of Carnival Australia' ships capable of utilising ship to shore power if it were available at White Bay?

Only some of Carnival Australia's ships currently accommodate shore to ship power but again this would be affected by the frequency incompatibility referred to above.