

**INQUIRY INTO PERFORMANCE OF THE NSW
ENVIRONMENT PROTECTION AUTHORITY**

Name: Name suppressed

Date received: 29/08/2014

Partially Confidential

The Hon Robert Brown MLC
Chair, General Purpose Standing Committee No 5
Legislative Council
NSW Parliament, Macquarie Street
SYDNEY NSW 2000

29 August 2014

Dear Chair,

RE: Submission to Inquiry into the performance of the NSW Environmental Protection Authority

Further to 1. (b) (v) of the Inquiry's terms of reference, please find attached my submission concerning the regulation of cruise passenger ships at the White Bay Cruise Terminal at Balmain.

Yours sincerely,

NSW Legislative Council – General Purpose Standing Committee No 5

Inquiry into the Performance of the NSW Environment Protection Authority

Submission re: Terms of Reference clause 1(b)(v) – the regulation of cruise passenger ships at the White Bay Cruise Terminal at Balmain

1. Overview – our community's health is at risk

In April 2013 the equivalent of an unregulated, toxic power station moved in to the end of my street.

Literally metres from our doorstep and from the homes of our many neighbours in the high density residential suburb of Balmain, the massive cruise ships which began to frequent the new White Bay Cruise Terminal, following their relocation from Barangaroo, had an immediate and devastating impact on our community.

Put simply, we started to get sick. Symptoms included kids getting asthma for the first time, adults experiencing worsening respiratory and cardiopulmonary conditions, bronchitis, headaches, nausea, lethargy and eye irritations, amongst other things.

We subsequently learned that these symptoms are all well-known health impacts of exposure to diesel exhaust and that the World Health Organisation declared in 2012 that diesel exhaust is a group 1 carcinogen. Diesel exhaust contains lethal pollutants such as: sulphur dioxide, oxides of nitrogen, particulate matter (PM 10 and the smaller PM2.5), benzene, toluene and formaldehyde. We have learned that health authorities have agreed that there is no safe level of exposure to many of these pollutants.

I understand that no health impact assessment was conducted as part of the development approval process. A development such as this cruise terminal should never have received approval, given the dangers that the community has been subjected to.

With respect to the specific terms of reference for this Parliamentary Inquiry, it appears that the NSW EPA did provide a number of recommendations in their public submission during the development approval process, however they appear to have been ignored. Had their recommendations been adopted and regulations been put in place as they already have in other first world countries, then the community would be better protected and exposure to the serious health risks would be reduced.

2. Australia lags well behind other developed nations when it comes to regulation of fuel used by cruise ships

The simple truth is that regulations relating to the operation of cruise ships at White Bay significantly lag behind other first world countries.

Reducing the sulphur content of diesel fuel is critical to reducing the significant impacts of diesel emissions on human health. Governments in North America and Europe have recognised the health risks to their citizens and regulated for low sulphur fuels well ahead of the international regulatory

timetable. They have achieved this by designating Emissions Control Areas (ECAs). Australia has no such ECA.

These international developments in regulating the sulphur content of fuel occurred well before the approval of the White Bay Cruise Terminal in 2011.

Further to this, we know that cruise lines are rolling out exhaust gas cleaning technology retrofit programs on many of their ships based in the northern hemisphere, but are not doing the same in Australia, presumably due to the lack of regulation requiring them to do so. Have we unwittingly become the dumping ground for old, non-compliant ships?

Emissions Control Areas and Sulphur Fuel Standards – a Comparison				
	North America	California	Europe	Australia
ECA designated?	Yes	Yes	Yes	No
ECA description	200 nautical miles out from the east and west coast of North America	California fuel sulphur requirements - 24 nautical miles out from the coast of California	EU directive set separate requirements for ships at berth and ships moving between EU Ports	N/A
Date ECA designated	August 2011	July 2009	Jan 2010	N/A
Fuel sulphur limits	2012 – 1% 2015 – 0.1%	2009 – 0.5% 2012 – 0.1%	2010 – 0.1% at berth and 1% when moving between ports	3.5%

Today, ships are allowed to burn fuel in Sydney Harbour which has up to 35 times higher levels of sulphur than Europe. Worse still, it is up to 3,500 times higher than diesel cars in Australia which must burn fuel with sulphur content of no more than 0.001%.

Australia is subject to the International Maritime Organisation's MARPOL Annex VI, enacted in 2008 to control exhaust emissions from international ships on the open seas. These standards do not provide protection close to human populations, in port.

MARPOL Annex VI sulphur fuel reduction target	
2012	3.5%
2020	0.5%

The 2020 MARPOL reduction requirement is still dangerously inadequate. It will be 5 times higher than North America and European standards, and will not protect our community.

We urgently need to reduce fuel sulphur levels to a maximum of 0.1% in Sydney Harbour.

