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18 June 2021

Sally Monk
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2150

Dear Sally

Subject: Request for Input into SEARs – Proposed Woodlawn Advanced Energy Recovery Centre

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A review of the Woodlawn Advanced Energy Recovery Centre Scoping Report (Report No: J200931 RP1) prepared by EMM Consulting has been undertaken and a report was considered at the 15 June 2021 Council Meeting. At this meeting, Council resolved:

That

1. ***The report from the Director Planning and Environment in regard to the Department of Planning & Environment's request for input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Woodlawn Advanced Recovery Centre be received.***
2. ***Council acknowledges that it is in the best interests of the community for Council to contribute to this SEARS process to ensure that community concerns are addressed in the application.***
3. ***Council addresses in its submission to the Department of Planning & Environment (DPIE) on the proposed Woodlawn Advanced Recovery Centre the issues raised in the Director – Planning and Environment Assessment's report to the 15 June Council meeting detailing the following issues:-***

    (a) Air quality and odour -
    (b) Human Health Risk
    (c) Greenhouse Gas Emissions
    (d) Noise and Vibration
    (e) Traffic and Transport
    (f) Visual
    (g) Biodiversity
    (h) Heritage
    (i) Social
    (j) Hazard and Risk
    (k) Water – including residential water supplies
    (l) Waste feedstock availability and management
    (m) Economic
    (n) Land capability stability and soils
    (o) Built Environment

4. ***Additional to the matters addressed in paragraph 3 of this resolution, the applicant must also demonstrate as part of the application that they have addressed the following***

   (a) Comprehensive identification and consultation with all residents within a minimum 6.75km radius (to the eastern side of the Braidwood Road so as to include the township of Tarago) that will enable the people in the area to consider the impact of this proposal on them

   (b) Comprehensive over view of existing transmission infrastructure constraints and the need for upgrading. Upgrading of transmission infrastructure should be fully identified within the EIS. The impacts of any required upgrades to transmission infrastructure form part of the EIS assessment and should not be deferred.

   (d) The proposed emission capturing technology delivers and exceeds European and NSW standards and build on past experiences to deliver a first class outcome.

   (e) Demonstrate beyond reasonable doubt that there will be no adverse impact to human, animal and environmental health as a result of the proposal.

   (f) A full reassessment of the haul route between Crisps Creek Intermodal Facility and the site be undertaken, with specific emphasis on the provision of a climbing lane on Bungendore Road to be installed.

5. ***The General Manager be authorised to forward Tarago and Districts Progress Association Inc submission under separate cover noting to the Department of Planning that the submission was not received in time for their endorsement.***

6. ***There should be a minimum community consultation period of at least three months.***

7. ***Council requests the engagement of independent scientific expert(s) by the Department of Planning Industry and Environment to undertake a critical review of the proposal in its entirety before the public consultation process. This critical review to be made publicly available during the consultation process.***

8. ***The EIS and the Department of Planning need to consider the cumulative impacts of the proposed Energy Recovery Facilities being proposed in this Local Government Area.***

9. ***Goulburn Mulwaree Council does not support this type of infrastructure in our Local Government Area and expresses its disappointment in the process thus far.***

To provide context in relation to the above resolution, a copy of the report considered by Council has been attached. Furthermore, in relation to Item (5) above, please find attached the submission from Tarago and District Progress Association Pty Ltd.

If you require any further information, I can be contacted on (02) 4823 4480.

Yours sincerely

Scott Martin
Director Planning & Environment

15.5 REQUEST FOR SEARS - WOODLAWN ADVANCED ENERGY RECOVERY CENTRE

Author: **Scott Martin, Director Planning & Environment**

Authoriser: **Warwick Bennett, General Manager**

Attachments:
1. **Update on Veolia Woodlawn Advanced Energy Recovery Centre Project** ⇩
2. **Woodlawn ARC_Scoping Report** ⇩

Link to Community Strategic Plan:	EN4 Maintain a balance between growth, development and environmental protection through sensible planning.
Cost to Council:	NIL – Operational costs
Use of Reserve Funds:	NIL

RECOMMENDATION

That

1. The report from the Director- Planning and Environment in regard to the Department of Planning & Environment's request for input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Woodlawn Advanced Recovery Centre be received.
2. Council acknowledges that it is in the best interests of the community for Council to contribute to this SEARS process to ensure that community concerns are addressed in the application. This action should not be taken as establishing any position on this proposal until detailed information is available
3. Council addresses in its submission to the Department of Planning & Environment (DPIE) on the proposed Woodlawn Advanced Recovery Centre the issues raised in the Director – Planning and Environment Assessment's report to the 15 June Council meeting detailing the following issues:-
   (a) Air quality and odour -
   (b) Human Health Risk
   (c) Greenhouse Gas Emissions
   (d) Noise and Vibration
   (e) Traffic and Transport
   (f) Visual
   (g) Biodiversity
   (h) Heritage
   (i) Social
   (j) Hazard and Risk
   (k) Water – including residential water supplies
   (l) Waste feedstock availability and management
   (m) Economic
   (n) Land capability stability and soils
   (o) Built Environment

4. Additional to the matters addressed in paragraph 3 of this resolution, the applicant must also demonstrate as part of the application that they have addressed the following
   (a) Comprehensive identification and consultation with all residents within a minimum 6.75km radius (to the eastern side of the Braidwood Road so as to include the township of Tarago) that will enable the people in the area to consider the impact of this proposal on them
   (b) Comprehensive over view of existing transmission infrastructure constraints and the need for upgrading. Upgrading of transmission infrastructure should be fully identified within the EIS. The impacts of any required upgrades to transmission infrastructure form part of the EIS assessment and should not be deferred.
   (d) The proposed emission capturing technology delivers and exceeds European and NSW standards and build on past experiences to deliver a first class outcome.
   (e) Demonstrate beyond reasonable doubt that there will be no adverse impact to human, animal and environmental health as a result of the proposal.
   (f) A full reassessment of the haul route between Crisps Creek Intermodal Facility and the site be undertaken, with specific emphasis on the provision of a climbing lane on Bungendore Road to be installed.
5. Council includes the Tarago and Districts Progress Association Inc submission on behalf of the local community as an attachment to the Council submission
6. There should be a meaningful community consultation period of at least three months.
7. Council requests the engagement of independent scientific expert(s) by the Department of Planning Industry and Environment to undertake a critical review of the proposal in its entirety before the public consultation process. This critical review to be made publicly available during the consultation process.
8. The EIS and the Department of Planning need to consider the cumulative impacts of the proposed Energy Recovery Facilities being proposed in this Local Government Area.

BACKGROUND

The Woodlawn Eco Precinct (old Woodlawn mine) is located 5.5km to the west of Tarago, 35km south of Goulburn, 7km to the east of Lake George and 8km west of Lake Bathurst. There are a number of residential properties within close proximity to the precinct, the closest being approximately 800m to the north with the main township of Tarago being 5.8km to east. The Woodlawn Eco Precinct has been developed over the last 20 years to include a range of waste management and resource recovery uses which presently include, the Woodlawn Bioreactor, Woodlawn Bioenergy Power Station, Woodlawn Mechanical Biological Treatment Facility, sustainable agricultural operations, aquaculture and horticulture operations utilising waste heat from energy production, and renewable energy generation including wind and solar. The Woodlawn Eco Precinct is supported by two external waste transfer terminals located at Clyde and Banksmeadow Sydney, and the Crisps Creek intermodal Facility at Tarago.

