NSW Environment Protection Authority
Air Policy Unit

To whom it may concern,

Clean Air for NSW Consultation Paper submission

I write this submission as a resident of the community living near the White Bay Cruise Terminal and a member of the Stop Cruise Ship Pollution Campaign.

The Clean Air for NSW Consultation Paper does not go far enough to address the significant air quality problems posed by cruise ships in Sydney Harbour. The current level of exposure to harmful toxins is unacceptable in this day and age, in the middle of Sydney. In addition to the serious long term health issues, the community are suffering from more immediate symptoms and a significant loss of amenity.

Frustratingly, this is all very preventable if NSW catches up to developments in emissions control for cruise ships and follows international best practice by implementing low-sulphur fuel requirements and shore power.

I make the following points in response to the Consultation Paper:

1. The NSW Government and EPA made good progress towards bringing cruise ship fuel standards in line with best practice internationally but this has now been undone by the Federal Government

The NSW government recognised the health risks to the community in early 2015 and the NSW EPA worked quickly and responsibly to introduce a regulation to require cruise ships in Sydney Harbour to use low-sulphur fuel. This regulation was to be implemented in two stages:

   i) Stage 1 - cruise ships to use low-sulphur fuel (0.1% or less) while berthed in Sydney Harbour from 1 October 2015
   ii) Stage 2 – cruise ships to use low-sulphur fuel (0.1% or less) while in Sydney Harbour from 1 July 2016

The two stage process was designed to allow cruise lines time to adjust to the new regime. Stage 1 alone was never seen as an adequate measure to protect the health of the community.

The Federal Government introduced its amended legislation in early 2016 which overrode the state regulation before stage 2 could be implemented.
In January 2016, the Federal Government took steps to re-instate the stage 1 requirement but had not announced any measures to address stage 2 at the time of writing.

That means that we are left with a situation where cruise ships can burn bunker fuel (3.5% sulphur) for an hour on arrival and an hour before departure, as well as the whole time they are manoeuvring up and down Sydney Harbour.

Reducing the use of bunker fuel to 3-4 hours per visit (2 hours at berth and 1-2 hours manoeuvring up and down the harbour) may sound like an improvement but the reality is that once respiratory and other symptoms are triggered, it can take days to get them under control. They don’t simply disappear as soon as the ship departs.

2. NSW is lagging behind the rest of the world when it comes to cruise ship fuel standards

The regulation in point 1 above went part way toward bringing NSW in line with best practice internationally. Burning fuel with 0.1% sulphur content is mandatory for all ships that come within 200 nautical miles of the east or west coasts of North America and is also mandated in the North Sea and Baltic Sea areas of Europe.

The Australian Federal Government has indicated that it is inclined to rely on the international MARPOL convention and its new sulphur cap to be introduced in 2020.

The problem is that this puts a cap of 0.5% sulphur in fuel burned by ships. That’s five times higher than the NSW regulation and international jurisdictions require and it’s still three years away. Given that there is no safe level of exposure to particulate matter and the known effects of exposure to SO₂, this is not good enough.

The NSW Government must again act to protect its citizens in light of the failure of the Federal Government to do so. The whole of Sydney Harbour must be a low-sulphur fuel zone for cruise ships, as the NSW Government initially intended.

3. Proximity of cruise terminals to high density residential communities in Sydney Harbour means that we must have best practice emissions control

Unlike many other cruise terminals around the world, the White Bay Cruise Terminal and to some extent the Overseas Passenger Terminal are located right next to residential communities. Added to this, the topography of those two sites means that residences are located at the same height as ship funnels – thereby pumping toxic smoke directly into homes.

I note that the Consultation Paper suggests that only projects which have the greatest impact on overall emissions will be targeted. It’s important to also factor in the impact on local communities where the emissions source is so close to houses, schools, parks, hospitals and significantly impacts the daily life of residents.
4. The short and long term health impacts on the community are well documented and they’re frightening, but amenity is also an issue

The Consultation Paper clearly sets out the health impacts of the toxins contained in diesel emissions and the community are experiencing many of these today including worsening asthma and other respiratory conditions, headaches, eye irritations and more.

We are very concerned particularly about the more vulnerable in our community who are suffering the most – children and the elderly. The prospect of what we might face down the track given that the World Health Organisation has declared diesel emissions to be a group 1 carcinogen is terrifying.
It’s unbelievable that this risk is being taken by the government of one of the most beautiful, advanced and modern cities in the world.

Whilst our health concerns outweigh any other we have, the issue of amenity is still important. There are days when it is impossible to sit outside in our garden because the stench is so strong that it brings on headaches almost immediately. During the peak cruise season this summer we have experienced record temperatures, yet have had to lock up the windows and doors because the acrid fumes are too strong to tolerate. This is even worse when ships stay overnight. During the first week of January, we had two ships berthed at the same time for three consecutive nights and on the fourth night, we still had one ship in. The sleeplessness and sickness associated with that experience was unbearable.

