### Seven reasons to reject the Eastern Creek waste to energy facility Prepared for the Planning Assessment Commission hearing | 14 May 2018

### Dr James Whelan, Environmental Justice Australia James.Whelan@envirojustice.org.au 0431 150 928

Proponents of waste incinerators generally describe these facilities as 'proven technology', pointing to 'more than 500' incinerators<sup>1</sup> operating in parts of Europe. They fail to mention that waste incinerators are major sources of toxic air pollution, sometimes the dominant source in nearby communities, and that communities generally campaign against their approval.

Combustion of toxic materials such as plastic releases toxic pollutants, including mercury, lead and dioxins that can be more hazardous than the material that has been incinerated. Of particular concern are dioxins.<sup>2</sup> These highly toxic pollutants are known as 'persistent organic pollutants' because they resist breaking down and accumulate in animals and the environment. In parts of Europe waste incineration is the leading cause of dioxin production. Dioxins are also present in post-combustion ash waste which needs to be dumped somewhere.

Facility operators often reassure communities that pollution level standards will be adhered to. In reality, even supposedly best practice air pollution standards in Australia can be too low, or are not adhered to. In many places, these standards are not adequately monitored or enforced.

To continue to reduce toxic pollution created by energy generation, the New South Wales Government must continue to make a rapid transition to wind, solar and other forms of renewable energy that produce no toxic pollution.

Contrary to company claims, waste incineration is *not* good for the environment or for community health. In addition to pollution concerns, waste to energy facilities support the continued production of waste, rather than efforts to stop producing waste in the first place. Waste to energy is low on the waste hierarchy that underpins our environmental protection laws. Zero waste programs that emphasise avoiding waste being created (e.g. by banning plastic bags and unnecessary packaging, and diverting restaurant and supermarket food waste to community kitchens), reuse and recycling are always preferable.

Australia must prioritise policies and strategies that aim for zero waste and genuinely clean and renewable energy, with the associated job creation – rather than accepting 'solutions' that at best relocate pollution sources and at worst exacerbate environmental harm.

EJA's presentation presents seven compelling reasons to reject the proposed waste to energy facility.

# #1 Western Sydney has limited independent, reliable and accessible air pollution monitoring

- In Western Sydney, the NSW Office of Environment and Heritage<sup>3</sup> operates three air pollution monitoring stations, at Richmond, St Marys and Prospect. There are 14 monitoring sites in the entire city.
- The NSW OEH conducts minimal monitoring of the 'air toxics' emitted by incinerators. Australia has no legally enforceable standards for ambient air toxics.

<sup>&</sup>lt;sup>1</sup> <u>https://capitalrecyclingsolutions.com.au/case-studies/</u>

<sup>&</sup>lt;sup>2</sup> <u>http://www.who.int/mediacentre/factsheets/fs225/en/</u>

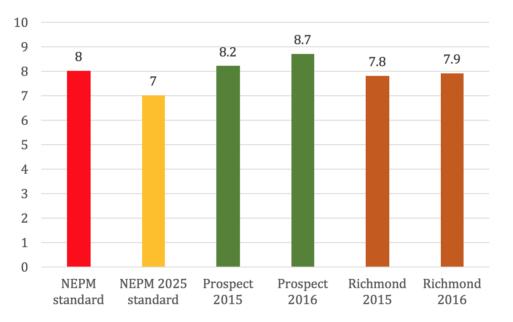
<sup>&</sup>lt;sup>3</sup> <u>http://www.environment.nsw.gov.au/AQMS/sitesyd.htm</u>

• Pollution licences for major pollution sources tend to rely on self-monitoring rather than independent OEH monitoring. The results of this monitoring tend to be difficult or impossible for community members to access, and have been found to be false and misleading (e.g. Whitehaven).