The next phase of the Woodlawn Eco Precinct is seeking approval for the development of the Woodlawn Advanced Energy Recovery Centre being an Energy Recovery Facility. The Energy Recovery Facility will treat waste streams approved to be received at the site into energy through the process of incineration. The diversion of waste through the Energy Recovery Facility will reduce in part the quantity of waste going to landfill. Figure 1 provides an overview of the proposed location of the Woodlawn complex.

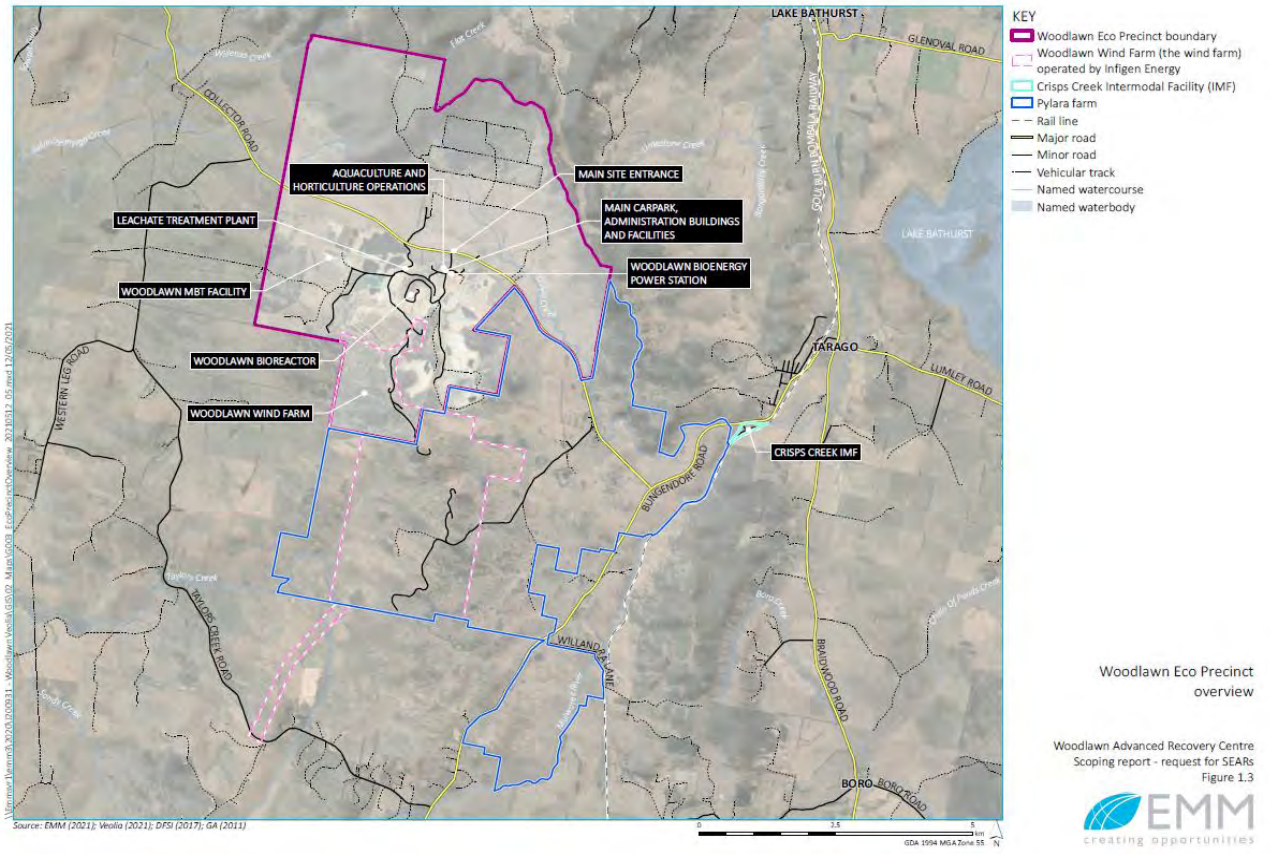

Figure 1 Woodlawn Overview Map p.7 Scoping Report

REPORT

Council has received a request from DPIE relating to a new State Significant Development application by Veolia Environmental Services (Australia) Pty Ltd (Veolia) as owners and operators of the Woodlawn Eco Precinct. Council is one of no less than twelve agencies requested to provide input into the SEARs.

The proposal is set out in the attached Scoping Report and in summary includes:

- development of an Energy Recovery Facility for the thermal treatment of –
    - residual municipal solid waste;
    - commercial and industrial waste (waste feedstock); and
    - residual waste feedstock approximately 380,000 tonnes per annum.
- recovery of approximately 39 MW of electrical energy;
- management of residual by-products generated by the Energy Recovery Facility within the Woodlawn Eco Precinct; and
- ancillary development of site infrastructure to facilitate construction and operation of the project.

In return the project will generate, environmental and community benefits. The proposed benefits are set out in the scoping report and in summary include:

- over $600M initial investment in regional NSW

- approximately $2B investment in lifetime maintenance and employment;
- increasing Veolia's capacity to recover non-recyclable waste, diverting approximately 380,000 tonnes per annum from landfill;
- recovery of about 39 MW of electrical energy, enough to power 50,000 homes per year;
- generation of around 300 jobs during construction and 40 jobs during operation; and
- further investment in community initiatives.

An Energy Recovery Facility incinerates residual waste to create heat, which generates steam. The steam is directed into steam turbines to generate electricity. The process is not dissimilar to conventional gas or coal fired power stations, in this case it is the source of energy that is different. Instead of using fossil fuels as an energy source, energy is predominantly obtained from non-recyclable waste materials. The scoping report identifies that approximately three tonnes of residual waste is the equivalent of burning one tonne of coal which will deliver a low carbon energy solution.

Whilst there are a quantity of small scale Energy Recovery Facilities in Australia that rely on energy sources derived from the by-products of the sugarcane milling process, the commercial upscale of Energy Recovery Facilities utilising residual waste is relatively new to Australia. However, there are several proposed commercial Energy Recovery Facilities being considered within Australia; the most progressed is in Western Australia. This facility is currently under construction and will process up to 400,000 tonnes per year; Veolia will operate this facility once complete.

In Europe the use of commercial scale Energy Recovery Facilities utilising residual waste exceed over 500 across more than twenty-three countries. Sweden and Demark appear to be the most advanced by removing recyclables from the municipal waste (47% of waste) and then utilising over 50% of the residual waste to generate electricity with only minimal waste going to landfill. Currently, Veolia operates over sixty-five Energy Recovery Facilities globally, Veolia is intending to bring its operational experience and expertise to Australia.

The Scoping Report discusses that preliminary environmental investigations have been undertaken to identify matters to be addressed in the Environmental Impact Statement and the required level of assessment. These matters are set out in the table below.

