

OUTCOMES SUPPLEMENTARY REPORTS

Meeting Date 17 November 2020

Item Number. 110

SUBJECT: Proposed Western Sydney Energy and Resource Recovery Centre at 339 Wallgrove Road Eastern Creek

FILE NUMBER: 20/25264

REPORT BY: Kerren Ven, Strategic Planner

RECOMMENDATION:

That Council:

1. Endorse the issues outlined in the report as the basis for making a submission to the Department of Planning, Industry and Environment regarding the Western Sydney Energy and Resource Recovery Centre (WSERRC) at 339 Wallgrove Road Eastern Creek and subject to the following issues -
 - 1.1. Public exhibition of the proposal has not been accompanied by independent expert review of the proposal. This has meant that Council's assessment and submission to the proposal has relied entirely on the reports prepared by the applicant that suggest the proposal complies with national and international guidelines relevant to this form of development.
 - 1.2. Without the benefit of the independent expert advice, it is uncertain if the proposal will result in unacceptable negative impacts on the environment and community of Fairfield City.
 - 1.3. Based on the above, Council strongly requests that the proposal be re-exhibited once the independent expert review of the proposal has been undertaken and been made publically available.
 - 1.4. Truck movements associated with the proposal have the potential to generate adverse impacts on the local road network of Fairfield City. Accordingly, any approval for the project should include measures to ensure all trucks entering or exiting the site should be from or to Wallgrove Road. This should include GPS tracking and/or provision of structures (e.g. gantries) to monitor truck movements through the surrounding road network.
2. Request that given the close proximity of the proposed facility to the Fairfield LGA (in particular nearby rural-residential development in Horsley Park), the proposed Community Reference Group must include strong representation from the community of Fairfield City.

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3. The Community Funding Package for the project to support community projects must be focussed toward the community of Fairfield City that has the greatest level of exposure to potential impacts from the project.

SUPPORTING DOCUMENTS:

There are no supporting documents for this report.

CITY PLAN

This report is linked to *Theme 2 Places and Infrastructure* in the Fairfield City Plan.

SUMMARY

Council has received notification from the NSW Department of Planning, Industry and Environment (DPIE) with regards to the public exhibition of a State Significant Development Application (SSDA) for the Western Sydney Energy and Resource Recovery Centre (WSERRC) at 339 Wallgrove Road Eastern Creek (Blacktown Local Government Area (LGA)).

The proposal was publically exhibited until 16 November 2020 and the consent authority for the project will be either the Minister for Planning & Public Spaces or the Independent Planning Commission.

The proposed development seeks to thermally treat up to 500,000 tonnes per annum of municipal solid waste (MSW) and commercial and industrial waste (C&IW) that would generate up to 55 megawatts of base load electricity, to be exported to the grid. This is enough energy to service 79,000 homes in Western Sydney and would reduce greenhouse gas emissions equivalent to taking 85,000 cars off the road each year.

The nature of operations of the facility are highly complex and if approved would be subject to a range of detailed technical and licensing requirements issued by State agencies, including the DPIE and NSW Environmental Protection Authority (EPA). As part of this approval, the EPA would also undertake ongoing monitoring of the air quality issues relevant to future operations of the site to ensure the proposal complied with licensing requirements.

It is noted that at a recent briefing provided to Council, the applicants advised that the DPIE will be engaging independent experts to undertake a detailed assessment of the project following the public exhibition period. Given the complexity of the project, it is recommended Council advise the DPIE of its concerns that public exhibition of the proposal did not include a review of the reports supporting the proposal and the merits of the proposal. In this regard the proposal should be re-exhibited once this advice becomes available.

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It is also recommended that any approval of the proposal should have regard to the fact that the majority of sensitive receptors located in proximity to the site are located in Fairfield City. In this regard, the proposed Community Reference Group should include strong representation from the community of Fairfield City. In addition, the Community Funding Package for the project should be focused toward Fairfield City, being the community in closest proximity to the site.

