

30 June 2018

## **Comments by the Beacon Cove Neighbourhood Association on the Victorian Government's *Clean Air for All Victorians: Victoria's Air Quality Statement***

The [REDACTED] Association (BCNA) is a not-for-profit community-based association of Port Melbourne residents formed to promote the amenity of Beacon Cove and nearby areas. The Association currently has 402 financial members.

BCNA welcomes the Victorian Government's announcement of the development of an air quality statement for release in 2019. This is timely as poor air quality, as the Statement states, "can have serious impacts on people's health and quality of life and has been linked to respiratory and cardiovascular health effects and premature mortality." <sup>1</sup>

BCNA's contribution to the development of an air quality statement is confined to six aspects with examples chosen to highlight local concerns.

1. Need to monitor ambient air quality at sites with demonstrated poor air quality - residential areas near Station Pier, Port Melbourne

Station Pier is the main arrival point for cruise ships visiting Melbourne<sup>2</sup>. It is also the arrival and departure point for the *Spirit of Tasmania* in Melbourne. Station Pier is near residential areas in Beacon Cove and other parts of Port Melbourne. Residents in the Beacon Cove area have been concerned about air quality for some time as the number of cruise ship and associated vessel (refueling ships and tugs) visits have steadily increased. In addition, the size of cruise ships has also steadily increased meaning that as these vessels need to supply electricity while docked the emissions per vessel have also increased. At the same time freight volumes moving to and from Tasmania have increased necessitating more truck movements. Combined, this means increasing emissions from ships, trucks, taxis and buses in the Station Pier area over time.

In response to residents' concerns, the Victorian Ports Corporation (Melbourne) conducted an air quality monitoring program in 2016-17 on the finger pier adjacent to Station Pier. Residents observed that plumes from ships near Station Pier usually passed well above the monitoring station. The air quality monitoring program revealed higher concentrations of SO<sub>2</sub> and

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<sup>1</sup>Victorian Government (2018), *Clean air for all Victorians: Victoria's Air Quality Statement*, page 1.

<sup>2</sup> A small number of cruise ships dock at Victoria Dock when Station Pier is full.

particulate matter than at nearby EPA air quality monitoring stations. Sulphur dioxide readings breached the World Health Organisation's (WHO) daily SO<sub>2</sub> limits on many occasions and the annual average PM<sub>2.5</sub> value of 8.4 µg/m<sup>3</sup> exceeded the 8.0 µg/m<sup>3</sup> level specified in the State Environment Protection Policy (SEPP) (Ambient Air Quality) and National Environment Protection Measure (NEPP) standards. No modeling of plume dispersion was performed, and the air quality monitoring station was not in a location that was indicative of exposure levels to nearby residents some of whom by their location (towers) are likely to be exposed to higher levels of pollutants than were measured by the monitoring station. In February 2018, EPA staff verbally asked the Victorian Ports Corporation to continue the air quality program. This request was not acted on. A written request was sought but not provided by the EPA. The EPA has no authority or mandate to request further monitoring in this situation. This situation illustrates the need for the EPA to have sufficient resources to introduce ambient air quality monitoring in the Station Pier area and in other areas which have been shown to have air quality problems.

Consequently, residents cannot be assured that air quality in the residential areas near Station Pier complies with Australian standards. The pollutants of concern include Sulphur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM), especially small particles (PM<sub>2.5</sub> and smaller).

**BCNA recommends that the Victorian Government introduce an ambient air quality monitoring program in residential areas near Station Pier, Port Melbourne. The locations chosen should be ones that are likely to experience the greatest levels of pollutants.**

2. Develop remedial programs for areas which breach air quality standards

EPA Victoria should be proactive in instigating programs that will actively improve the air in areas that have been shown to breach air quality standards. In addition, EPA Victoria should actively demonstrate that the air quality in such areas has improved. In the case of Station Pier and its environs, this means developing a program to address the air quality problem and show by actual measurements that the changes have been sufficient to make the air quality compliant with Victorian SEPP and NEPM limits.