MATTER	CUMULATIVE IMPACTS?	LEVEL OF ASSESSMENT	COUNCIL COMMENTS
Air quality and odour	Yes – with existing eco precinct operations	Detailed	Any air quality assessment should include: • All emissions from the site including those generated by the broader bio-reactor activities onsite. • Measures designed to monitor emissions and procedures to manage non-compliant emissions. • Odour control from current site operations has been and remains an issue with the surrounding residents. The EIS should

MATTER	CUMULATIVE IMPACTS?	LEVEL OF ASSESSMENT	COUNCIL COMMENTS
			demonstrate how this will be controlled and not exasperated. • Plume mapping and dispersal modelling based on varying atmospheric conditions including worst case scenarios. • What particle sizes will be emitted from the stack? • The need to establish independent air quality monitoring stations (to be part of the NSW Government network) external to the site based on sensitive receivers prevailing weather conditions and topographical constraints must be investigated. This would include (as a minimum) the need for air quality monitoring stations to be established at Tarago, Lake Bathurst, Collector and Bungendore.
Human Health Risk	Yes – with existing eco precinct operations	Detailed	Any Human Health Risk Assessment should include all emissions from the site including those generated by the broader bio-reactor activities onsite. Residential properties are identified closer than the 5km stated in the Scoping report. All residential properties within a defined radius should be identified and mapped, regardless of whether they are owned by Veolia or not. The particle sizes emitted from the stack and during the management of incinerator bottom ash should be identified and assessed.
Greenhouse Gas Emissions	Yes – with existing eco precinct operations	Standard	Greenhouse Gas Emissions should include all emissions from the site including those generated by the broader bio-reactor activities onsite. The Scoping Report mentions that the carbon footprint for the electricity generated by the Energy Recovery Facility is “likely” to be lower than the grid average. The use of the word likely implies that the carbon footprint may not be better than current alternatives. This should be explored fully within the EIS to demonstrate the viability of an Energy Recovery facility to reduce carbon

MATTER	CUMULATIVE IMPACTS?	LEVEL OF ASSESSMENT	COUNCIL COMMENTS
			emissions over the project lifecycle. The level of assessment should be detailed.
Noise and Vibration	Yes – with existing eco precinct operations	Standard	Modelling should include residential properties within the township of Tarago and those that reside within the same radius. The cumulative impacts of additional noise must be fully considered taking into account atmospheric and topographical constraints and be appropriately mapped. Issues of intrusive noise impacts are to be addressed in the assessment. The level of assessment should be detailed.
Traffic and Transport	Yes – with existing eco precinct operations	Standard	While there is no change proposed to the quantity of material or means of conveyance to the site, the construction activities will generate significant additional traffic volumes to the site via the local road network. A detailed understanding and assessment of these impacts should be provided within the EIS. This may include the need to consider pavement life, intersection details and climbing lanes along with any required upgrading works. Further to the above, Council requires that a full assessment of the haul route between Crisps Creek Intermodal Facility and the site be reassessed, with specific emphasis on the provision of a climbing lane on Bungendore Road
Visual	Yes – with existing eco precinct operations	Standard	While the site is highly disturbed the structure being proposed is permanent, large in scale and located on a ridgeline. The level of assessment should be detailed and include photomontages from known views into the site, including those from the M23 Federal Highway and Weereewa lookout. The visual assessment should include projected milestones of the intended site rehabilitation. The visual assessment should provide for the end of life and decommissioning of the site as the life of the Energy Recovery Facility is thirty years.
Biodiversity	No	Minor	The site has been highly disturbed which

MATTER	CUMULATIVE IMPACTS?	LEVEL OF ASSESSMENT	COUNCIL COMMENTS
			may not mean that site biodiversity is a concern, however, there are off site impacts that should be considered in relation to the need to upgrade transmission infrastructure and what effect this will have on biodiversity. Additionally, the impact of negative externalities resulting from emissions from the Energy Recovery Facility upon biodiversity values within any plume dispersal radius including nearby wetlands requires assessment. The dispersal radius needs to be define as some commentators put the radius at 30 kms The impact needs to include impacts on surrounding livestock and agriculture products for human consumption The level of assessment should be standard.
Heritage	No	Minor	A due diligence assessment of Aboriginal and European heritage shall be undertaken.
Social	Yes	Detailed	An assessment of the social impact upon the Tarago and district community needs to be carried out, with particular attention given to any stigma associated with Tarago and waste.
Hazard and Risk	No	Detailed	Modelling of worst case scenarios should be considered including total destruction of the Energy Recovery Facility through unplanned events. The impact needs to include impacts on surrounding livestock and agriculture products for human consumption.
Water	Yes – with existing eco precinct operations	Standard	The Energy Recovery Facility requires 6,000m^3 of potable water per month equating to 6,000,000 litres per month or seventy-two million litres per year. The source of this drinking quality water supply and its availability shall be detailed and analysed. Does the proposal include treatment of non-potable water on site to meet the water quality standards including domestic and household water tanks in the dispersal radius area Water security, competing demands for water across the entire complex and long-term impacts on, catchments,

MATTER	CUMULATIVE IMPACTS?	LEVEL OF ASSESSMENT	COUNCIL COMMENTS
			aquifers and bores should be considered along with how the proposal is to be drought proofed. A comprehensive and robust water balance assessment should be undertaken. The level of assessment should be detailed
Waste feedstock availability and management	No	Standard	Concern is raised on the quality of waste being sorted for use in the Energy Recovery Facility. The quality of air emission is intrinsically linked to the quality of the waste burnt therefore the following questions require consideration: What checking and verification methods are used in the sorting of waste materials? What safe guards are in place to ensure only the right material is sent to the Energy Recovery Facility? The level of assessment should be detailed
Economic	Yes	Standard	While the project may have positive economic outcomes there is the potential for some to be disadvantaged by the proposal. The EIS should model all economic opportunities and threats to ensure no-one is economically disadvantaged.
Land capability stability and soils	No	Minor	Geotechnical investigations shall be required to ensure land capability and ground stability.
Built Environment	No	Not relevant	The Energy Recovery Facility has a thirty year life. The EIS should identify what is to happen at the conclusion of this period. Is the facility to be simply decommissioned and recycled, will it be mothballed or refurbished? What is the rationale behind the proposed thirty years.

SUMMARY

To ensure that the community impact is minimised, it is recommended that Council's submission to DPIE in relation to the SEAR's contains:

1. The above Table and the comments made within.

2. The submission provided by the Tarago and Districts Progress Association Inc on behalf of the local community.

3. Comprehensive identification of all residential receivers within a minimum 6.75km radius (to the eastern side of the Braidwood Road so as to include the township of Tarago), to enable the proposal to consider the impacts on residence.

4. Comprehensive over view of existing transmission infrastructure constraints and the need for upgrading. Upgrading of transmission infrastructure should be fully identified within the EIS. The impacts of any required upgrades to transmission infrastructure form part of the EIS assessment and should not be deferred.

5. The EIS should address and map all negative and positive externalities of the proposal to understand the impacts through the life of the project.

6. Proposed emission capturing technology should deliver and exceed European and NSW standards and build on past experiences to deliver a first class outcome.

