2 December 2016

Air Policy
Regulatory Reform and Advice Branch
NSW Environment Protection Authority

Dear Sir / Madam,

Re: CONSULTATION PAPER – CLEAN AIR FOR NSW

Singleton Council welcomes the opportunity to comment on Clean Air for NSW Consultation Paper released in October 2016.

Primary sources of particulate air pollution in the Singleton Local Government Area include dust from mining activities, domestic wood heater smoke, power stations and vehicle emissions.

Air pollution issues in Singleton largely relate to cumulative impacts and community concern about these issues is forefront and has been amply demonstrated. This has resulted in a number of major actions already being taken to improve air quality by state government, local government, business and the community.

Council endorses the proposed actions outlined in the Clean Air for NSW Consultation Paper which also support the strategies and actions in the Singleton Community – Environmental Sustainability Strategy and Action Plan.

Council’s submission on the Paper is provided in Attachment 1, included with this letter.

Please direct any queries about this correspondence to the contact officer above.

Yours faithfully,

Mark Ihlein
Director Planning and Infrastructure
**ATTACHMENT 1:
CONSULTATION PAPER – CLEAN AIR FOR NSW
SINGLETON COUNCIL SUBMISSION**

**Council’s Position on Air Quality**

In November 2016, Singleton Council endorsed the ‘Singleton Community - Environmental Sustainability Strategy and Action Plan’ (SCESSAP) which provides clear direction to promoting, facilitating and supporting community environmental sustainability within the Singleton Local Government Area (LGA).

The overall vision for environmental sustainability established by the SCESSAP is: ‘Singleton is a clean, healthy and productive community practising good stewardship of its finite resources and environment’.

One of the environmental sub-themes explored in this document is that of air quality. The **sustainability air quality goal** set is ‘Air quality in Singleton meets the National Environmental Protection Measure (NEPM) goals’. The **sustainability air quality objectives** are:

- All sectors of the community collaborate to reduce sources of air pollution
- Air quality in Singleton consistently meets national health standards
- The community is actively aware of prevailing air quality conditions and strategies for reducing impacts on human health

The NEPM goals in 2014 (baseline year for the SCESSAP) were as follows:

- **PM10** - the benchmark concentration is exceeded no more than 5 days per year.
- **PM2.5** - to gather sufficient information to allow a standard to be set for PM2.5 when the Air NEPM is reviewed. The benchmark concentrations for PM2.5 are an Australia-wide advisory reporting standard and will be in use until a standard has been set.

In 2014, the number of days above the PM 10 and PM2.5 benchmark concentrations were as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singleton</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Singleton NW</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Bulga</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Camberwell</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Jerrys Plains</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Maison Dieu</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Warkworth</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Mt Thorley</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

The NEPM goals were therefore not met at the Singleton NW, Camberwell, Jerrys Plains and Maison Dieu monitoring stations, i.e. four out of eight monitoring locations in the Singleton LGA did not meet the NEPM goal. While it is recognised that these results are influenced by non-mining activities, such as bushfires, they do highlight that the smaller communities within the LGA, close to open cut coal mines activities, are adversely affected by mining activities.

The impact of mining on air quality and local residents attitudes and behaviours was reflected in the report entitled ‘Attitudes and Directions for Environmental Sustainability’ prepared for Singleton Council in 2014 by Taverner Research for the purpose of guiding the prioritisation of actions within the SCESSAP.

This research involved a telephone survey of 409 people in the Singleton Local Government Area (LGA). The survey found that, for those who rated themselves as concerned ‘at least fair amount’ about the environment, the main
unprompted concern nominated, by far, was coal dust or air pollution from mining (64%), followed by air pollution (no source identified) (12%). When asked about action priorities, action to reduce air pollution and to minimise effects of air pollution were in the top five priority actions identified.

This survey highlights the concerns that the people living and working in the LGA have about local air quality, particularly the impacts of coal mining. It also highlights how mining air quality impacts significantly impact on the attitudes of the community toward other environmental issues and taking individual action to improve air pollution.

This impact on behaviour change was highlighted in a study undertaken by Databuild for the Environmental Protection Authority in 2015 entitled ‘NSW EPA Upper Hunter Wood Smoke Community Research Project Final Report’. The purpose of this research was to provide insights into public attitudes about the impact of wood smoke, understand households’ heating choices and recommend measures to help develop initiatives to reduce particle emissions from wood smoke.

This study identified that mining, power stations, diesel trucks and trains tend to be seen as the only real sources of air pollution in the area, making it difficult to change wood heater owners’ attitudes about the impacts of wood smoke.

Taking into consideration these and other available reports, the SCESSAP recognises that the key challenges in meeting the air quality goal and objectives are:

- Facilitating community understanding of the sources of poor air quality in the district, what the air quality trends are and what is happening to improve air quality.
- Building a scientifically independent body of knowledge on the nature, source and health impacts of airborne pollutants
- Ensuring that the community understands the potential impacts of air pollution on public health and has the capacity to evaluate ‘real time’ conditions and data to routinely inform mitigation strategies
- Ensuring that the assessment of future activities with the potential to contribute to air pollution issues are assessed within a cumulative rather than individual activity context

Singleton Council is therefore particularly interested in how the strategies and actions proposed in the Clean Air for NSW consultation address these key challenges and provide assistance in meeting the air quality goal and objectives of the SCESSAP.

