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THE GREENS

WESTERN SYDNEY ENERGY AND RESOURCE RECOVERY CENTRE ENVIRONMENTAL IMPACT STATEMENT SSD-10395

SUBMISSION - GREENS NSW

18 November 2020

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Submitted via https://www.planningportal.nsw.gov.au/major-projects/project/25896

Thank you for the opportunity to make a submission to the Western Sydney Energy and Resource Recovery Centre (WSERRC) Environmental Impact Statement (the EIS). Greens NSW objects to the proposal for the reasons outlined below.

Air quality and public health

We are concerned that the proposal is inconsistent with the NSW Government's Energy from Waste (EfW) Policy due to continued uncertainty around the performance of the facility and long-term risks to the environment and the health of the local community;

Whilst the applicant has identified two reference facilities, the Dublin EfW facility in Ireland and the Filborna Oresundskraft EfW facility, in the municipality of Helsingborg, Sweden, we are not necessarily confident that the waste streams (containing a mixture of residual Municipal Solid Waste (MSW) and residual Commercial and Industrial (C&I) waste streams will be directly comparable.

The EIS states that the facility will not accept waste with a chlorine content of greater than 1% or construction and demolition waste and goes on to state that "operational procedures and systems will be implemented to minimise the likelihood of unacceptable waste being received at the facility. This will include:

- Pre-qualification procedures for waste suppliers

- Pre-processing of waste from sources that have not been adequately source separated
- Periodic sampling and testing
- On site quality control and quality assurance procedures".[1]

We are concerned that the proponents, Cleanaway Waste Management Limited and Macquarie Capital may not meet the "fit and proper person test" under Section 83 of the *Protection of the Environment Operations Act 1997*.

Cleanaway is Australia's largest waste, recycling, industrial and liquids service provider with a substantial network of facilities, transfer stations, engineered landfills, liquid treatment plants and refineries. Macquarie Capital is part of Macquarie Group, a global financial services group operating in 31 markets.

Macquarie Capital is the developer and co-investor in Australia's first Energy from Waste (EfW) centre, which is currently under construction at Kwinana, in Perth. Their subsidiary, Green Investment Group Ltd, are also joint venture partners with Covanta Holding Corp, in the ownership of the Dublin Waste to Energy project, one of the reference facilities referenced in the EIS.

In particular, Greens NSW have concerns about the environmental sustainability and compliance with environmental licensing conditions at Cleanaway's existing operations. According to recent reporting in the Australian Financial Review, Cleanaway Waste Management's has been blasted by the NSW Environmental Protection Authority (EPA),

> *"over concerns about its "management of its operations" and the approach and knowledge of employees about environmental safety.*
>
> *The NSW EPA has also slapped Cleanaway, Australia's largest waste management company, with a raft of licence conditions, show cause notices, warning letters and advisory letters after uncovering "consistent areas of concern" following an inspection blitz of 26 company sites in late June.*
>
> *Of the 26 sites the EPA inspected, including Homebush, Unanderra, Greenacre, Eastern Creek, Blacktown, St Marys, Penrith, Silverwater, Albury, Orange, South Windsor and Tamworth, only one site – Padstow – was given a "no action" finding".*[2]

[1] Western Sydney Energy and Resource Recovery Environmental Impact Statement p. 189-190 available at: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-10395%2120200929T072737.725%20GMT

[2] Cleanaway safety claims blasted by NSW EPA available at: https://www.afr.com/companies/manufacturing/cleanaway-safety-claims-blasted-by-nsw-epa-20201010-p563wy

Cleanaway was previously known as Transpacific, a company which has been associated with a number of health and safety violations, including fatalities[3].

Macquarie Group has also been linked with recent unfavourable reporting. This year they disclosed that 60 of their current and former employees, including chief executive Shemara Wikramanayake, are now suspects in an investigation into an immense tax evasion scheme in German dividend trading[4].

Given these recent findings, we have limited confidence in the proponents plans to "implement a waste acceptance protocol to control waste feedstock acceptance through pre-qualification of suppliers, contractual arrangements and onsite Quality Assurance/Quality Control (QA/QC) procedures". [5]

The Greens NSW are concerned that there is insufficient certainty that there will be sufficient separation of halogenated organic substances such as plastic wastes (composed of polyvinyl chloride (PVC)) to ensure that toxic air emissions such as dioxins and furans are avoided.

When burned PVC produces carbon monoxide, dioxins, and chlorinated furans. Dioxins and furans are two of the most toxic man-made products because the lowest amount of either product can cause diseases such as cancer and birth defects[6].