7. There should be a meaningful three month community consultation period upon lodgement of the application.

8. It shall be demonstrated beyond reasonable doubt that there will be no adverse impact to human, animal and environmental health as a result of the proposal.

9. The EIS and the Department of Planning need to consider the cumulative impacts of the proposed Energy Recovery Facilities being proposed in the Local Government Area.

10. The engagement of independent scientific expert(s) by the Department of Planning to undertake a critical review.

11. A full reassessment of the haul route between Crisps Creek Intermodal Facility and the site be undertaken, with specific emphasis on the provision of a climbing lane on Bungendore Road to be investigated.

tadpai

Tarago and District Progress Association Incorporated
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Email: tadpaisecretary@gmail.com

"Promoting the Social and Economic Development of Tarago Village and District"

17th June 2021

Tarago and District Progress Association Incorporated (TADPAI) Response to Woodlawn Advanced Energy Recovery Centre - Scoping Report Prepared for Veolia Environmental Services (Australia) Pty Ltd, May 2021

Key References:

A. Woodlawn Advanced Energy Recovery Centre - Scoping Report Prepared for Veolia Environmental Services (Australia) Pty Ltd, May 2021
B. Federal Court of Australia Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment [2021] FCA 560 - Justice Bromberg's Reasons for Judgement and Summary, May 2021
C. Department of Planning, Industry and Environment (DPIE) NSW, Waste and Sustainable Materials Strategy 2041 (Stage 1: 2021-2027), June 2021
D. Environment Protection Authority (EPA), NSW Energy from Waste Policy Statement, June 2021
F. Goulburn Mulwaree Council Resolution 2021/252, Secretary's Environmental assessment Requirements (SEARs) for the proposed Woodlawn Advanced Recovery Centre, 15 June 2021

Background

Veolia's and Jerrara Power are both proposing waste to energy (waste incineration) facilities to be built within the Goulburn Mulwaree Local Government Area (LGA), The two proposals are approximately the same in size and complexity; however, Veolia is further along the approval process than Jerrara Power. Veolia is presenting its proposed Advanced Energy Recovery Centre as a waste minimisation, energy generation, and emissions reduction proposal.

Preamble

Tarago District and surrounding districts are the communities closest to the Woodlawn Eco Precinct and those most affected by Veolia's operations, activities, odours and other pollutants at/from Woodlawn. We are the communities defined in Reference D, page 1, whose acceptance must be obtained for the development and operation of a waste to energy (waste incineration) facility at Woodlawn.

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The Tarago and District Progress Association Incorporated (TADPAI) is the primary fully independent grassroots representative of these communities as the Woodlawn Eco Precinct resides within the Tarago District. This said, other progress associations outside of the Tarago District, such as the Windellama Progress Association, representative of people also affected by Veolia's operations and activities within the Woodlawn may have views of their own that they will want to express during the approval consideration and decision process for Veolia's Woodlawn waste incinerator.

The Veolia Community Liaison Committee (VCLC), which exists under legislation to enable Veolia to inform the local communities of its activities and to be informed of community views and concerns, is not independent enough of Veolia to truly represent and articulate the communities position and concerns regarding the development and operations of Veolia's businesses within the Woodlawn Eco Precinct.

This is TADPAI's response to Reference A for DPIE NSW and others consideration. This Response is specifically directed at Veolia's proposed waste to energy (waste incinerator) but has general application to Jerrara Power, and some application to the other proposed waste to energy (waste incineration) projects now being progressed within NSW.

Duty of Care

Justice Bromberg ruled in Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment [2021] FCA 560 (May 2021) that:

> "*Having weighed and balanced those considerations, the Court is satisfied that a duty of care should be recognised. Accordingly, the Court has determined the Minister has a duty to take reasonable care not to cause the Children personal injury when exercising her power under s 130 and s 133 of the EPBC Act to approve or not approve the Extension Project*." (Summary page 4)

Justice Bromberg's reasons for judgement relate to the law of negligence and are very specific legal in nature and complex. TADPAI's position is much simpler - anyone (politician, councilor, bureaucrat, community representative, etc.) who holds authority or responsibility, and is in a position to influence the future, has a duty to take reasonable care not to cause future harm, and that this duty of care process starts with the proponents of any proposals, which in the case of proposed waste incinerators to be built and operated within the Goulburn Mulwaree LGA is Veolia and Jerrara Power.

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Veolia's Scoping Report (Reference A) is biased and contains numerous misleading facts: for example, tries on several occasions to use ERF acronym for compatibility for comparative purposes, whereas Veolia is trying to compare waste incineration to non-waste incineration energy recovery facilities. The term Advance Energy Recovery Centre is also used to avoid any linkage to the use of the term 'waste incineration', and the local community are commenting and disapproving of this on local social media. Considerable local discussion and comment has also occurred on the misrepresentation of the pictures in the Scoping Report that undersize the facility to be built. At this time, Veolia has lost the trust of many of the Tarago and surrounding areas' residents.

This project should be titled 'Woodlawn Waste to Energy (Waste Incineration) Facility' or very similar wording, and if Veolia does not have the fortitude, honesty and transparency to do this then this Project should not be considered further.

Following on from above, all comparison should be of and between waste incinerators, and reference to non-waste incinerators should be specific in nature - the sugar cane example cited in the Scoping Report is not an equivalent project for comparative purposes. The nature of feedstock (an eligible waste fuel[1]), odours, pollutants and toxins are very different.

The Woodlawn Bioreactors is a harvested landfill, that is its biogases are collected and used in energy and electricity generators. Any comparative claims of improvements and efficiencies should be specific to Woodlawn and over the whole life of the Facility.

Where the words 'no', 'nothing', 'zero', 'nil', are to be used, it is to be emphasised that Veolia is putting forward the literal sense of the word and what should appear in any future licence for this new waste incinerator, should it be approved.

And where Veolia, and for that matter Jerrara Power, claim community support generally or specifically, such claims should be supported by letters on letterhead from the Marulan, Bungonia, Windellama and Tarago progress associations - those communities most affected.

The expectation here in moving forward is an honest, balanced, transparent application submission and approval process.

[1] Environment Protection Authority, NSW Energy from Waste Policy Statement, June 2021, p4

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TADPAI's Preferred Positions

TADPAI has five preferred positions that need to be expressed upfront for honesty, transparency and disclosure reasons.