BACKGROUND

Cleanaway and Macquarie Capital are jointly proposing the energy from waste (EfW) facility known as the Western Sydney Energy and Resource Recovery Centre. The key objectives of the proposal are to:

1. Divert waste from landfill;
2. Operate the facility to international best-practice standards; and
3. Provide a source of baseload energy categorised as renewable to contribute to the NSW Government's objectives for energy security and renewable energy.

Site location and layout

The site (see image over page) is located in Blacktown City Council adjoining the existing SUEZ Eastern Creek Waste Management Facility and Global Renewables site and was previously utilised as a poultry farm.

The proposed facility will be accessed via Austral Bricks Road in Blacktown that crosses over the Warragamba Pipeline Corridor. The nearest sensitive land uses in Fairfield City are 1km south of the site in Horsley Park that includes rural residential development and Horsley Park Public School.

The proposal will be designed to thermally treat up to 500,000 tonnes per annum of MSW and C&IW streams that would generate up to 55MW of base load electricity to be exported to the grid in the form of electricity to produce enough energy for over 79,000 homes in Western Sydney.

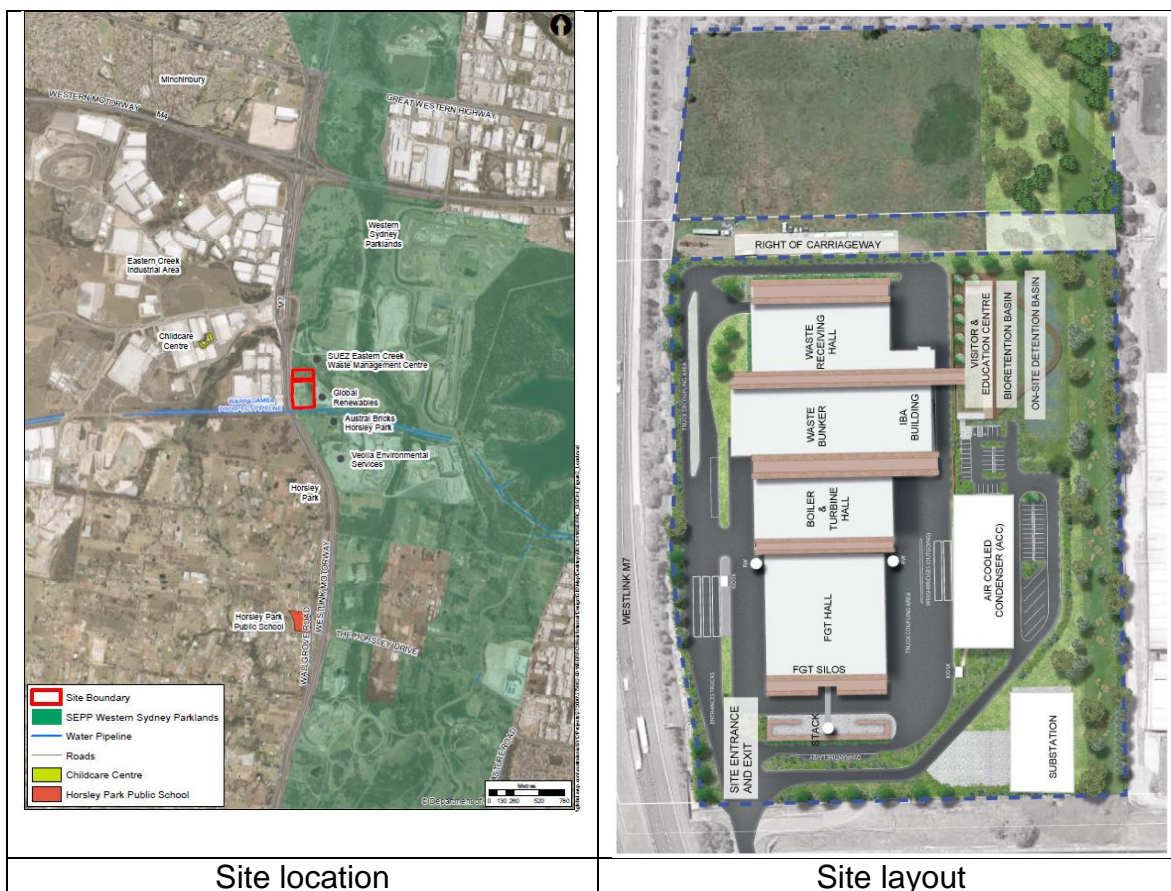
Permissibility