Dioxins are persistent organic pollutants (POPs), meaning they take a long time to break down once they are in the environment. They are highly toxic and can cause cancer, reproductive and developmental problems, damage to the immune system, and can interfere with hormones. Dioxins accumulate in food chains, concentrating mainly in the fatty tissue of animals[7].

The ARUP Merit Review for the Next Generation EfW facility undertaken for the NSW EPA states that "hazardous waste incinerators are designed for 1100°C, due to the nature and composition of the difficult waste generally processed through them thus ensuring their complete destruction. This practice is based on considerable practical experience. Similar practical experience shows that 850°C is

[3] Transpacific fined $363,000 over rubbish truck's defective brakes that caused Perth fatal crash available at: https://www.perthnow.com.au/news/wa/transpacific-fined-363000-over-rubbish-trucks-defective-brakes-that-caused-perth-fatal-crash-ng-3551b21411f7cde808bd095738dd1a40 and Comcare v Transpacific Industries Pty Ltd [2012] FCA 90 available at: https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/single/2012/2012fca0090

[4] Macquarie staff tied to German tax fraud scandal available at: https://www.investordaily.com.au/regulation/46398-macquarie-staff-tied-to-german-tax-fraud-scandal#:~:text=Macquarie%20Group%20has%20disclosed%2060,scheme%20in%20German%20dividend%20trading.&text=The%20Macquarie%20staff%20are%20reported,looked%20into%20by%20German%20authorities

[5] Western Sydney Energy and Resource Recovery Environmental Impact Statement p. 188 available at: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-10395%2120200929T072737.725%20GMT

[6] Negative effects from certain materials available at: https://completewastemgmt.com/backyard-burning/#:~:text=When%20burned%20PVC%20produces%20carbon,as%2C%20cancer%20and%20birth%20defects.

[7] Learn about Dioxin available at: https://www.epa.gov/dioxin/learn-about-dioxin

sufficiently high for the destruction of MSW and C&I wastes, where the chlorine concentration of the waste feed to the grate is normal up to 1%. Limiting the chlorine concentration in the feedstock to 1% prevents excessive corrosion of the boiler and shock loading of chlorine into the flue gas treatment plant. It is possible and acceptable for small quantities of waste with higher concentrations of chlorine to be accepted into the pit but they would need to be mixed and/or blended with other waste before feeding onto the grate".[8]

This proposed facility intends to burn a mixture of residual MSW and residual C&I waste streams at 850°C for at least 2 seconds. The NSW Energy from Waste Policy Statement states that "if a waste has a content of more than 1% of halogenated organic substances, expressed as chlorine, the temperature should be raised to 1100°C for at least 2 seconds after the last injection of air.

We note that under the NSW EfW Policy Statement "as part of the environment protection licence conditions of any energy recovery facilities, the EPA will require operators to undertake proof of performance (POP) trials to demonstrate compliance with air emissions standards. Following successful POP trials, there must be at least two measurements per year of heavy metals, polycyclic aromatic hydrocarbons, and chlorinated dioxins and furans. One measurement at least every three months shall be carried out for the first 12 months of operation. If and when appropriate measurement techniques are available, continuous monitoring of these pollutants will be required".[9]

Thus, there will be no continuous monitoring of air emissions of heavy metals, polycyclic aromatic hydrocarbons, and chlorinated dioxins and furans

Very importantly, the proposed facility is only 1km from the nearest residential homes and there are also sensitive sites, such as schools and childcare centres, nearby.

In addition, the EIS states that cumulative ground level $PM_{2.5}$ and PM_{10} concentrations will exceed applicable emission limit values, due to the existing background levels which already exceed the criteria. The fact that air quality in the region is already poor, due in part to regional dust and bushfire events, is a strong reason not to permit any additional particulate pollution sources, such as this proposed facility.