First, TADPAI does not endorse the use of waste incineration for the following reasons:

- Waste incineration is a latent, problematic, and inefficient technology.
- Waste incineration is an active process of combustion under compressed air flow where air with odours, pollutants and toxins are forced up a chimney and where the proponent tries to capture these before entering the atmosphere, whereas, landfilling and the harvesting of biogas is a passive decomposition process - waste incineration distributes odours, pollutants and toxins over a larger area than landfilling.
- It is difficult to find detail but it is understood that the used scrubbers that filter out the pollutants and other emissions are highly toxic and require special handling and landfilling.
- Waste incineration does provide risk to human health, stock, crops, local flora and fauna, rain water, ground water, and environment in general no matter how vigilant anyone is in trying to mitigate this risk. As evidenced in the EPA news update re current odour issues of 1 June 2021, where it states: "*However, repeated exposures to landfill gases can cause coughing, irritation of eyes, nose and throat, headaches, nausea and breathing difficulties. Symptoms tend to disappear once exposure to these gases stop. People with asthma may be more sensitive to these gases and should follow their asthma management plan.*"[2]
- The UN guidance is that "*the European Union, which has relied on waste incineration for the past few decades, is now moving away from thermal WtE and other forms of incineration and is focusing on more ecologically acceptable solutions such as waste prevention, reuse and recycling as it shifts towards a circular economy*".[3] Notably, this is the same framework that exists for NSW and the remainder of Australia now; the concept of using waste to energy has only come about relatively recently.
- Waste to energy is not acknowledged in the Australian Energy Security Board's Post-2025 Market Design Directions Paper (January 2021) as part of the future sustainable generation of electricity but this paper does suggest that renewable energy

[2] EPA, Questions and answers about odours in the Tarago area, 1 June 2021
[3] United Nations Environment Programme's Waste to Energy - Considerations for Informed Decision Making, 2019, p8

might be best used within adjacent local areas rather than as a general input to the national energy market (electricity network/grid).[4]

- From reading the European Commission's best practices, it appears that of the 100% energy required to convert waste to energy, the conversion rate is only between 25% and 40% of that input.[5]
- "*Moreover, incineration plants generate air pollution and chemical waste residuals and are expensive to build compared to modern landfills that have appropriate procedures for the prevention of leakage of harmful gasses.*"[6]
- The International Energy Agency (IEA) now articulates that the use of waste incineration is inefficient, and that the way forward is the harvesting of biogas over time as the preferred way forward[7] and that very process is in place within the Woodlawn Bioreactor.

Veolia and Jerrara Power, and the other proponents of waste incineration seem to be out of step, and behind their counterparts within the global waste management and energy generation industry sectors.

Second, if waste incineration is to be used then it should be sited next to the source of waste, next to the source of energy/electricity use, and where its carbon footprint can be minimised to the maximum extent logistically. That is if the technology is to be used, that any proposed waste incinerator should be located within the boundaries of the greater Sydney and Canberra areas, not within the Goulburn Mulwaree LGA where the carbon footprint cannot be optimised.

Third, Veolia, the NSW Government, and Queanbeyan Palerang Regional Council (QPRC) must first complete the infrastructure upgrades identified later in the Submission before any construction work begins on any waste incinerators..

Fourth, the local communities are currently exposed to an odour problem arising from the Veolia's Woodlawn Bioreactor, Mechanical Biological Treatment (MBT) Plant and Leachate ponds. Veolia promised from the outset of the development and operation of Woodlawn that there would be **no** odours. Veolia should not be allowed to submit any EIS relating to any new works and operations, including this proposed waste incinerator until the current re-occurring **odour issues are resolved permanently**.

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[4] Waste to energy is considered to be a form of renewable energy which is at odds with the philosophy of avoid and reduce, reuse and recycle to avoid recovered energy, treatment and landfilling of waste.
[5] European commission, Official Journal of the European Union, December 2019
[6] L Levaggi, et al: Waste-to-Energy in the EU: The Effects of Plant Ownership, Waste Mobility, and Decentralization on Environmental Outcomes and Welfare, Sustainability/MDPI, July 2020
[7] IEA, Net Zero by 2050 A Roadmap for the Global Energy Sector, May 2021

Fifth, "*Thermal energy from waste facilities are the most common technology. These generate some electricity as well as heat and steam. Other types of energy recovery include anaerobic digestion and gas capture.*"[8] The Woodlawn bioreactor is purpose built for biogas capture and the onsite MBT plant purpose built for anaerobic digestion. We believe that the correct development path for the Woodlawn Eco Precinct is for it to be developed as an eco-friendly global centre of excellence for anaerobic digestion, biogas capture, and landfill mining, and in doing so encouraging and incentivising Veolia to resolve the existing odour issues.

General Comments

In reading this Scoping Report, TADPAI cannot see the financial benefits / profits that Veolia would generate by simply diverting existing waste into a waste incinerator and generating electricity. Veolia already generates electricity which it sells to the grid via Energy Australia, TADPAI sees no logic in Veolia's $600m investment. It is requested that Veolia explain how investing and using a waste incinerator would be profitable to the company over using existing biogas capture for the whole of the life of the project.

From the Introduction of the Scoping Report: "*Woodlawn is an important waste management site for NSW, accepting some 40% of Sydney's municipal solid waste (MSW). It forms a key part of a waste management system which comprises two transfer terminals in Sydney (Clyde and Banksmeadow) where municipal waste is sorted and loaded into rail containers for transport by rail to Crisps Creek and then on to Woodlawn by truck.*" TADPAI is of the understanding that Veolia's licence was for only around 20% of Sydney's waste. TADPAI notes that Veolia is seeking separate increases to regional waste acceptances. TADPAI requests that Veolia provide tabulated data of the likely waste inputs to Woodlawn over the life of the Waste Incinerator, and also an explanation of what is to happen to the waste when the waste incinerator reaches its end of life. Further request, that all likely requested licence increases for the Woodlawn Eco Precinct for the next 10 years be included in this project submission by expected date of need increase and why.

There is no reference to the AEMC, AEMO, ESB and other Commonwealth agencies associated with approving of purchasing and reselling of energy. In fact, the ESB in January 2021 Report does not acknowledge waste incineration as an option in the future protection of Australia's energy needs. How does Veolia get to this point in the approval process without

[8] Department of Planning, Industry and Environment NSW, Waste and Sustainable Materials Strategy 2041 (Stage 1: 2021-2027), June 2021, page 22

liaising with these Commonwealth agencies re the purchasing of the energy that Veolia intends to produce.

Section 4.5 refers to The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is the primary Commonwealth legislation that governs protection of the environment and is administered by the Department of Agriculture, Water and the Environment (DAWE) and that Minister approves. Referenced duty of care above, is directly related to this Minister's authority and responsibility in approving projects. Equally, TADPAI believes the Commonwealth Minister for Energy and Emissions Reduction should also now be involved in the approval processes to confirm that:

- the proposed energy to be generated is consistent with Australia's needs; and
- the proposed facility's carbon footprint is being optimised to enable Australia to fulfill net zero carbon emissions by 2050.

Furthermore, if the NSW Government is to be the final approving body, then the Commonwealth Ministers should be providing approvals first and that these approvals should be attached to the EIS submissions.

Carbon (GreenHouse Gas - GHG) Modelling

TADPAI believes that it is essential that if Veolia's project is to be considered seriously that Veolia should submit as part of its EIS submission three GHG models, each addressing scope 1, scope 2 and scope 3 emissions over each facilities proposed construction, operation and decommissioning life. The three models should be for:

- existing operation and baseline for the Woodlawn Eco Precinct now;
- for the Woodlawn Eco Precinct with the Waste Incinerator included; and
- a notional model where the Waste Incinerator is sited in Sydney somewhere between the two road/rail intermodals of Clyde and Banksmeadow.