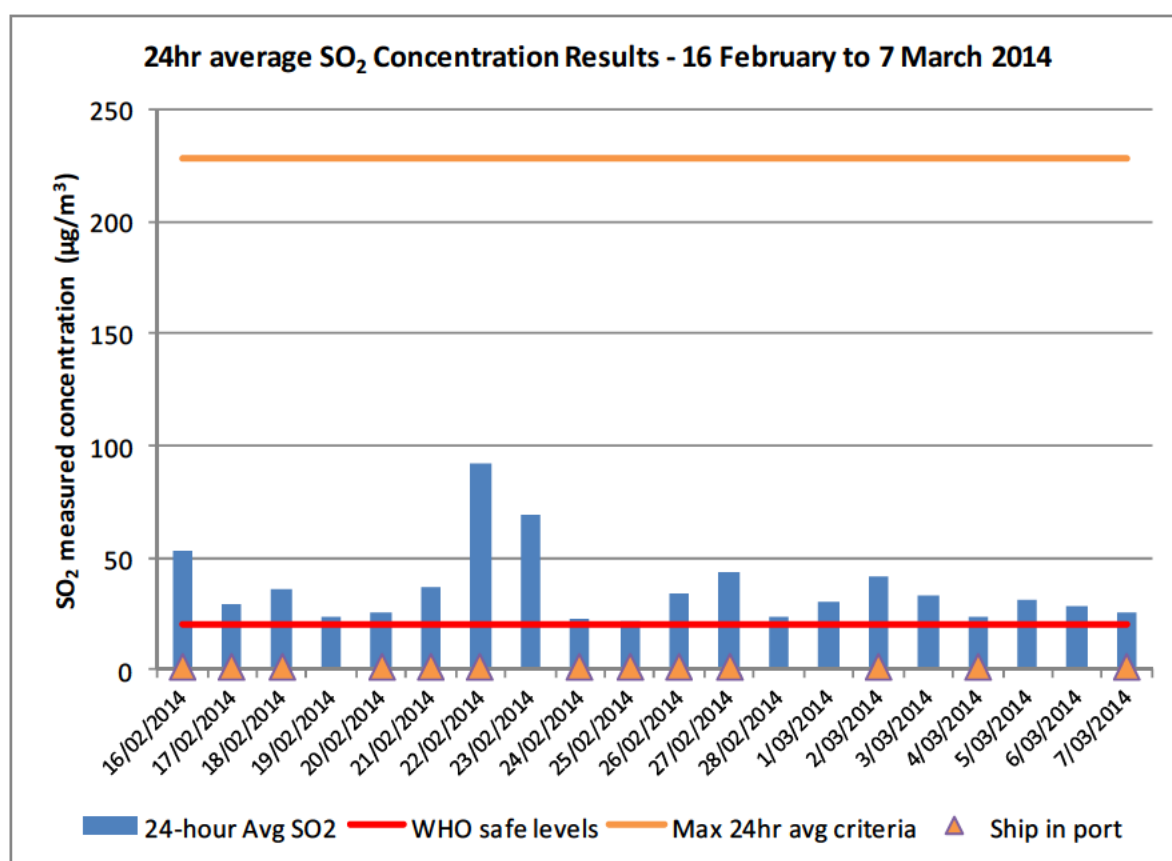
3. The required air quality monitoring is inadequate and unsafe

There are three main issues with the air quality monitoring required as part of the development consent:

- i. Only two toxins were to be monitored – SO₂ and PM₁₀. (That is, NO_x, PM_{2.5}, benzene, toluene and formaldehyde are not monitored)
- ii. The criteria against which the pollutants are being measured is not deemed safe by the World Health Organisation
- iii. The monitoring does not measure health impacts

The criteria against which the 24 hour average for sulphur dioxide was required to be measured is 11.4 times higher than the World Health Organisation (WHO) says is safe. That is, the criteria used was 228µg/m³ versus 20µg/m³ which is recommended by the WHO.

This has meant that in the four rounds of air quality monitoring conducted by Sydney Ports Corporation to date, there have been no reported breaches of the criteria. Yet, when compared to the WHO recommendations, Round 3 monitoring exceeded these recommendations on all twenty days monitored. The chart below demonstrates this:



4. Cruise ships at White Bay emit hundreds of tonnes of toxic pollutants

By considering the 2014 cruise ship schedule, the time in port, the engine size and resulting power requirements of each individual ship, we have calculated the hundreds of tonnes of resulting toxic chemicals emitted from cruise ships in Sydney Harbour. These large volumes of pollutants are spewing into the air we breathe. We can smell the acrid fumes and we can taste the chemicals.