The proposal is permissible with consent under the planning controls associated with State Environmental Planning Policy (SEPP) - Western Sydney Parklands 2009. The subject site is situated in the Wallgrove Precinct of the Western Sydney Parklands Plan of Management (PoM) and is consistent with the land use framework of the PoM.

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Site location

Site layout

Operation

In brief, the facility will combust both MSW and C&IW to produce energy for the NSW energy grid and includes a number of steps and processes shown in the illustration over page. As part of this process, emissions from the combustion process will be treated to meet relevant environmental emissions criteria issued by the NSW EPA.

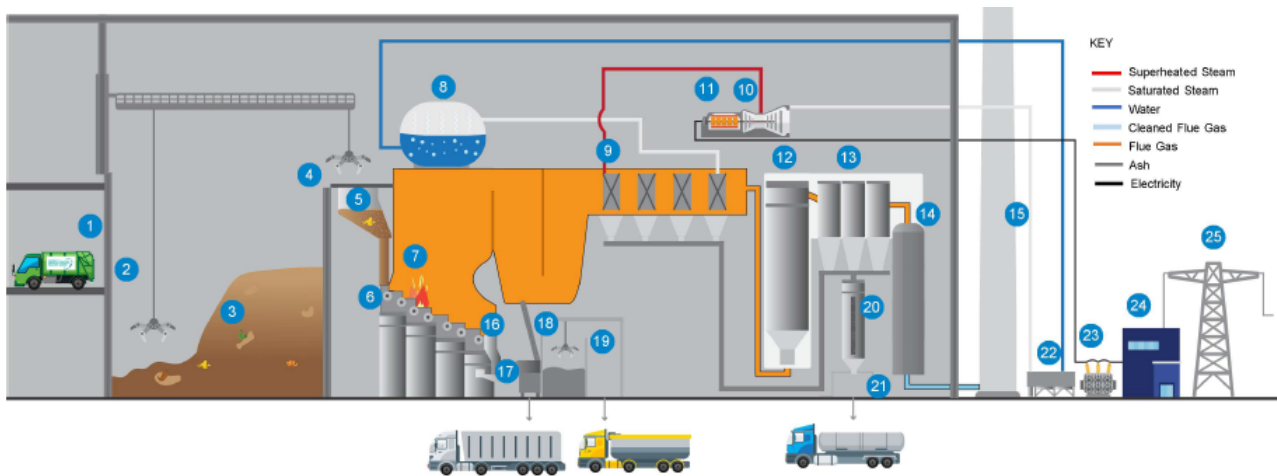
The facility will also separate ferrous metals from ash for recycling and sale to market. All incinerator bottom ash (IBA) will be transported to a dedicated licensed offsite IBA facility. Other ash by-products, including flue gas treatment residues and boiler ash flu, will also be managed offsite using existing infrastructure.

If approved by the State Government, the proposal will require an Environment Protection License (EPL) issued by the NSW EPA covering both the construction and operational phases of the development. The EPA will also appoint an independent regulatory authority to oversee the investigation of complaints covering the construction and operation of the facility.