Surely in 21st century Sydney, we have a right to live in our homes free of this horrendous impact?

5. **This is all so preventable. The answer is shore power and the government needs to act now!**

Other major cities around the world have recognised that they cannot allow cruise ships to generate the volumes of harmful pollutants that they do and have installed shore power solutions, allowing ships to plug in to the local power supply and switch off their engines whilst at berth.

Whilst low-sulphur fuel reduces SO$_2$ and some particulate matter, we know that there are still PM emissions (for which there is no safe level of exposure) and NO$_x$, benzene, toluene and formaldehyde are not reduced at all. Shore power provides reductions in all these dangerous toxins because the engines are switched off for the majority of the visit.

Some of those cities with shore power facilities installed at cruise terminals include:

- Brooklyn, New York, USA
- Vancouver, British Columbia, Canada
- Halifax, Nova Scotia, Canada
- Seattle, Washington, USA
- Los Angeles, California, USA
- San Francisco, California, USA
- San Diego, California, USA
- Juneau, Alaska, USA
- Hamburg, Germany

Further, shore power is currently being installed at two cruise terminals in Shanghai, China which will be operational by the end of 2017. It will also be trialled at other ports including Shenzhen and Guangzhou.

Shore power is also being considered by governments in New Zealand (Auckland), the UK, various ports around the Baltic sea including Copenhagen, Malmo and Oslo.

Sydney must catch up!
6. The cruise market is growing rapidly and generating large profits for operators – they have a responsibility to make it environmentally safe in one of their most successful home ports in the world

We see that internationally, the cruise lines have resisted shore power because of cost complaints. However given the enormous profits made by these operators, we believe the costs represent a mere rounding error.

In fact, the NSW Parliamentary Inquiry stated in 2015 that:

“The committee considers that the significant health effects of higher sulphur fuel, and the resulting health burden on the community outweighs the economic considerations of a single industry, especially when mutually beneficial solutions have been found in other countries, such as the United States of America and Canada.”

The cruise lines say they are acting within the law. Whilst this may be correct, living within the law whilst knowing the law is inadequate and harming citizens’ health is not reasonable and nor is it safe. Cruise lines know about the dangers and irrefutable evidence of impact to human health because they have already been through this in the northern hemisphere and implemented measures there to mitigate the risks. Sydney Harbour is an important growing market for them – the government must insist on world’s best practice if these ships are to come right into the heart of this beautiful city.

7. Australia has become a lucrative dumping ground for old ships and we let the cruise lines do it

Given our lack of regulation compared to the northern hemisphere, old ships which are no longer compliant in the northern hemisphere are being recycled in Australia.

Over the next year, three ships will account for approximately 50% of the visits to the White Bay Cruise Terminal. Those three ships have an average age of 27 years – the eldest is about to turn 30. If you have ever stood beside a 30 year old car or bus or truck, you will be familiar with the black smoke and acrid odours they emit. It is no different for a cruise ship. Old engines are simply not efficient enough to burn cleanly.
8. Solutions required

In addition to the two solutions outlined above – shore power at cruise terminals which are in close proximity to residential communities and low-sulphur fuel for the whole of Sydney Harbour, the following solutions are required:

- Ban overnight stays for cruise ships at White Bay because the terminal is located to closely to a high density residential area. If the government wishes to locate the terminal in the middle of a suburb as it is, then it must take important steps such as this to protect the community. The level of exposure at night, particularly hot summer nights is unacceptable.

- Reduce hours of operation to say 7am – 5pm to minimise exposure time for the local community

- Ban smoky ships from visiting terminals in close proximity to residential communities

9. Specific comments on the Consultation Paper:

- P.8 – “Innovative policy, regulatory and economic tools to accelerate adoption of clean air practices and technologies” – Innovation in managing cruise ship emissions is happening internationally but not in Australia and certainly not in Sydney Harbour.
We need to minimise all emissions at berth via shore power and minimise PM and SO₂ whilst manoeuvring up and down Sydney Harbour by mandating the use of low sulphur fuel throughout the whole harbour.

- P.10 – “Actions that will be prioritised under Clean Air for NSW will reflect our understanding that the greatest health benefits will come from actions that achieve sustained reductions in long term exposure of large populations to air pollution such as fine particles” – proximity of communities to stationary pollution sources such as cruise ships for extended periods of time must also be taken into account for health, wellbeing and amenity

- P.46 – Given the advanced age of the cruise ship fleet visiting Sydney Harbour, the NSW Government’s smoky vehicle camera system should be extended to smoky ships, thereby directly identifying the worst offending ships at cruise terminals

- P.46 – “NSW supports the Commonwealth policy of harmonising Australian vehicle and fuel standards with European standards designed to protect air quality and human health” – this clearly does not apply to cruise ships as the fuel standards are not compliant with European standards. Where the Commonwealth does not act to adequately protect our health, the NSW Government must step up to do so