# #2 Additional pollution sources should not be approved in locations where air pollution exceeds the national standards

Fine particle pollution contributes to the premature deaths of more than 3,000 Australians each year. These particles measure up to 2.5 micrometres in diameter. They are generally produced through combustion processes such as power stations, motor vehicles and incineration. Particulate matter can trigger heart attacks and strokes and has been deemed carcinogenic by the World Health Organisation. Fine particles travel deep into the lungs and pass into the bloodstream, posing a risk of stroke and heart attacks. There is no threshold below which particle pollution exposure is not harmful to health.

Fine particle pollution (PM<sub>2.5</sub>) concentrations have exceeded the national standard for 24-hour average concentration of 25 micrograms per cubic metre ( $\mu$ g/m<sup>3</sup>) in recent years at Richmond (up to 83.4 $\mu$ g/m<sup>3</sup>), St Mary's (up to 93.2 $\mu$ g/m<sup>3</sup>) and Prospect (up to 84.9 $\mu$ g/m<sup>3</sup>). Annual average PM<sub>2.5</sub> concentrations have exceeded the national standard in Prospect (8.7 $\mu$ g/m<sup>3</sup>) in 2016 and 8.2 $\mu$ g/m<sup>3</sup> in 2015). In Richmond, the annual average concentrations were 7.9 $\mu$ g/m<sup>3</sup> in 2016 and 7.8 $\mu$ g/m<sup>3</sup> in 2015, just below the national standard, but above the standard of 7 $\mu$ g/m<sup>3</sup> that the NSW Government is committed to complying with by 2025.



### Figure: Annual PM<sub>2.5</sub> concentrations in 2015, 2016 (micrograms per cubic metre)

- The NSW EPA opposes the proposal due to air pollution impacts. It is just 800m from residences, schools, playgrounds.
- The submission from NSW Health noted the significant increase in ground level ozone concentrations and expressed concern that asbestos may be included in the feedstock. NSW Health concluded that the incinerator could present a significant risk to health.
- Elsewhere in the state, the NSW Government approve additional pollution sources where pollution concentrations (Hunter Valley coal mines, coal terminals in Newcastle).

## #3 The NSW EPA does not regulate effectively when pollution concentrations exceed national standards

• Air pollution standards are not like speed limits. No-one is fined when limits are exceeded. No entity is shut down or prosecuted. In some parts of the state, the NSW EPA issues health alerts,

which you will receive by email if you have subscribed for them. But the national standard for fine particle pollution has been exceeded in Muswellbrook every year since monitoring began, without a significant (or effective) response by the NSW Government.

# #4 Air pollution should be reduced to the lowest level possible, not to *just below* the standard

- Particle pollution contributes to respiratory and cardiovascular illness at levels well below the national standard. There is no threshold below which particle pollution is not harmful to human health. Nationally, particle pollution contributes to 3000 premature deaths each year. Australian governments recently canvassed a 'pollution exposure reduction' framework that would actively manage pollution concentrations to levels well below the national standards.
- The NSW Energy from Waste policy stipulates that facilities need to present "no increase in the risk of harm to human health". The Eastern Creek EIS acknowledges that ultrafine particle pollution will increase.
- EJA has conducted extensive research into the NSW Government's approach to licencing power stations, mines and other polluting facilities. In general, consent conditions (set by Planning and Environment) and Environment Protection Licences (set by the EPA) might best be described as 'lowest common denominator'.
- At a recent community forum in Wyee, the NSW EPA's Director (Northern region) explained that the state's power stations are expected to operate emission controls that were 'reasonably available technology' when the plants were constructed, and are not expected to install 'Best Available Technology'.
- The World Health Organisation is opposed to incineration of waste.
- As a signatory of the Stockholm Convention Australia has committed not to produce Persistent Organic Pollutants (POPs) which are an unavoidable by-product of the incineration process.
- The Eastern Creek proposal does not meet the requirements of the NSW Energy from Waste policy
- There are currently no Australian emission standards for incinerators.