Cruise Ship Hotelling Pollution (2014)			
Pollutant (tonnes)	Other Sydney Terminals*	White Bay Cruise Terminal	Total Pollution
Oxides of Nitrogen	525.99	135.59	661.58
Sulfur Dioxide	397.18	102.38	499.56
Particulate Matter 10 µm	40.79	10.52	51.31
Particulate Matter 2.5 µm	39.36	10.15	49.51
Volatile Organic Compounds	13.60	3.51	17.10
Benzene	0.27	0.07	0.34
Toluene	0.27	0.07	0.34

*Overseas Passenger Terminal, Athol Bay and Point Piper

The fact that these enormous amounts of pollutants are focussed into single emission points (the ship funnels), concentrates toxic air pollution and amplifies health risks.

We have further calculated that over a 9 hour period, one of the most regularly visiting ships will emit the same amount of sulphur dioxide as well over 20 million cars.

5. The “working harbour” furphy

A century ago, the White Bay area was industrial with a mix of factories and heavy industry as well as the White Bay Power Station. In recent decades, governments have approved a large volume of high density residential development, following the closure of the factories; of other heavy industry; and of the power station. In other words, the profile of the area has changed substantially.

There is a frequently perpetuated myth that the current location of the White Bay Cruise Terminal was part of the historic port operations. This was never the case. Despite a strong community campaign to oppose it, residential and open space land was bulldozed in the late 1960's to make way for a container terminal which operated for around 15 years. It is that site that the cruise terminal currently occupies. A container terminal was not appropriate then and an unregulated cruise terminal with its substantial additional requirements to support 2000-3000 people is certainly not appropriate now.

The cruise ships are massive and fundamentally different from any other vessel that has ever entered White Bay. It is simply ridiculous to argue that they are part of a “working harbour” as an excuse for ignoring the health and wellbeing of the adjacent high density residential community.

Cruise ships at White Bay have enormous power requirements whilst at berth. To meet these power needs, they currently burn massive amounts of high sulphur fuel (which is not allowed in many other ports around the world). Even when the White Bay Power station was operating, its tall chimneys at least made an attempt to keep the emissions away from nearby homes. The topography of the area means that cruise ship funnels are located at the same level as our homes which sit on top of a cliff, only metres away, meaning that the fumes travel directly into our properties and make us sick.

There was a strong community campaign opposing this decision which ultimately fell on deaf ears. Despite government assertions to the contrary, the community's concerns about pollution were not taken into account. If they were, we would not have this terrible public health issue on our doorstep now.

6. The environmental assessment process

The approval process for the new cruise terminal appears to have been fast-tracked during the end of 2010 and on 2 February 2011, the project was approved by the then Minister for Planning. The EPA (then the DECCW) made a public submission during this process. It made several recommendations in that submission which appear to have been ignored. Amongst other things, these included:

- "DECCW considers that the adverse air quality impacts of the proposed CPT operations could be significantly reduced through the use of 0.5 per cent sulphur fuel"
- "DECCW still considers that adoption of shore-to-ship power would be the most effective and innovative way to satisfy Action for Air objectives of reducing air pollutants"

They also recommended that a comparative analysis of emissions from shipboard power versus shore based power be conducted; that a feasibility study of the emerging international trend of shore based power to reduce air quality impacts be conducted; and that a comparative analysis of the proximity of the White Bay Terminal to residential premises be performed. None of this recommended analysis appears to have been undertaken.

Had these recommendations been adopted, the risk to the community may not have been nearly as great as it is today. The question therefore needs to be asked as to why the EPA was ignored.

7. Keep our community safe – urgent action required

Under the *Protection of the Environment Administration Act 1991 – Section 6*, the EPA's objectives are amongst other things to "Reduce the risks to human health.... by means such as:

- promoting pollution prevention ...
- advising the Government to prescribe more stringent standards (*than those prescribed by Commonwealth and State legislation*)"

I understand that the EPA are working on solutions to the cruise ship air pollution problem at White Bay and I welcome their focus on this issue. Regulation of cruise ships at White Bay must urgently be brought in line with international standards including:

- Mandating that low sulphur fuel (max 0.1% sulphur content, as is the case in North America and Europe) be used by all cruise ships in Sydney Harbour
- Implementing shore-to-ship power and requiring all ships berthing at White Bay to use it, thereby allowing them to turn off their engines for the bulk of the time they are at berth.

The biggest concern is that the EPA have indicated to residents that these solutions may take considerable time (possibly years) to implement. We cannot live through another cruise season under the existing conditions. Apart from the well documented long-term health risks, including cancer, the health symptoms we are experiencing today are debilitating and not something that communities in a first world country should be subjected to.

Temporary solutions must be implemented immediately to mitigate the health risks. If this means relocation of the ships, then that is a necessary consequence of the failures of the relevant agencies to put appropriate protective measures in place for the safety of the community. This after all, is the role of the EPA, according to the Act.