Greens NSW are concerned that the proposed site is only 5km from Prospect Reservoir. Prospect Reservoir is an integral part of Sydney's drinking water supply and is still used regularly in times of high demand for water and when other parts of the water supply system are taken offline for

[8] Arup NSW EPA The Next Generation (NSW) Energy from Waste Facility, Eastern Creek EIS Merit Review p. 9 available at: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=EXH-170%20190325T120257.977%20GMT

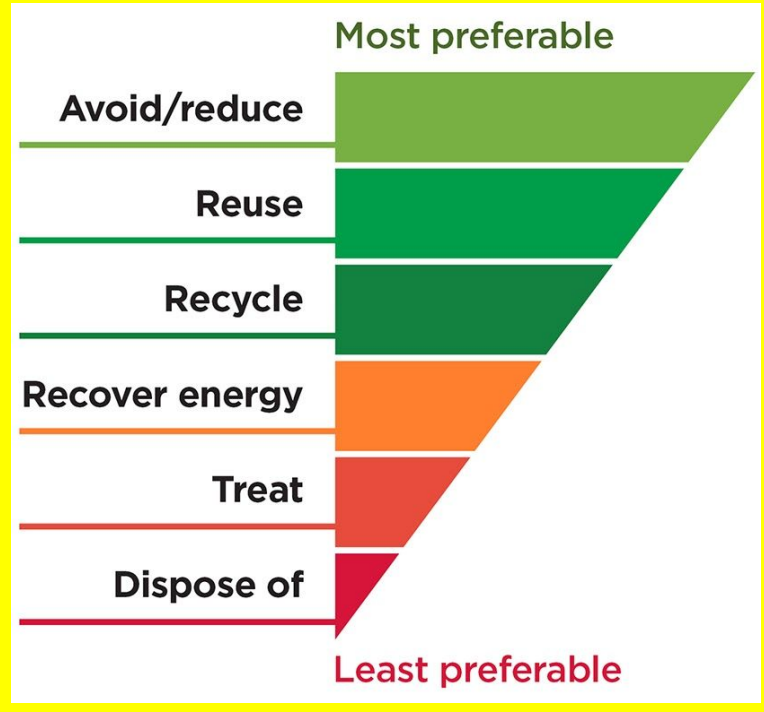
[9] NSW Energy from Waste Policy Statement p. 7. Available at: https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/epa/150011enfromwasteps.pdf

maintenance[10]. Any problematic release of pollutants into the air could be later deposited in a part of Sydney's drinking water supply.

Waste hierarchy and circular economy

Greens NSW do not support the use of incineration, but instead advocate for the use of the waste hierarchy and in support of a circular economy.

We note that "the NSW EfW Policy, the *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) and the NSW Waste and Resource Recovery Strategy 2014-21 (WARR Strategy 2014-21) are underpinned by the waste hierarchy, which provides guidance on the order of preference for a range of waste management approaches to achieve efficient resource use.



The recovery of energy is considered a less preferred approach in the waste hierarchy to higher order outcomes of avoid, reduce, reuse and recycle". [11]

The proponent states that they will be burning C&I waste and separated MSW, with no use of organic waste. However, Greens NSW believe that there is no guarantee that waste will not be diverted for fuel

[10] Prospect Reservoir available at: https://www.waternsw.com.au/supply/Greater-Sydney/dams/prospect-dam
[11] Energy from waste available webpage at: https://www.planning.nsw.gov.au/Assess-and-Regulate/State-Significant-Projects/Energy-from-waste

recovery away from higher order resource recovery outcomes. This has been the case overseas, where waste has ended up being imported to feed EfW facilities[12].

The Greens NSW are concerned that the proponents may have overestimated the volume of residual waste available for energy recovery in the Sydney/Lithgow area, particularly given that this is now one of four proposed energy to waste projects in the Sydney/Lithgow area. These are:

- this project;
- the proposed Botany Co-Generation Plant;
- the Next Generation Eastern Creek Energy from Waste project; and
- the proposed Mount Piper Energy Recovery facility.

Lack of social licence

There is significant community opposition to energy from waste proposals in this area, as demonstrated by two petitions, each with over 10,000 signatures opposing the proposed development of the Next Generation Energy from Waste Plant, tabled in the NSW State Parliament. The Next Generation Energy from Waste Plant was also planned for Eastern Creek and was refused consent by the Independent Planning Commission in July 2018.

The previous Next Generation EfW development proposal was not supported by the local council, Blacktown City Council. Blacktown City Council has commissioned an independent review of the current EIS and we will lodge a submission on the proposal based on this review and the 'scientific evidence' from here and overseas surrounding energy-from-waste.

We note that the current proposal includes aVisitor Information Centre and community education facility. While this demonstrates that the proponent has shown some commitment to engaging with the community, it is unlikely that inclusions such as these will sway the local community from a facility they believe may have significant adverse environmental and health effects for them.