**Responses to the Clean Air for NSW Consultation Paper**

**Air Quality Issues in NSW – current and future**

The Consultation Paper recognises that some communities in NSW are exposed at times to elevated pollutant levels and certain pollution sources need further controls. It also recognises that some regions are experiencing cumulative impacts and higher concentrations of harmful pollutants. Singleton LGA would fall into both of these categories due to the proximity of mining activities and the lack of local legislative controls on open burning and wood heating resulting in direct particle pollution impacts. The region is also impacted upon by direct and secondary particle pollution from coal-fired power generation located in both the Lower and Upper Hunter Valley and particulate emissions from vehicular and non-vehicle sources.

Council agrees with the statement that “measures that are low cost, easy and readily accepted by the community and industry are already in place”. A considerable amount of work has been completed in the past 5 years to reduce
particulate emissions particularly from mining activities, through State Government programs, such as 'Dust Stop', and through the efforts of the Upper Hunter Mining Dialogue.

Monitoring undertaken in the region shows that air quality in the area has improved due to the work undertaken and could be considered to be ‘good by world standards’, however despite this, air quality continues to be poorer than Rural NSW, the Central Coast and the Illawarra (refer Figure 2 of the Consultation Paper), the latter two areas having greater population density. In planning for future air quality actions, the Singleton community needs to be confident that existing measures continue to be effectively applied particularly during periods when coal mining companies’ profits are in decline, as the region has experiencing recently.

It is noted that the Consultation Paper states that:
- ‘the greatest public health gains will come from reducing long-term exposure of large populations to air pollution’,
- factors influencing the priorities for air quality management will include ‘areas where population exposure is high and the risk is increasing as populations and densities increase’ and
- that ‘proposals under Clean Air for NSW will be subject to rigorous cost-benefit analysis’.

Given that the Greater Metropolitan Region has 75% of the population of NSW, these statements would suggest that successful programs and resources will be focussed in that region which would be ignoring the needs of rural areas of NSW experiencing air pollution that impacts the aesthetics and health of residents.

The introduction of a population weighted clean air metric as a means of measuring progress towards the goal of improving air quality across NSW would be a useful tool. It is important however, that authorities continue to research and respond to the impacts of short term episodes of elevated air pollution. For example; some residents in Singleton are concerned about the immediate health impacts of emissions from mine blasts and expressing air quality in annual and three yearly averages may not reflect the real impacts of such events.

The key considerations for future air quality management in NSW provided on page 25 are all applicable to the Singleton LGA, in particular;
- The increasing need for new measures to address significant sources of pollutants, such as wood heaters.
- Increased development at the interface with natural bushland has potential to increase population exposure to the effects of smoke from bushfires and hazard reduction burns.
- Changes in climate are likely to affect future air quality and
- Opportunities to realise air quality and health benefits as the population and economy grow, by integrating air quality considerations into transport, land-use and energy planning.

**Priorities to Reduce Emissions and Exposure**

**Reducing Industry Emissions**

Council supports the four proposed goals;
- *Strengthen and better target the EPA’s load based licensing (LBL) scheme to extend and improve it’s effectiveness as a tool in managing air quality.*
  Council supports the proposed action of reviewing the EPA LBL scheme to ensure the scheme is achieving pollutant load reductions effectively and efficiently.
- *Minimise emissions from power stations to reduce primary and secondary particle precursors.*
The Upper Hunter Fine Particulate Characterisation Study undertaken in 2012 identified that the Singleton LGA was impacted by PM2.5 from power generation. Actions taken in partnership with the energy sector and Coal Innovation NSW to minimise particulate matter directly emitted and formed from secondary reactions in the atmosphere are supported, as are actions to reduce the emission of greenhouse gases.

- **The NSW Government will strengthen the rigour of the rehabilitation framework for mining projects to ensure that outcomes better meet the expectations of government and the community.**
  Post mining final land use including voids is of concern to Council and the Singleton community. Actions to improve the rehabilitation of mine sites to improve outcomes over short, medium and long term periods to reduce emissions to atmosphere is supported. A Rehabilitation Code of Practice and Final Land-use Policy will assist in ensuring better rehabilitation outcomes over the entire lifecycle of the mine. Any new codes and policies however must also ensure that, when mines change ownership, the new owners have the financial capacity to fulfil their obligations and also take into consideration community needs and future planning for the affected areas which may require sites be rehabilitated beyond their original condition.

- **Minimise exposure to dust emissions in the Hunter rail corridor.**
  Council supports the action of considering and acting on the findings of the studies undertaken by the NSW Chief Scientist and Engineer, on coal dust emissions in the NSW coal chain.