# **#5** The NSW EPA does not respond strongly to polluters that fail to comply with their licence

- A responsible regulator would respond to non-compliance swiftly and decisively. Our research indicates non-compliance is generally treated by the NSW EPA as a confidential or trivial matter. When coal ash from the Eraring power station's ash dump blew over residents in nearby Wangi Point, Origin Energy was fined just \$15,000.
- Coal-fired power stations frequently fail to comply with their consent conditions and EPL conditions without consequence. Eraring, Australia's largest coal-fired power station, has breached licence conditions 23 times in 10 years and received just one Penalty Infringement Notice.

# #6 The company proposing this waste incinerator has not demonstrated competence and relevant experience

• Section 83 of the Protection of the Environment Operations Act requires consideration of whether the proponent is a fit and proper person. This Section aims to ensure that people are suitably qualified and experienced. The proponent for Eastern Creek has not built or operated plants of this nature previously. The company has been fined for non-compliance (mishandling asbestos).

### **#7** Waste incinerators generally community conflict and opposition

The Wheelabrator incinerator in Baltimore is that US city's largest single source of air pollution,<sup>4</sup> emitting sulfur dioxide, oxides of nitrogen, hydrochloric acid and formaldehyde into the

<sup>&</sup>lt;sup>4</sup> <u>http://www.baltimoresun.com/news/maryland/environment/bs-md-trash-incineration-20171107-story.html</u>

community. Nitrogen oxides inflame lung tissue and cause or exacerbate breathing problems, particularly asthma. Fine particles and other pollutants are often too small to be filtered by the cilia in the upper airways. They make their way deep into the lungs, and eventually the bloodstream.

When a second incinerator was proposed near the Wheelabrator plant, students from the Franklin High School staged a sit-in at the Maryland Department of the Environment. Seven were arrested.

The Baltimore incinerator receives 'Green Energy' subsidies. Federal energy minister Josh Frydenberg recently suggested our Clean Energy Finance Corporation should make funding available in Australia for waste incineration. This suggestion should be rejected outright.

In Ireland, the 240,000 tonne per annum Indaver waste incinerator in Cork Harbour has triggered conflict between residents and the waste company.<sup>5</sup> In Beirut, civil society groups are protesting a proposal to use waste incinerators across the country.<sup>6</sup> The proposed re-construction of the Ivry incinerator near Paris is opposed by an alliance of community and environment groups who argue that more effort should, instead, be invested in waste prevention, composting and recycling.<sup>7</sup>

Waste incineration generates large quantities of ash. Norwegian community groups are protesting against their country importing ash generated by waste to energy facilities in Sweden.

In Australia, as in the United States and other countries, waste to energy incinerators are emerging as a major public health threat. Communities are becoming increasingly informed and organised in their opposition.

#### Recommendation

The Planning Assessment Commission should reject the proposed energy from waste facility. The state's regulatory system for protecting the environment and community health is not sufficiently robust.

For more information on the environmental and social justice problems created by the Waste to Energy industry, visit: <u>https://www.envirojustice.org.au/our-work/community/air-pollution/resources/waste-to-energy/</u>

### About Environmental Justice Australia

Environmental Justice Australia is nature's legal team. We use our technical expertise and practical understanding of the legal system to protect nature and defend the rights of communities to a healthy environment. EJA uses the law to protect and restore Australia's environment. We work to achieve better environmental laws that truly protect our environment, for the benefit of all Australians. We make sure communities have a real say in decisions that affect their environment.

<sup>&</sup>lt;sup>5</sup> <u>https://www.irishtimes.com/news/ireland/irish-news/indaver-and-environmentalists-clash-over-cork-incineration-plan-1.2973112</u>

<sup>&</sup>lt;sup>6</sup> <u>http://www.dailystar.com.lb/News/Lebanon-News/2018/Feb-11/437597-civil-society-speaks-up-against-incinerator-plans.ashx</u>

<sup>&</sup>lt;sup>7</sup> <u>https://www.connexionfrance.com/French-news/No-need-to-build-more-incinerators-says-Environment-Agency</u>