Uncertainty re the classification of the solid waste and an end location for the waste generated by the plant

The EIS states that residual materials produced from the EfW process include:

- incinerator bottom ash (IBA);
- boiler fly ash; and

[12] Danish ministers call for cuts to waste imports available at: https://www.euwid-recycling.com/news/policy/single/Artikel/danish-ministers-call-for-cuts-to-waste-imports.html

- flue gas treatment residues (FGTr).

The EIS claims that the EfW process typically leads to about 90% reduction in the volume, or 80% reduction in mass (tonnes), of waste that would otherwise go to landfill[13]. Based on the EIS's accompanying Technical Report C, it is likely that lead, nickel and cadmium will exceed the NSW General solid waste – maximum allowed value, and that lead levels would exceed the NSW Restricted solid waste – maximum allowed value. The Technical Report states that "based on the IBA testing results for the Dublin reference facility and the accompanying IBA benchmarking values indicating the range of typical results for other moving grate facilities processing MSW in the UK, it is expected that lead content will govern the classification of the IBA stream at WSERRC". [14]

The EIS states that the applicant is exploring options to reuse the IBA in construction products. The Greens NSW are concerned that this IBA is potentially toxic, containing residue heavy metals such as lead. There is a possibility that this waste may be classified as hazardous waste. We consider further reuse of this waste in construction products as potentially dangerous and could lead to the spreading of toxic waste into the community in construction products, such as bricks.

Additionally, we are concerned that the EIS does not specify where the IBA will go for disposal. The EIS states that "IBA will be stored in a bunker with a minimum of five days storage capacity.... The facility will have a fully enclosed ash handling system for IBA and no ash treatment or long-term ash storage will occur on site. IBA will then be transferred offsite to a separate IBA processing facility (to be developed) where further metals recovery will also take place".[15] The EIS goes on to state "The IBA processing facility, if progressed, will be subject to a separate development application process. However, the site location for storage and/or treatment has not been finalised at this stage".[16]

The Greens NSW find it hard to comprehend that the proponents have put forward this proposal, without a guaranteed location prepared to accept the IBA waste. There would be 65,000tpa dry weight of IBA generated by the facility.

Part of the boiler fly ash and the FGTr are classified as hazardous waste and "will be transported for pre-treatment at Cleanaway's hazardous waste treatment facility located at St Mary's before being disposed of to a licenced restricted solid waste landfill facility such as at Kemps Creek. The St Mary's

[13] Western Sydney Energy and Resource Recovery Environmental Impact Statement p. 206 available at: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-10395%2120200929T072737.725%20GMT

[14] Technical report C Waste and resource management assessment report pp. 66-68 available at: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-10395%2120200923T055933.273%20GMT

[15] Western Sydney Energy and Resource Recovery Environmental Impact Statement p. 111 available at: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-10395%2120200929T072737.725%20GMT

[16] Ibid. p. 494

facility has the capacity and is licenced to treat FGTr material. There is no limit on the annual processing capacity at St Mary's as stipulated in the facility's EPL (EPL 20271). However, there is a limit on storage at the facility i.e. the quantity of waste, treated or otherwise, stored on the premises must not exceed 5000 tonnes at any one time. In the case that the St Mary's facility is not available, FGTr will be sent to another suitably licenced facility".[17]

The Greens NSW are extremely concerned that this proposal will, by the proponent's own figures, generate 20,000tpa of hazardous waste.

Greenhouse gas (GHG) emissions

We note that the EIS claims that "while the facility will generate GHG emissions, considering factors like export of electricity back to the grid and the diversion of the equivalent waste which would otherwise be sent to landfill, the overall net reduction of GHG emissions will be by around 390,000tpa CO2-e". [18]

As the National Toxics Network highlights the real issue for climate change is how well incinerators compare to other energy generation sources - not other waste management practices. When this comparison is examined, GHG emissions from waste incinerators generating electricity, was found to be the highest of all technologies by the United States Environment Protection Authority.[19]

The public interest and the precautionary principle

It is The Greens NSW position that this proposed development is not in the public interest, as the benefits of reducing waste going to landfill and some reduced greenhouse gas emissions, do not outweigh the potential release of toxic emissions into the air only 1km from the nearest residents and the uncertainty around the characterisation of the IBA and its end location. Principle 15 of the Rio Declaration on Environment and Development states that "in order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation".[20]

It is our position that this development poses serious and irreversible damage to the environment and public health and we urge the consent authority to reject it.

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[17] Ibid. p. 112
[18] Ibid. p. xxxi
[19] USEPA (2013) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2011
[20] Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 p. 3. available at: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf