20151031 SL Submission Part B to WestConnex EIS

I write to submit further objections to the M4 East project based on my reading of the EIS and information given at community sessions. I regret that I am unable to properly detail and reference all of my objections because of too short time given for the EIS public exhibition and comment period; and due to my current travel overseas which was planned long before the release of the EIS.

I urge Planning Department Officers to do their job as public servants in this assessment period of project approval or rejection. I also urge them to review all community objections and be willing to provide frank and fearless advice to Government that is independent of the political wishes of any State and Federal political parties. I also further request that their planning advice is based on protecting and promoting the interests of the public and given without being influenced by political or business interference or direction.

I urge the Planning Department to reject the M4 East project because it is not in the interests of Sydney's Greater Metropolitan Region, will not fulfil its stated aim of providing the best transport solution, the full business case has not been released and traffic modelling figures do not add up to justify the project.

I object to the inevitable fracturing of social and community links between Haberfield and Ashfield and surrounding Local Government Areas of Leichhardt, Marrickville, Canada Bay and Drummoyne due to increased congestion at the eastern end of the project caused by the M4East tunnel exiting into the Parramatta Rd and Wattle St (City West Link) interchanges.

I object to multiple intersection 'Failures' and congestion points east along Parramatta Rd that are predicted in the EIS, as a result of this project. (Dalhousie St, Liverpool Rd, Sloane St, Hawthorne Parade, West St, Flood St, Crystal St, Balmain Rd, Catherine St, Annandale St, Johnston St etc).

I object at the increased congestion also predicted in the EIS that will occur along Dobroyd Parade/City West Link because of proposed changes at the Waratah St and Mortley Avenue, Haberfield intersections.

I am aware that proposed road changes at the intersection of Mortley Avenue/Timbrell Drive and Dobroyd Parade/City West Link are 'outside the scope' of this M4 East project. I object that proposed changes at this intersection are NOT included within the EIS, and therefore the impacts are not properly addressed or assessed.

I object that the proposed right hand turn at Waratah St is obviously being created as an overflow traffic route from the tunnel, and will cause significant traffic 'rat running throughout Haberfield and Leichhardt.

I also object at the increased traffic that will be induced into and out of the M4East tunnel, to be dumped onto the City West Link with no where to go after Robson Park, and which will crawl along causing traffic chaos in Rozelle, Lilyfield and Balmain.

I object to the noise and pollution impacts upon Olivia's playground and the playing fields at Timbrell Park, Five Dock and the resulting loss of amenity with regard to these public recreations spaces.

I object to the noise and pollution impacts and loss of passive recreation at Robson Park and Reg Coady Reserve, Haberfield.

I also strongly object to the accuracy and currency of information presented in the Human Health Risk Assessment of the EIS (Volume 2D, Appendix J). I noted several mentions of the Sydney Area Heath service, - a service which has NEVER existed. There was a Central Sydney Area Health Service until 2004, which combined in 2005 to become South West Sydney Area Health Service until 2010. Since 2011, the relevant local service has been known as the Sydney Local Health District. This lack of precision in the EIS suggests that perhaps the authors do not understand how health services are organised. It also suggests that they do not appreciate the social and health impacts of the project on individuals and communities. It raises questions on what consultation occurred with the Local Health District, if the report does not even know it exists? It also raises the question of how informed are the questions actually put to the Ministry of Health, by the project proponents to inform this EIS? It also leaves a lingering doubt that perhaps the entire Human Health Risk Assessment was a rehash of a 2004 document for an earlier tunnel proposal.

I object to the repeated assertion through the EIS that there will be no portal emissions, given that this has never been detailed or confirmed exactly where portal emission are measured. At which precise point are portal emission measurements taken (and I do understand where the portals are actually located)? Are the portal emissions measured inside the tunnel and before the exit up to the road surface; inside the tunnel and beyond where the tunnel exits to surface, or are the portal emissions measured on the road surface and surrounds? I object that I never got a clear answer to these questions despite repeated attempts to seek this information at community information sessions. I also object that others who tried to get the same information did not get clear answers. Because of this, I reject that validity of the EIS asserting that there will be no portal emissions causing problems for residents and businesses nearby.

Also, in relation to toxic polluting emissions, I object to 2 associated problems with the proposed use of in-tunnel jet fans to supposedly blow back and eliminate portal emissions - namely the energy use of such fans and the noise that will be generated by the use of these fans.

The EIS states (Volume 2D, Appendix J page 2-3) that: 'Air quality in the Sydney region has improved over the past few decades. The improvements have been attributed to initiatives to reduce emissions from industry, motor vehicles, businesses and residences.' This bold statement, contradicted at other times in the EIS, also seems in contradiction to EPA NSW data about a 20% increase of PM 10 in the Sydney's Greater Metropolitan Region. See link to EPA NSW submission to Senate Committee: http://www.epa.nsw.gov.au/resources/air/epasenateaqsub.pdf

I am also concerned about the selective use of data from EPA NSW.

The EIS makes use of EPA data that air quality in NSW is good and has improved over the years. But the EIS fails to mention that EPA NSW also documents that there has been an increase of PM throughout the greater Sydney area, mainly due to mining in the Hunter region. I object to the selective use of EPA data given that there has been a 20% increase of PM10 in the Sydney Greater Metropolitan Region (GMR) from 1992 to 2008, an increase largely attributed to coal mining in the Hunter Valley.

I recommend the reading of the attached CAHA document. Whilst this report focuses on the health and climate impacts of coal mining in the Hunter region, there is much researched and written in this report that is relevant to health, social and climate impacts M4 East project.

In order to assist you in this review I have highlighted below some relevant excerpts from this report within the body of my submission. CAHA can be contacted: PO Box 343 Clifton Hill, Victoria 3068. Web: www.caha.org.au. Email: convenor@caha.org.au.

Excerpts from Climate And Health Action Alliance (CAHA) report, *Coal and Health in the Hunter: Lessons from one valley for the world (Feb 2015):*

(Page 3) *The impacts on local communities in the Hunter Valley include exposure to harmful air, noise and water pollution, distress associated with social disruption, and a sense of abandonment as government's prioritise the interests of the coal industry above that of the community. Government regulations are failing to protect the community and the Hunter Valley's natural assets from the negative impacts of the region's intensive coal mining and coal combustion industries.*

(Page 4) *Despite these serious and costly impacts, recent changes to planning laws remove the rights of communities to contest proposed projects. The views of health experts and community members have little impact on policy and approvals, and projects are failing to account for greenhouse emissions, human health and broader environmental impacts.*

The recommendations accompanying this report call for:

- *A ban on new coal projects in the Hunter Valley*
- *The development of a transition plan to assist the region develop new industries as coal is phased out*
- *Stronger regulation of any projects in the planning pipeline to adequately evaluate and limit health, climate, and environmental damages*
- *Stricter air quality standards and monitoring of all coal sources, with data publicly available*
- *Increased consultation with communities affected by coal projects*

- *The implementation of mandatory health impact assessments as part of all project assessment processes still in the planning phase*

- *Comprehensive health research studies to evaluate*

  – the environmental health risks faced by local communities from exposure to pollutants associated with the coal industry,

  and

  – the social impacts associated with disruption to communities, to landscapes, ecosystems and other industries.

(Page 15) *There is a considerable body of evidence on the adverse health impacts of outdoor air pollution. Risks relate predominantly to cardiovascular and respiratory health, lung cancer,[57] and premature death.[58]*

Air pollution is an increasing concern for many people and communities in the Hunter Valley, and is a significant health problem for New South Wales more broadly. The major contributors are industrial activity (including mining), motor vehicle exhaust and coal- fired power generation.[59]

Air pollution from coal mining, transport and combustion for electricity is not always visible but it carries serious and well documented risks to health, and can travel long distances, affecting people far from the source.[60]

Most health and medical research on particulates has focused on fine particles known as PM2.5 (measuring less than 2.5 micrometres in diameter) and PM10 (less than ten micrometres in diameter) as these are associated with the most significant health impacts.

(Page 18) *The National Environment Protection (Ambient Air Quality) Measure (NEPM) developed in 1998 sets uniform national ambient air quality standards for six air pollutants: carbon monoxide; lead; sulphur dioxide; nitrogen dioxide; ozone and particles with diameter less than 10 μm (PM10).*

In 2003, an advisory reporting standard for particles with a diameter less than 2.5 μm (PM2.5) was added. However, having no air quality standard for PM2.5 puts Australia out-of-step with the World Health Organisation (WHO) guidelines.

Australia's air pollution standards and implementation practices are outdated and do not reflect current air pollution science, although they are under review. The current approach is to regulate to certain air quality targets as the standard, when in fact exposure to air pollution at the standard itself is not safe, and aiming to regulate to keep air quality from exceeding the (known to be inadequate) standard will fail to bring about reductions in air pollution to safer levels. (See Appendix A for more details).

The most recent New South Wales Air Emissions Inventory (published in 2012 using 2008 data) indicates emissions of PM10 in the Sydney Greater Metropolitan Region (GMR) increased 20 per cent from 1992 to 2008, an increase largely attributed to increased coal mining in the Hunter Valley.[63]

(Page 20) Health effects of particulates

Both the varied size of air particulates and their total number are implicated in affecting human health.

As a major component of outdoor air pollution, particulates can trigger heart attacks and strokes, and particulate matter has been deemed carcinogenic by the World Health Organisation's International Agency for Research on Cancer.[74]

In 2013, the World Health Organisation stated:

"There is no evidence of a safe level of exposure (to PM10 or PM2.5) or a threshold below which no adverse health effects occur."[75]

Health risks are associated with both short and long- term exposure to particulates. Over a long period, even relatively modest increases in the levels of PM2.5 can significantly increase the risk of premature death.

Due to their very small size, PM2.5 (along with other toxins which attach to it, including heavy metals)can travel deep into the lungs and pass into the blood stream, where they can trigger cardiovascular events, such as heart attacks and strokes.[76] *They stimulate chronic inflammation, may contribute to asthma incidence and severity and may cause direct tissue damage due to heavy metals and other toxins adhered to their surface.*

Exposure over long periods to increased levels of PM2.5 is associated with serious health impacts:an increase of 10 µg/m^3 is associated with a 4 per cent increase in deaths from all causes, a 6 per cent increase in cardiopulmonary deaths, and an 8 per cent increase in deaths from lung cancer.[77]

Short term exposure is harmful too: exposure to a 10 µg/m^3 rise in PM2.5 can increase daily mortality by 1 per cent and increase hospital and emergency room visits for cardiovascular illness by more than 3 per cent and for respiratory illness by 4 per cent.[78]

These associations have been demonstrated in areas with mean 24 hour PM2.5 concentrations as low as between 6.1 and 22 µg/m^3 [79] *– levels that are frequently exceeded in the Hunter Valley.*[80]

The dispersal of PM2.5 is of particular concern given its propensity to be airborne for longer than other heavier particles, leading to wider distribution, and given the strong links with a range of diseases and mortality.[81]

Short-term exposure to larger particles (PM10) can trigger adverse health responses leading to hospital admissions.[82] A recent Australian study found an increase of 10 μg/m³ [83] in PM10 was associated with a 1 per cent rise in hospital admissions for respiratory disease.[84]

Longer term PM10 exposure was associated withthe development of lung cancer in a recent large European study, which supports earlier studies and suggests particulate matter in ambient air pollution contributes to the development of lung cancer even at levels below current European air quality standards.[85]

Particulate matter is thought to be the most important component of diesel engine exhaust, which was recently classified as a human carcinogen by the International Agency for Research on Cancer.[86,87]

Health effects of other air pollutants

While particulates are a key pollutant associated with both coal mining, combustion, and transportation, other air pollutants produced in the process of mining and/or burning coal such as sulphur dioxide, oxides of nitrogen, carbon monoxide, hydrochloric acid, volatile organic compounds and polyaromatic hydrocarbons are also associated with adverse health impacts.

Substances present in vehicle emissions are also harmful to health. Diesel emissions are particularly toxic as they emit fine particulate matter (PM2.5) containing polycyclic aromatic hydrocarbons (PAHs), a known carcinogen.[88] Diesel emissions also include volatile organic compounds which can, in the presence of sunlight, combine to form ground level ozone which is harmful to respiratory and cardiovascular systems.[89]

***(Page 21)** The people most at risk of exposure to and health effects from poor air quality are: babies and children, elderly people, Indigenous people, those with chronic ill health, low socio-economic status, or with pre- existing cardiovascular and respiratory disease*

Also, please look at **(Page 23)***: Figure 7. Air emissions and health effects*

***(Page 37)** The views of health experts and community members appear to have little impact on planning policy decisions. Even when there is strong opposition to coal projects, concerns are all too frequently ignored and decisions made in the interests of mining companies.[225,226]*

While new mining projects are obliged to evaluate the cumulative impacts of many mines operating together, these frequently assess a narrow scope of cumulative impacts, and fail to accurately account for greenhouse emissions, human health and broader environmental impacts.

State-based regulations which require Environmental Impact Assessments for

mining projects are inadequate in assessing human health impacts and are frequently non-transparent.[227]

Federal environmental laws, such as the Environmental Protection and Biodiversity Conservation Act, are aimed at protecting biodiversity and supporting conservation of ecosystems, not the protections of humans.

While links between human health and the environment are well understood within the public health and environmental health professions, this has not been reflected in policy decisions and is ignored in industry regulations.[228]

Current processes for the approval of coal projects in New South Wales burden, rather than protect, the community. While health impact assessments (HIAs) are well established methods for evaluating the health impacts of infrastructure projects, these are rarely employed in assessing coal project proposals by state planning decision-makers. Without an HIA, or a comprehensive assessment of environmental impacts, communities are concerned projects are being approved without an accurate assessment of the health, social or economic costs.[229]

The failure to conduct health impact assessments as part of the process of assessing applications for mining licences means projects are going ahead without an adequate assessment of the health consequences for local communities.

Where included, health impacts are either narrowly defined or ignored in planning decisions, and the removal of local government powers to influence decisions about coal mining projects limits the ability of local communities to exercise any power in opposing new projects.[230,231]

For example, the Muswellbrook Shire Council says the community is "exhausted" by the "negative consequences of the mining industry"[232] *but, due to changes to planning laws, local governments now lack any power to approve or reject new coal projects.*[233]

***(Page 39)** Other changes to state planning laws include the removal of the principles of Ecologically Sustainable Development (ESD), which allows economic considerations to take precedence over social and environmental concerns, and limits to the rights*

of communities to appeal decisions on coal and gas development, with no appeal rights at all when there has been a public hearing by the Planning Assessment Commission.[234]

Newcastle public health academics have advised that the construction of T4, the fourth coal export terminal in the city of Newcastle, will cause a critical increase in harmful coal train pollution along the rail corridor through Hunter towns and Newcastle suburbs. They assert that carcinogenic diesel exhaust

combined with PM10 and PM2.5 dispersals from coal trains creates

a toxic pollution source that must be mitigated at the development planning stage. However, New South Wales Planning and Environment does not require such 'upstream' impacts to be considered in the approval process for T4.[235]

The recent introduction of a 'gateway' approval process following amendments to New South Wales planning laws – ostensibly to protect agricultural land and groundwater – has failed to provide assurance to communities concerned about the evaluation of public benefit in relation to new coal projects.[236]

The first project to be considered under the 'gateway process', the Bylong Valley Coal Project in the Hunter Valley, failed to meet 12 out of 13 criteria, and will have significant impacts on productive land and local water supplies, but was still awarded a conditional certificate and has progressed to the next stage of planning development.[237]

Other community concerns about the approvals process involves the practice of contracting out environmental assessments for projects (which evaluate impacts on air, soil and water quality, as well as on social, economic, cultural, and heritage values) to private consultants who frequently also work for the coal industry.

This practice has led to considerable distrust ofthe findings of experts employed by industry that show proposed coal projects will not cause adverse impacts or that the source of pollution causing concern is not from the coal industry.[238]

This has the effect of further undermining community confidence in the industry and in the responsibilityof regulatory and government agencies to act in the community interests, and adds to the mental health burden of communities due to a sense of distress and abandonment.[239]

(Page 41) *The people of the Hunter Valley and the natural values of the region should not be sacrificed in the interests of short term profit for an industry that is causing harm.*

It is hoped this report will shed some light on some of the risks posed by coal in the Hunter Valley, assist in a public effort to influence policy decisions to minimise those risks, and provide the opportunity for the region to consider an alternative future.

I would appreciate a reply to all of the matters I have raised in this submission. Thank you for your consideration.

Sharon Laura
31/10/15