3. Review and revision of national and state standards for air pollutants

EPA Victoria should continue to review the scientific literature and WHO guidelines to determine whether any new air quality standards need to be introduced, or the existing standards changed. An example would be adding the WHO recommended Sulphur dioxide (SO<sub>2</sub>) ten-minute mean standard of a limit of 500 µg/m<sup>3</sup> (191 ppb) and adjusting the daily limit from 80 ppb to the WHO recommended of 20 µg/m<sup>3</sup> (7.6 ppb). Sulphur dioxide from ship bunker fuel is a specific concern at Station Pier and the community is concerned that the WHO

standards recommended in 2005 have not yet been adopted.

**BCNA commends the Victorian Government for taking the lead on the review of national standards for ozone, Sulphur dioxide and nitrogen dioxide.**

4. Directing resources to potential air quality ‘problem areas’

The EPA should have the capacity to monitor potential ‘problem areas’. That is, it needs to proactively identify areas that are likely to have air quality issues and to monitor these areas in a timely manner to identify whether they do breach air quality standards rather than exposing the community to unmonitored long term poor air quality.

If air quality levels do breach the standards then the EPA should identify the causes of the problem, propose/mandate possible mitigation measures to emitters and to continue monitoring until air quality becomes acceptable. In the case of air quality monitoring at Station Pier, Port Melbourne (explained in point 1 of this submission) the Victorian Ports Corporation 2016/17 monitoring revealed that the annual mean PM<sub>2.5</sub> limit of SEPP and NEPM (8 µg/m<sup>3</sup>) was exceeded at Station Pier (8.4 µg/m<sup>3</sup>). This should have acted as a trigger for EPA action, including the continuation of air monitoring and implementation of a program to improve air quality, as they were involved with the establishment and conduct of the VPC monitoring program, but this has not happened. In addition, there are other locations near Beacon Cove and Port Melbourne that may have poor air quality. These include residential areas, sensitive locations such as schools and childcare centres, and work and recreational locations near Webb Dock, the Westgate Freeway and other major roads. Such areas should have sufficient monitoring performed, in a timely fashion, to determine whether they meet air quality standards.

**BCNA recommends that the Victorian Government ensure EPA Victoria has the resources to identify and act on “problem areas” as and when required.**

5. Independent air quality monitoring, analysis and reporting

It is important that the EPA continues to maintain an independent role. There is an inherent tension in expecting industry to self-regulate to the extent required for objective and timely information to be provided to the community. A local example helps to illustrate this point. In response to resident concerns about ship emissions at Station Pier, the Victorian Ports Corporation introduced an air quality monitoring program at Station Pier in 2016-17. Unfortunately, the work was not well designed so that only one monitoring station was used in a location which did not correspond to residential exposure. A second station on nearby residential towers would have allowed readings at times when the prevailing winds bring ship fumes into residential areas. A written request to extend the air quality monitoring program was sought by the Victorian Ports Corporation (Melbourne) from EPA Victoria but this was not provided. The EPA has no authority or mandate to request further monitoring in this situation. The reports and data from this program are not publicly available.

Whilst real-time air quality data from EPA monitoring sites is available on the EPA web-site, historical data appears to be restricted to either a graphical view of the past 48 hours or hourly values for a single specified hour. This type of situation is unsatisfactory, and a greater range of data and summary data and reports should be provided for public access.

**BCNA recommends that EPA Victoria should have the resources to undertake independent air quality monitoring, analysis and reporting. Reports and measurements should be made publicly available on a readily accessible web-site in appropriate formats.**

#### 6. Mechanism for EPA input into planning processes in Victoria

There should be some mechanism by which EPA Victoria has routine input into planning processes involving sensitive land uses such as the location of schools, childcare centres and residential areas where there are known air quality problems. This appears to be a gap in current planning processes. New schools are proposed for Fishermans Bend and it would seem prudent to receive EPA advice on air quality when considering locations.

EPA Victoria should also provide information on appropriate air quality filtering mechanism that can be used in residences in areas where there are air quality problems or mandate suitable systems for buildings that will be constructed in poor air quality areas. This issue is directly relevant to areas near Station Pier, Port Melbourne.

**BCNA recommends that the planning provisions be reviewed so that EPA Victoria is required to provide advice on air quality issues where sensitive uses such as schools, child care centres and residential areas are proposed.**

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