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LEGEND

1 Waste Receiving hall	7 Boiler	13 Bag filters	20 Flue gas treatment residues (FGTr) and boiler fly ash silo
2 Tipping bay	8 Steam drum	14 Wet scrubber	21 FGTr and boiler fly ash collection for treatment and disposal
3 Waste bunker	9 Superheaters	15 Stack	22 Air cooled condenser
4 Waste crane	10 Steam turbine	16 Incinerator bottom ash (IBA) handling	23 Transformer
5 Feed hopper (chute)	11 Generator	17 Ferrous metals recovery	24 Substation
6 Moving grate	12 Semi dry reactor	18 IBA bunker and separate metals bunker	25 Local electricity grid
		19 IBA collection and separate metals collection	

REPORT

The proposed facility is subject to a number of technical considerations and issues. The following sections of this report provide an overview of the key aspects of the proposal followed by Council Officers' comments and recommendations.

A. Construction Phase

- The construction of proposal is expected to take up to 39 months to complete and involve 5 phases comprising:
 - Demolition
 - Site establishment for enabling works
 - Main construction works
 - Testing and commissioning works
 - Revegetation and landscaping measures
- The construction phase would be in accordance with an approved Construction Environmental Management Plan (CEMP) and conditions of the consent covering:
 - Environmental performance
 - Management and monitoring requirements
 - Control of emission of dust and noise
 - Addressing site contamination issues
 - Traffic and waste matters relevant to the project

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B. Operational Phase – Air quality and odour emissions

- An air quality/odour impact assessment report has been prepared for the project and includes an assessment of the potential cumulative impacts of air quality issues and odour emissions during the operational phase on nearby sensitive receptors.
- In summary, the findings of the applicant's studies are as follows:
 - Odour levels will be at or below the odour assessment criteria issued by the NSW EPA for this form of development.
 - This finding is qualified against the existing background emissions from the existing waste management operations at the Eastern Creek site.
 - Conditions are recommended to ensure emissions do not exacerbate existing emissions generated from the site.
 - This includes:
 - Enclosure of the waste receiving hall,
 - Implementing operation processes to contain odours from the tipping process,
 - Waste bunker and exhaust systems utilising active carbon filters.
 - In addition to the above, the process for a dry/wet flue gas treatment will result in lower emissions than dry/semi-dry systems and will not result in significant impacts on the surrounding environment or sensitive receptors.

C. Human Health Risk

- Given the operation of the development involves burning of waste to generate energy, potential human health impacts have been considered as part of the SSDA.
- The Human Health Risk Assessment Report assesses:
 - Potential risk and impacts from short-term and long-term exposure pathways including inhalation.
 - Potential human ingestion in accordance with the relevant environmental health protection guidelines.
 - This model relies on the Air Quality and Odour Impact Assessment report.
- The applicant's study concludes that all possible exposure to gases and particles are lower than the relevant guidelines and does not cause unacceptable human risk.
- Subject to conditions of approval, the proposal will operate within the emission limit value set by the EPL License to ensure that the impacts at receptors are within the criteria.
- The EPL license will also:
 - Require operations to occur fully within the building
 - Control the combustion process

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- Require the monitoring of emissions and use the best available technology for the process of flue gas treatment system.

D. Waste Management

- The waste management operations will target waste from source-separated sources. The approach will provide high-quality recycling processes in compliance with the NSW Policy.
- Unacceptable waste will be excluded within the pre-qualification process and via contractual agreements with waste suppliers.
- Residual materials will be produced as part of the process including:
 - Incinerator bottom ash
 - Boiler fly ash and flue gas treatment residue
- A Preliminary Hazard Analysis Report recommends that the products be disposed of off-site to licensed facilities to ensure compliance with NSW Policy.

E. Site Contamination

- The subject site was previously used as a poultry farm.
- As a result the site was subject to an individual biosecurity direction (IBD) issued by the NSW EP&A due to the presence of *Salmonella enteritidis* (type of bacteria harmful to human beings) and has undergone treatment and cleaning to address this issue.
- Detailed site contamination investigations have been carried out on the site in 2015, 2019 and 2020. The reports concluded that the site has low to moderate risk for soil contamination, primarily as a result of asbestos contamination.
- A draft Remedial Action Plan (RAP) has been prepared for the proposal and will be undertaken to remediate the site further to required standards prior to construction of the facility.

F. Traffic Management

- The development will be serviced by bulk and refuse trucks for residual waste.
- All other servicing vehicles would be semi-trailers/B-double vehicles.
- Three weighbridges are located at the entrance route to ensure all vehicles are weighed before circulating on site to avoid queuing back onto the public highway.

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G. Biodiversity Impacts

- The proposal will result in the loss of 0.45ha of Eucalypt woodland, listed as critically endangered under the Biodiversity Conservation Act 2016, to provide infrastructure for the development.
- This will result in loss of foraging habitations for other fauna species.
- The proposal seeks to mitigate the loss of endangered woodland through site landscaping and restoration of cleared native vegetation communities during construction to minimise the impact of biodiversity in the provided Biodiversity Development Assessment Report (BDAR) Vegetation Management Plan.

H. Bulk Water Infrastructure

- The subject site is located within the proximity of the Warragamba Pipeline corridor and Prospect Reservoir.
- The Environmental Impact Statement (EIS) states ongoing consultation with Water NSW to determine the positive or neutral impact of the quality of water within the enclosed pipes as there is no mechanism for exposure to any emissions from the facility.

I. Visual Amenity

- An Architecture and Landscape Design Strategy has been provided as part of the EIS.
- The proponent will provide regeneration screen planting to the site, architectural design to reduce bulk, low reflective materials to provide visual elements.
- Vegetation management and maintenance will be undertaken to ensure that during the construction to operational phase that plantings and screening on site and on the building envelope are maintained for long-term revegetation.

J. Prevailing Winds

- An analysis of prevailing local wind patterns undertaken for the project indicates that areas of Fairfield City (located directly south east and south west of the site) are the most likely to be impacted by seasonal winds.

K. Community Consultation

- Prior to public exhibition, the applicant consulted with the relevant stakeholders (State agencies, organisations, communities and local residents) in various forms of media releases, door knocking, 1800 information line, social media posts, start-up community workshops, agency meetings etc. during preparation of the EIS.

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- A Community and Stakeholder Engagement Report addresses the comments raised by stakeholders to ensure diligence was maintained throughout the SSDA.
- A number of concerns raised included the proximity to residential areas, impact of potential emissions on persons health, anticipated traffic issues, etc.
- For ongoing consultation with stakeholders, it is proposed that the formation of a Community Reference Group and a Communication Management Strategy will provide long-term relationships during construction and across the life of the proposal.

OFFICER COMMENTS/RECOMMENDATIONS

Environmental Management and Waste Services Branches

Council's Environmental Management Section reviewed the application and determined that the proposal has been prepared in accordance of the NSW EPA requirements. The facility has been designed to meet the strict requirements of the European Industrial Emissions Directive (IED) (Directive 2010/75/EU of the European Parliament) and the associated Best Available Techniques Reference 2019 (BREF) document.

The consultant has also made comparisons to available data from 2 reference facilities, one in Dublin, Ireland and the other in Filborna, Sweden. These facilities were utilised by the consultant for assessment due to their similarities with the proposed facility and to demonstrate compliance is achievable.

A vast suite of air pollutants were modelled and demonstrated the facility would be able to achieve required levels of compliance. It was also found by the applicant that the facilities overall contribution to additional emissions from the site would be minimal.

Council's Waste Sustainability Team advises that the facility would help the region's resource recovery targets set by the NSW Government and Western Sydney Waste Avoidance and Resource Recovery Strategy 2017-2021.

Traffic Management Branch

It is estimated that there will be approximately 200 truck movements on/off site per day or around 17% of the sites capacity. This does not appear to include additional movements from increased operations of the business over time, with low initial estimates of trade as the business grows over several years. Based on this, the traffic generation should be considered further in the context of expected maximum capacity of the facility, rather than business forecasts.

The broader origin-destination information is lacking in the traffic report and somewhat glossed over. 50% of traffic appears to come from the processing plant near Mamre Road, the rest is not really identified or discussed in the traffic report.

It is uncertain whether the assumption that all traffic will access the site via Wallgrove Road is reasonable. It is understood that the nearby Austral Brickworks has an access road from Wallgrove Road to Ferrers Road.

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Given the broader network performance, vehicles heading westbound along either the Great Western Highway or The Horsley Drive are more likely to use Ferrers Road than loop around to Wallgrove Road (particularly having to negotiate the M7/The Horsley Drive intersection).

The Ferrers Road intersection would need significant upgrades for additional heavy vehicle access (as it is not designed for this as it is currently closer to a rural road environment) and Council is not in a position to implement a 5tonne or 10tonne load limit on the road to prevent the heavy vehicle use (Ferrers Road is also an approved B-Double route).

If the applicant maintains that traffic will access the site only from Wallgrove Road, then all trucks servicing the site should be subject to (Global Positioning System) GPS monitoring of access paths, with the GPS data provided to relevant local councils (Fairfield & Blacktown) and TfNSW on a quarterly basis to demonstrate compliance.

A condition should also be applied for significant ongoing non-compliance of access arrangements to require an upgrade of Ferrers Road intersection within (say) a 3 year timeframe (with suspension of operating licence if upgrade is not completed).

In addition to the above, it is recommended:

- An electronic copy of the SIDRA traffic modelling (all files associated with the traffic modelling assessment under the existing and forecasted conditions) shall be submitted to the relevant sections of TfNSW, Fairfield City Council and Blacktown City Council for assessment.
- The installation of traffic control signals whether it is on a local road or state road requires approval from TfNSW and there are specific warrants that need to be met according to TfNSW 'Traffic signal design Section 2 – Warrants'. It should be noted that the installation of traffic control signals may require significant land acquisition and would impact the adjoining road network.
- Vehicle access to/from the site at 339 Wallgrove Road, Eastern Creek is affected by access denied restrictions that runs across the site's access driveway (parallel to the Austral Bricks Road). Clarification is required about whether the access denied restrictions should be removed/modified as part of the SSDA process.
- Swept path analysis showing the largest vehicle can satisfactorily manoeuvre into and out of the site to/from the adjoining road network shall be submitted for assessment.

Natural Resources Branch

Council's Natural Resources Branch has reviewed the BDAR and has no issues subject to the Vegetation Management Plan being implemented.

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CONCLUSION

Council Officers' assessment of technical issues and potential impacts of the project on Fairfield City are based entirely on the findings and recommendations of studies and reports prepared by the applicant.

The processes and technology associated with the proposal are highly complex and it is noted that the DPIE will be engaging the services of independent experts to undertake a detailed assessment of the proposal following public exhibition. In this respect, it would have been highly desirable for DPIE to make the assessment undertaken by the independent experts available during public exhibition to assist in addressing any uncertainties about the project. Accordingly, it is recommended that Council request that DPIE formally re-exhibit the proposal once the findings of the independent expert are made available.

Compared to other LGAs, the community of Fairfield City (in particular the rural residential areas of Horsley Park) are located in closest proximity to the site. Furthermore, analysis of the prevailing seasonal winds accompanying the proposal indicate that these areas of Fairfield City (south east and south west of the site), represent the areas of Western Sydney with the highest potential to be impacted by emissions from the proposal.

In this regard, the proposed Community Reference Group for the project should incorporate strong representation from members of the Fairfield Community. Similarly, any Community Funding Package should be focussed on the nearest community potentially affected by the project being the nearby areas of Fairfield City.

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Authorisation:

Acting Manager Strategic Land Use Planning
Group Manager City Strategic Planning

Outcomes Supplementary Reports - 17 November 2020

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***** END OF ITEM 110 *****