Clarence Valley Conservation Coalition inc

PO Box 1015 Grafton NSW 2460
clarencevcc@gmail.com
www.clarencevalleycc.blogspot.com.au

Director – Industry Assessments
Development Assessment – NSW Planning
Locked Bag 5022
Parramatta NSW 2124
By email: Industry.Assessments@planning.nsw.gov.au

Dear Sir/Madam

EIS for the Woodlawn Advanced Energy Recovery Centre SSD-21184278

The Clarence Valley Conservation Coalition (CVCC) is a community group based in the Clarence Valley in the NSW Northern Rivers. Formed in 1988, the CVCC has been involved with environmental issues – both locally and beyond – since that time. It has had a long-term interest in climate change, waste management, energy production, the water cycle, and protecting the environment of our local area and further afield.

The CVCC is disappointed with a lack of progress on improving waste management in NSW. To date, the NSW Government has done little to encourage appropriate diversion of organic wastes from landfill in the Sydney region – something that happened with the introduction of FOGO bins in the Clarence Valley more than a decade ago. Like others in our local community, we were horrified when the NSW Government identified nearby Casino as one of only a few sites across the state where waste-to-energy incineration will be permitted under its *Energy from Waste Infrastructure Plan*.

Another of these sites is the Southern Goulburn Mulwaree Precinct, where Veolia is proposing its Woodlawn Advanced Energy Recovery Centre (variously shortened to ARC or ERC in the environmental impact statement (EIS) and its supporting documentation currently on exhibition).

In making the following submission, the CVCC acknowledges and accept the Department's disclaimer and declaration at www.planningportal.nsw.gov.au/major-projects/help/disclaimer-and-declaration. It has made no reportable political donations in the past 2 years.

The CVCC **objects** to the Woodlawn ERC proposal as it will:

- provide a contractual imperative for Sydney-based councils to continue to supply large volumes of waste to this privately owned facility that is run for profit by a multinational company;
- undermine moves to a more sustainable waste management future based on the actual resource recovery that is intrinsic to a circular economy;

- add to greenhouse gas emissions, producing more carbon dioxide per unit of energy generated than the grid, contrary to the urgent need to reach carbon neutrality in this climate emergency;
- produce air-borne dioxins and furans, compounds which are known to be highly toxic and cumulative with no safe limit; and
- generate a large volume of toxic ash residues that will still require disposal in landfill, equivalent to about a quarter of the weight of the waste burnt.

Waste incineration entrenches a linear economy in our society that relies on the extraction of virgin materials and rewards consumptive and wasteful lifestyle choices. A waste-to-energy incinerator is not an ecologically sustainable solution to Sydney's waste management. It is neither 'green' nor 'renewable'. Waste incinerators are a polluting, expensive and unsustainable technology that undermines zero waste strategies (such as recycling and composting) and stifles innovation in the waste management and energy sectors.

Burning resources and creating toxic pollution, whether for energy generation or waste disposal, makes no sense if we are serious about reducing greenhouse gas emissions and addressing climate change. For the amount of greenhouse pollution it will cause, it will produce very little energy.

There are numerous flaws in the documentation supporting the EIS. The CVCC point to two of the weakest supporting documents:

Example of flawed analysis 1: Appendix I – Waste Feedstock Analysis

Appendix I of the EIS assumes that the volume of metropolitan solid waste (MSW) will remain steady into the future even if all the targets in the NSW Government's *Waste and Sustainable Materials Strategy 2041* are met. Further, it assumes that 100% of MSW is putrescible. This is inconsistent with the Strategy's main target which is to halve the amount of organic waste sent to landfill by 2030 – if this target is met (and there is no reason to doubt why it would), the volume of putrescible MSW will be reduced significantly and so the putrescible landfill capacity for Greater Sydney (claimed in Appendix I to be exhausted by 2036) will be extended until at least the 2040s.

According to the Strategy, the NSW Government has spent $105 million since 2013 to keep food and garden organic waste out of landfill, mostly in regional areas. It is time for Sydney councils to follow their country cousins! The Strategy identifies the need for significant new infrastructure to handle and process Sydney's organics waste via largescale composting and biogas facilities. These are the facilities that should be built, not ERC incinerators.

Appendix I assumes that all MSW is considered eligible to be used as feedstock for the proposed incinerator, and yet it is expected the MSW will still contain a proportion of organics and recyclable material that should not be burnt. Better sorting facilities are required to remove these resources from the waste-stream – it shouldn't just be sent into the furnace.

The CVCC recommends:

- Appendix I be sent back to the proponent for revision with more realistic proportions of MSW that should be considered 'residual' waste and so eligible for leakage from the circular economy model into an energy from waste facility.
- Veolia is requested to consider developing the largescale composting and anaerobic biogas digesters that the NSW Government's *Waste and Sustainable Materials Strategy 2041* identifies are urgently required for the Sydney Basin.

Example of flawed analysis 2: Appendix Q – Greenhouse Gas Impact Assessment

Appendix Q considers only three scenarios:

- current operation (baseline)
- future operation at the existing approved limit of landfilling but (crucially) with the composition of waste unchanged (Scenario 1)
- future operation with a proportion of the existing approval limit of waste diverted to the ERC (Scenario 2).

Appendix Q of the EIS identifies that greenhouse gas emissions from the Westlawn facility will be grossly increased under Scenario 2 compared to both the baseline and Scenario 1. Under Scenario 2, it is estimated the facility will emit 323,850 tonnes of CO_2-e/year – an increase of almost 100,000 tonnes compared to Scenario 1 and an increase of more than 200,000 tonnes compared to the baseline.

In terms of its comparisons, the CVCC considers that the estimate of emissions under Scenario 1 is not a true representation of what is likely under the NSW Government's *Waste and Sustainable Materials Strategy 2041*. It has ignored the improvements in waste handling, diversion and processing of organic waste. A key plank of the Strategy is to reach net zero emissions from organics to landfill by 2030.

Section 5 of Appendix Q does not identify how the emissions of the ERC were calculated. There is no source (published or otherwise) cited. Table 6.3 merely provides that 'Thermal treatment of residual waste for electricity (ARC)' will generate 146,891.3 tonnes of CO_2-e/yr with a further 1639.1 tonnes of CO_2-e/yr produced from using diesel to combust the waste material in the ERC. These figures (which are surprisingly precise) are stated without any information on how they were calculated.

Another real problem with the assessment in Appendix Q is the claim that the ERC's 30 MW power station will directly substitute 240 GWh each year of electricity sourced from the more carbon-intensive electricity fed into the Australian (Eastern) National Electricity Market (NEM), and so the reduced emissions from other power stations should be considered a direct benefit of the proposal. This claim implies that the authors have no idea how the NEM operates. Those coal-fired power stations that continue to provide electricity into the grid will continue to operate at the level that is most efficient – they won't be cutting their power output by the 30 MW generated by the proposal.

The NEM generates around 200 TWh of electricity annually from both renewable and fossil fuel sources, with an annual average CO2-e intensity index of 0.71 t/MWh (during the whole of 2021[1]). Based on the 2021 figures, if other generators do reduce their input to the NEM by 240 GWh, this **could** achieve a net saving of 170,400 tonnes of CO_2-e/yr. Appendix Q uses a carbon equivalent intensity index of 0.85 t/MWh for purchased grid electricity in NSW. This is based on the estimates for 2019/20 from the National Greenhouse Accounts Factors published in 2021[2]. It is unclear why the more up-to-date AEMO figures for the NEM were not used instead – the carbon intensity of the grid is quickly diminishing from year to year.

[1] Sourced from https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/market-operations/settlements-and-payments/settlements/carbon-dioxide-equivalent-intensity-index

[2] At: www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-accounts-factors-2021.pdf

According to *Power Sector Carbon Intensity Outlook in Australia 2020-2050*[3], the CO2-e of intensity index of the NEM is likely to dramatically decrease as more renewables come into operation. By 2030, the carbon intensity of the grid is estimated to be 0.58 t/MWh – less than the ERC; by 2040, the carbon intensity of the grid will be about half of the ERC, at 0.31 t/MWh. Even if the 240,000 MWh displacement occurs, this means the calculated net 'saving' of the ERC will amount to an extra 74,000 tonnes of CO_2-e/yr.

Critically, Appendix Q appears to assume the figure of 0.85 t/MWh will be fixed into the future. This serves to dramatically over-estimate the net benefit of the ERC's facility for greenhouse gas emissions during the life of the project.

The CVCC recommends:

- Appendix Q be sent back to the proponent for revision with more information provided on how the emissions of the ERC have been calculated with such precision.
- The consent authority considers the implications of the additional emissions (compared to the baseline) of 150,000 tonnes of CO_2-e/year in this time of a climate emergency when the current NSW Government is committed to net zero by 2050 and this target is enshrined in Commonwealth legislation.

The CVCC urges the Department of Planning and Environment to **refuse** this proposal or, failing refusal, to seek further information before considering it any further.

Yours faithfully

Leonie Blain
Hon Secretary

12 December 2022

[3] Published by Ian Tiseo, October 2021, sourced from www.statista.com/statistics/1190081/carbon-intensity-outlook-of-australia/