**Reducing transport, engine and fuel emissions**
Council supports the four proposed goals:

- **Examine policies and incentives that could be adopted by the NSW Government to increase the uptake of electric vehicles.**
  Council would support the adoption of incentives to increase the uptake of electric vehicles in particular assistance to Councils to install charging stations. Singleton is located on the New England Highway, a major route to Brisbane from Sydney. Provision of high speed charging stations along this route would enable electric vehicles to travel further from the major centres, making the vehicles a more attractive purchase for those who need to travel long distances, including rural residents.

- **Investigate mandatory emission performance standards policy for motor vehicles operated by or under NSW Government service contracts.**
  Council looks to the NSW state government for leadership in this area. Improvements in policy direction at a state level will therefore lead to improvements at a local level.

- **Further reduce diesel emissions from priority sources.**
  Council supports measures to reduce diesel emissions from non-road diesel equipment, including equipment used in mining, and in particular, locomotives due to the proximity residents to the rail corridors.

- **Reduce health impacts from air toxic emissions in petrol vapours, by extending vapour recovery requirements for new/upgraded petrol service stations and petrol depots regional urban centres.**
  Council supports the proposed investigation into extending requirements to install vapour recovery equipment as currently applies in the metropolitan area including the Lower Hunter.
Reducing Household Emissions
Council supports the two proposed goals:

- Reduce exposure to fine particle pollution from domestic wood heaters. Council has undertaken considerable work in this area in partnership with the NSW EPA. Assistance to continue and improve existing education, training and incentive programs is required to ensure that further reductions in fine particle pollution occur.

Both Singleton and Muswellbrook LGAs have benefitted from the Upper Hunter Fine Particulate Characterisation Study which quantified the wood smoke component of PM2.5 in the atmosphere during the winter months of 2012. Since this study it has been difficult for Council to measure the impact of its wood smoke reduction work. Repeating this or similar studies to quantify wood smoke contribution to air pollution would be useful to Councils undertaking wood smoke reduction programs in the future.

- Reduce emissions from garden equipment and fuel storage containers, and support uptake of national actions to improve emissions standards for new garden equipment. Council supports an investigation into the replacement of 2-stroke garden equipment and old fuel cans and would be willing to partner in a program to reduce emission of volatile organic compounds (VOCs).

Exposure and Impact Reduction
Council supports the four proposed goals:

- Improved health outcomes and reduction in all health impacts of smoke across populations by reducing exposure to particle pollution from hazard reduction and open burning in metropolitan and regional NSW. The Singleton LGA is impacted by wood smoke from hazard reduction and open burning, and agricultural burning practised on farmland at times adjacent to urban areas. Council would be willing to collaborate with state government and research organisations to reduce population exposure to smoke from these activities.

- Ensure NSW air quality monitoring networks meet government and community information needs. Council welcomes the proposed review of the air quality monitoring network in the Upper Hunter and supports its ongoing improvement and enhancement. Since the networks inception, many residents of the region rely on the information and alerts to manage their daily activities to minimise personal exposure and/or health impacts.

- Expand the scope and enhance the accuracy of air quality forecasting capabilities in NSW. Council is a member of the Upper Hunter Mining Dialogue and the Joint Working Group for Health and Emissions which has worked to improve air quality forecasting at mine sites to reduce air emissions. The development of an air quality forecasting system for the Upper Hunter that supports the work done by the local mining companies and can deliver accurate, locality-specific short term forecasts on an ongoing basis would be well utilised by local residents.

- Provide the best available information on air pollution and possible health impacts from major incidents, to inform emergency management responses and to reduce health impacts in communities affected by major incidents. Council supports this proposed initiative however to be truly effective, response times would need to be minimal. It is difficult to provide
comment without more information on how this goal will be resourced to minimise response time across the state.

Co-benefit Actions
Council supports the goal of:
Promote more productive use of energy in the transport sector which could also lead to local air quality benefits, via for example:
• increased use of public and active transport.
• reduced road congestion
• cleaner vehicles, such as electric and hybrid vehicles

These actions support those contained within the SCESSAP. In particular, Council supports the community in its objective of obtaining two additional train services per day to Singleton and is seeking to expand its bicycle network to provide linkages to major infrastructure within the urban areas. Assistance in promoting and measuring the use of alternative forms of transport would be beneficial.

Shared Responsibility
Council recognises that it has a major role to play in managing local air quality. Rural councils, such as Singleton, rely on the support provided the NSW EPA and NSW Office of Environment and Heritage (OEH) to implement programs to reduce air emissions, in particular from grant funding.

For these programs to continue, the state government needs to recognise the limited capacity of rural councils to apply for funding and deliver programs. The introduction of the NSW OEH ‘Place Based’ delivery of programs has greatly assisted Council to develop and implement programs in the area. Reduction in the complexity of applications and reporting requirements, plus provisions for funding of project management, would increase the number and timeliness of programs completed to improve air quality.

Local government also relies on state government to be able to meet the goal of increasing the use of public transport. It is vital that the state government consider increasing supply of public transport, in particular train services, in order to reduce resident’s reliance of private vehicles.