Energy/Electricity (in to combust / out to the grid) modelling

The European Commission's BATs for waste to energy facilities referenced in the Official Journal of the European Union, December 2019 suggest that of the 100% energy required to convert waste to energy, the conversion rate is only between 25% and 40% of that input.[9]

TADPAI requests that Veolia include an energy/electricity model that clearly shows the quantity of energy/electricity required as input to combust the proposed waste feedstock and the quantity

[9] European commission, Official Journal of the European Union, December 2019

of energy/electricity produced and to be delivered to the energy market for1 tonne of waste combusted. This model should include associated GHG values and also extrapolated to reflect the proposed 380,000 tonnes to be incinerated each year.

Electricity Modelling

TADPAI notes that Veolia generates electricity from biogas captured onsite at Woodlawn now. TADPAI assumes, as waste volumes increase in the bioreactor, biogas will increase and so too will the need for additional generators and thus production of electricity.

TADPAI requests that Veolia includes in its EIS an electricity model that compares electricity generated using current practices compared to using a waste incinerator over the projected life of the waste incinerator that can be in conjunction to the GHG modelling results requested..

Home Solar Generation

TADPAI's position is that in terms of any energy generation that family owned home solar (and wind generation where used) sits higher in the energy generation hierarchy and is by far more a renewable form of clean energy generation than that of waste incineration.

Mr Ben Barr, Chief Executive, AEMC, is on record advising: "*Now the AEMC is even controversially proposing an overhaul of the system that could see solar exporters penalised for sending energy out during the day. "The other part of it is two-way pricing*"."[10] And this is wrong, industrial produced energy should be designed to work around and support family owned renewable clean energy/electricity generation.

TADPAI requests Veolia in its EIS to technically explain how its waste incinerator can be moderated up and down, and if need be shut down completely to support family owned solar and wind generated electricity and its delivery to Australia's energy market.

Odour

The EPA has received more than 170 odour complaints since 1st January 2021. On top of this there are the complaints made directly to Veolia. At one point there were 49 complaints over a period of two weeks.

[10] BC News (Emila Terzon), 'Matt put a solar power battery on his bike shop. He wont put one on his home and policy is to blame.', 17 May 2021

Veolia assured the Tarago community from the outset of the approval process for the Woodlawn Eco Precinct that there would be **no** odours coming from Woodlawn, this is not the case and there has been a considerable spike in reported odour complaints in the past 12 months. Section 6.1(ii) from the Scoping Report (Reference A) includes the following statement "*From the ongoing community engagement, Veolia is aware of local community concerns regarding odour, and is constantly reviewing operations to minimise impacts*." This condescending and trivalling statement is not acceptable - the promise was **no** odour and we the Tarago District and surrounding areas expect no less of an outcome before any further development of Woodlawn. The EPA has just this month identified and confirmed that long term exposure to landfill gases is a health risk (see above).

Transport NSW and contractors contaminated Tarago with lead in 2019. Exposure to odour, pollutants and toxins from the waste incinerator will be greater than that from the landfill. The EPA considers rain water in housing tanks to be safe but concedes that odours can taint water and that it is the owners responsibility to have their tanks regularly inspected. TADPAI also notes Veolia's retreat from its original promises to hide behind the European Commission BAT for odour management - this is **not** acceptable; and TADPAI reiterates its position **that the existing odour issues have to be permanently resolved before any further developments at Woodlawn**.

TADPAI would also like to see some form of compensation bond established that can be accessed by the local community for any Woodlawn related medical issues.

And in terms of impacts, there is a high use of air trycs in and around Tarago - this needs to be factored in to plume impacts.

TADPAI requests that Veolia include in its EIS a detailed wind and pollutant dispersion model. This should also include a mapping of all the air monitoring sensory devices, and identifying and distinguishing existing and new devices.

Human Health Risk

At Section 6.2.1 of the Scoping Report, Veolia states "*There are currently no requirements with regard to monitoring human health related emissions at the Eco Precinct site*". Tarago has an aging population, and what might have been the case previously might not be the case now. TADPAI is requesting a full and proper assessment to be included in the EIS, including the analysis of long term effects of exposure, even small exposures and by age groups..

Traffic and Transport

This is an area of significant community concern. Residents and commuters through Tarago District and surrounding areas are frustrated and fed up with:

- being stuck behind Veolia's slow crawling trucks up the hill from Crisps Creek to Collector Road;
- the numerous near misses occurring on the Bungendore-Tarago Road because of the very poor state it is in and the damages constantly be inflicted by large trucks using the road; and
- the inability of articulated vehicles to be able to turn legally and safely on the intersection of Braidwood Road, Lumley Road and Wallace Street in the centre of Tarago.

From a community perspective, it is a must that these three issues be rectified before any commencement of development at Woodlawn. Veolia, in liaison with Transport NSW and QPRC, is requested to include in any EIS submitted detailed designs, budgets, funding strategies, project times and all necessary approvals for these three rectifications. This is a duty of care that Veolia and the NSW Government must address. And, if the waste incinerator is so important, Veolia should be prepared to fully fund the work itself.

The communities of Bungonia and Marulan will have similar duty of care requirements should Jerrara Power seek to move forward on its proposal.

Visual

Please provide properly dimensioned pictures and photos in the EIS, what was provided in the Scoping Report is unacceptable and offensive.

Water

From TADPAI's perspective there are three types of water that need to be addressed in Veolia's and Jerrara Power's EIS, these are rainwater, surface water and groundwater.

Rainwater

As noted above, the EPA considers rain water in housing tanks to be safe but concedes that odours (and by extension toxins and other pollutants) can taint water.

TADPAI's requests that Veolia and Jerrara Power devise a representative sample of household rainwater tanks in all directions based on the wind and pollution models referred to above, to sample the water quality in these tanks and to include the results in their EIS.

TADPAI further requests that those same sampled tanks then be sampled and reported on (as a minimum) as follows:

- each year within 10 kms of Woodlawn
- every three years between 10 kms and 20 kms of Woodlawn
- every five years between 20 and 30 kms of Woodlawn

Surface Water

Surface water is essential to the survival of stock, native fauna and flora in the area. Veolia has in place processes for monitoring the quantity and quality of this water that needs to be reviewed and updated.

Groundwater

The author of this Submission lived in the Pilbara for 10 years and during his time there were many issues re groundwater from mine dewatering, these issues included:

- intermittent creeks and rivers being converted into permanent all year round waterways;
- voids created from loss of water turning into sinkholes;
- flora dieback from changes in soil salts and other nutrients;
- tracking dyes turning up in unexpected places far away and quickly;
- community and town bores being closed down and replaced on regular basis because of increased pollutants; and
- in some cases reversal of groundwater flows.

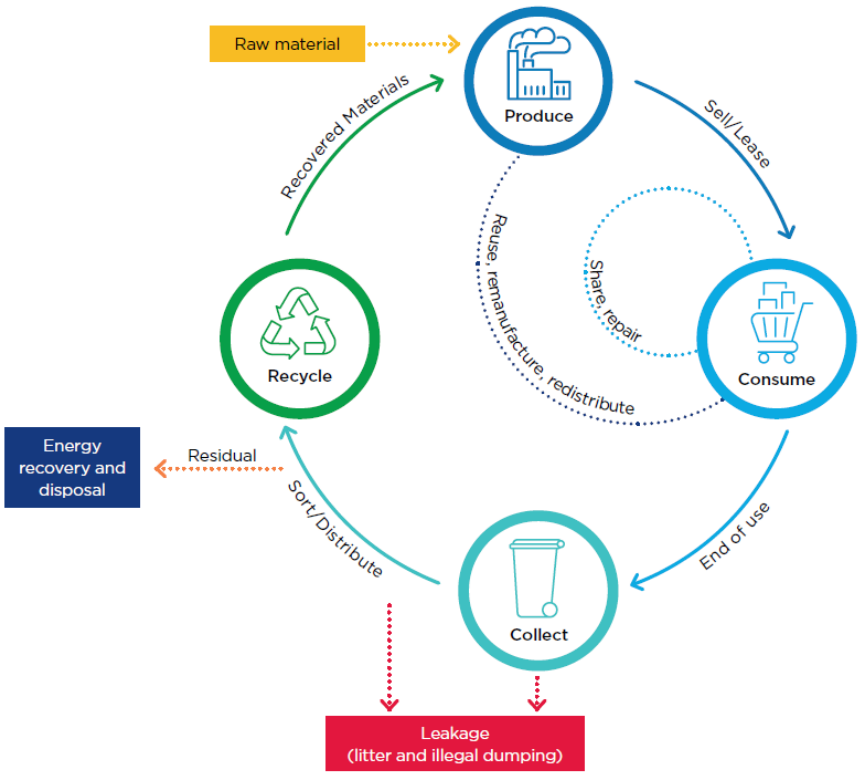
Farmers and glaziers are dependent on accessibility to quality groundwater. The groundwater around Tarago potentially contributes to the water supplies for Goulburn, Bungendore, Braidwood, Sydney and other towns and communities in between. Understanding groundwater and the impact the waste incinerators and the current waste activities have on the groundwater is vital knowledge.

Veolia already has a licence to draw 600 Ml of groundwater per year, is currently drawing around 250 Ml per year, but will need to draw an additional 72 Ml per year if the requested waste incinerator is approved. It is understood that Jerrara Power has similar water needs but the source for its water has yet to be identified. Both companies need to provide detailed hydro

mapping of the groundwater in terms of volumes, depths, flows, quality, etc. within their EIS, in terms of status quo, and when the waste incinerators are operational. Including how the groundwater will be measured and monitored for volume, flow and quality.

A major, if not the most significant, risk is the undetected unnoticed polluting of ground water which could reach the water sources of Goulburn, Bungendore, Braidwood, Sydney and other towns and communities in between, quite quickly based on anecdotal evidence from the Pilbara. Consideration should be given to the inclusion of an emergency management plan in the EIS to clarify how Veolia and State agencies would respond to an incident as described here.

Alternate Feedstocks, and Sustainability of Waste to Energy Facilities



The Circular Economy[11]

[11] Department of Planning, Industry and Environment NSW, Waste and Sustainable Materials Strategy 2041 (Stage 1: 2021-2027), June 2021, page 5

Once the Circular Economy (shown above) begins to become effective and efficient as proposed in the DPIE NSW, Waste and Sustainable Materials Strategy 2041, which could be as early as 2025, the amount of residual waste available to be thermally processed and converted to energy declines in both volumes available and calorific content for combustion.

Europe has been converting waste into energy via waste incineration for several decades now, in fact some countries such as Denmark have a virtual dependence on this technology. "*In Sweden, but also in Denmark, Norway and the Netherlands, the prevailing view is that WtE facilities are a safe and efficient way to produce energy. In 2018, nearly 2.4 million tons of household waste was burned into energy, but local WtE plants had to import about the same amount from abroad (the UK and Ireland, for instance).*"[12]

The UN guidance is that "*the European Union, which has relied on waste incineration for the past few decades, is now moving away from thermal WtE and other forms of incineration and is focusing on more ecologically acceptable solutions such as waste prevention, reuse and recycling as it shifts towards a circular economy*".[13] And the need to import waste to sustain waste incineration is one of the reasons why Europe is moving away from the use of this technology.

For example, Veolia and Jerrara Power are citing similar sources for waste to combust. In addition, there are now a number of waste to energy projects listed on the Major Projects website. TADPAI strongly recommends that DPIE NSW confirm the sources of all claimed waste inputs for all proposed waste incinerators, to confirm that there is enough residual waste to sustain the collective use of waste incinerators for the duration of each intended life. Should this not be the case, then additional feedstock will be required, which could result in reuse and recyclable materials being diverted to waste incinerators or worse the need to import waste from the other States, Territories, New Zealand and other countries, as the European countries cited above are doing now.[14]

TADPAI fully supports Goulburn Mulwaree Council's Resolution 2021/252, and in particular: "*1. Goulburn Mulwaree Council advises the New South Wales State Government that it would be inappropriate to issue any Secretary's Environmental Assessment Requirements (SEARs) until*

[12] L Levaggi, et al: Waste-to-Energy in the EU: The Effects of Plant Ownership, Waste Mobility, and Decentralization on Environmental Outcomes and Welfare, Sustainability/MDPI, July 2020,p6

[13] United Nations Environment Programme's Waste to Energy - Considerations for Informed Decision Making, 2019, p8

[14] L Levaggi, et al: Waste-to-Energy in the EU: The Effects of Plant Ownership, Waste Mobility, and Decentralization on Environmental Outcomes and Welfare, Sustainability/MDPI, July 2020

a policy on facilities that handle and/or process waste products from outside the receiving local government area has been developed and endorsed by State Government." and would like to add the following additional comments:

- this policy needs to also address imports from other States and Territories, and other countries;
- the waste streams that can and cannot be imported; and
- needs to give consideration to the concept below and in the section below.

TADPAI believes that the Woodlawn Bioreactor and MBT Plant should continue to be used as is, with modest growth in Veolia's licences, and then for DPIE NSW to strategically use the facility and waste streams/inputs to modulate, regulate and compensate waste to energy operations such that Woodlawn can provide waste feedstock if required and receive residual waste on short notice from failed waste to energy, recycling or production operations within NSW Circular Economy.

Center of Excellence - Waste Decomposition, Anaerobic Digestion and Biogas Capture

The DPIE NSW, Waste and Sustainable Materials Strategy 2041 (Stage 1 2021 - 2027) Report does reference some locations for some specific waste associated activities to be undertaken in the proposed Circular Economy. Neither Veolia or the Woodlawn Eco Precinct are mentioned.

TADPAI does not endorse the use of waste to energy (waste incineration) technology for the reasons mentioned earlier in this Submission; however, if the NSW Government and some commercial entities insist on this course of action, then below should be given consideration.

TADPAI believes that there is a hole in DPIE NSW strategy for achieving the Circular Economy, which is effectively being able to strategically manage the availability of any shortfalls and surplus within the final residual waste stream to go to waste to energy (thermal processing) facilities. This has all the potential to be the case during start-ups and decommission of waste incinerators, and potentially during operation should waste volumes change for any reasons, such as it has during the COVID-19 pandemic.

TADPAI believes that Veolia through its Woodlawn bioreactor has a vital strategic role in the moderating of residual waste by:

- by providing waste feedstock when required; and
- accepting surpluses when they occur.

tadpai

Tarago and District Progress Association Incorporated
ABN: 20 532 382 103
Postal Address: 18 Wallace Street, Tarago, NSW, 2580
Email: tadpaisecretary@gmail.com

"Promoting the Social and Economic Development of Tarago Village and District"

TADPAI believes this will inevitably occur because of the number of prospective proposals to provide waste to energy (waste incineration) facilities, which is now numerous. Some proposals, if approved, will need assistance sourcing initial feedstock and others when they fail, their customers/clients will need to be able to divert their residual waste elsewhere on short notice. Veolia at Woodlawn is perfectly set up to provide the necessary strategic service.

TAPAI believes that the NSW Government should be encouraging Veolia to establish the Woodlawn the Centre of Excellence for:

- wet waste decomposition and biogas collection for energy generation onsite and offsite (bioreactor);
- anaerobic digestion, and biogas capture (for exporting offsite) and composting (MBT Plant);
- leachate treatment, management, and reuse;
- land reclamation;
- landfill mining and waste reclamation (for provision of additional waste feedstock as and when required to avoid interstate and overseas waste imports);
- landfill odour control;
- solid recovered fuels for use as supplements in waste incinerators and other incinerators as appropriate, noting that Veolia already has an approval for one of these plants;
- waste sustained associated commercial industries; and
- on-spec supplier of energy to the energy market for the AEMO to be able to respond to spikes in demand and to balance out family owned solar and wind generated electricity.

TADPAI believes that the inclusion of a waste incinerator at Woodlawn would be prejudicial to the achievement of the above outcomes.

TADPAI requests that the NSW Government, Goulburn Mulwaree Council, and Veolia give serious consideration for this identified NSW strategic role for the Woodlawn Eco Precinct.

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Ms Sally Munk
Principal Planner
Industry Assessments
Department of Planning, Industry & Environment

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Notice Number	1609745
Date	18-Jun-2021

RE: Veolia Environmental Services (Australia) Pty Ltd - Woodlawn Advanced Energy Recovery Centre (SSD - 21184278)

I refer to your request for the Environment Protection Authority's (EPA) requirements for the environmental assessment (EA) in regard to the above proposal received by EPA on <insert date>.

The EPA has considered the details of the proposal as provided by <DPE or applicant> and has identified the information it requires to issue its general terms of approval in Attachment A & B. In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

1. Waste management, including waste feedstock and inputs, waste processing and controls and management of residual waste and by-products from the incineration process (such as ash);

2. The proposal's compliance with the NSW EPA's *Energy from Waste Policy Statement*; and

3. Air quality and human health risk.

In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment B and any relevant industry codes of practice and best practice management guidelines.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

The Proponent should be made aware that any commitments made in the EA may be formalised as approval conditions and may also be placed as formal licence conditions.

The Proponent should be made aware that, consistent with provisions under Part 9.4 of the *Protection of the Environment Operations Act 1997* ("the Act") the EPA may require the provision of a financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an Environment Protection Licence ("EPL").

In addition, as a requirement of an EPL, the EPA will require the Proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the Act.

Yours sincerely

SGyrn

.....

Steen Gyrn

Unit Head

Environment Protection Authority

(by Delegation)

ATTACHMENT A: Specific EIS Requirements for <PROPOSAL NAME>

Veolia Environmental Services (Australia) Pty Ltd (**the Applicant**) proposes to develop and operate an the Woodlawn Advanced Energy Recovery Centre (ARC) at the Woodlawn Eco-precinict, Collector Road, Tarago. The facility will process up to 380,000 tonnes per year of waste including residual municipal solid waste and commercial and industrial waste. The EPA has reviewed the document titled "Woodlawn Advanced Energy Recovery Centre: Scoping Report" prepared by EMC and dated May 2021 (**The Report**) and provides the following SEARs.

The EIS must include an assessment of the potential impacts of the proposal including cumulative impacts and develop appropriate measures to avoid, mitigate, manage and/or offset these impacts.

The EIS must address the following specific matters:

Waste Management

The EPA encourages the Applicant to carefully review the NSW EPA's *Energy from Waste Policy Statement* to ensure that the proposal complies with the requirements therein.

The EPA's strong view is that all incoming waste must go through an EPA licensed resource recovery facility, to ensure that any recyclable's have been recovered from the waste stream, the waste has been subject to a bona-fide recycling process as required by the NSW EPA's *Energy from Waste Policy Statement* and contaminants have been removed prior to receipt at the proposal facility for incineration. This will ensure that the waste has been subject to rigorous sorting prior to arrival and the waste has been subject to the NSW EPA's licensing regime, and licence conditions, therefore providing more confidence in the composition of the incoming waste stream.

The EPA understands that the waste bunker at the proposed facility will be large and although there will be some mixing of the waste by the crane to improve homogenisation, it will not be equivalent to the level of sorting and processing that occurs at an EPA licensed resource recovery facility, and may not be able to identify and manage smaller contaminants or hazardous materials in the incoming waste.

The EPA is concerned that there will be a lack of controls to ensure that the incoming waste will meet the requirements of the NSW EPA's *Energy from Waste Policy Statement,* and the Applicant will not be able to maintain the integrity of the waste stream. As the EPA considers that there likely are higher order reuse opportunities for that waste, than incineration. The EIS should clearly explain how proposed waste streams do not have higher order reuse in accordance with the waste hierarchy and how receipt of these waste types will meet the NSW EPA's *Energy from Waste Policy Statement.* The EIS must also include;

- a description of the classes and quantities of waste that would be thermally treated at the facility, including; source, quantities, composition and classes of waste;
- demonstrate that waste used as a feedstock in the waste to energy plant would be the residual from a resource recovery process that maximises the recovery of material in accordance with EPA guidelines and the NSW EPA's Energy from Waste Policy Statement;
- demonstration of how the proposal would operate as an energy from waste facility in accordance with the NSW EPA's Energy from Waste Policy Statement;

- description of or procedures that would be implemented to control the inputs to the waste to energy plant, including contingency measures that would be implemented if inappropriate materials are identified;
- details on the location and size of stockpile's of unprocessed and processed recycled waste at the site;
- procedures for management of all waste materials produced from the waste to energy facility (solid liquid and gaseous);
- demonstrate that any waste material produced from the energy from waste facility for land application is fit-for-purpose and poses minimal risk of harm to the environment in order to meet the requirements for consideration of a resource recovery exemption by the EPA under Clause 91 of the Protection of the Environment Operations (Waste) Regulation 2014;
- describe how waste would be treated, stored, used, disposed and handled on site, and transported to and from the site, and the potential impacts associated with these issues, including current and future offsite waste disposal methods;
- describe the flow of waste, including receipt and transportation between various adjoining licence facilities and the proposed processes that will enable Veolia to account for the waste levy and contributions required under the Protection of the Environment Operations Act 1997 (POEO Act);
- identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste and Sustainable Material Strategy 2021 and the NSW Plastics Action Plan;
- detailed description of the proposed immobilisation process for the flue gas residues, which immobilisation approval intended to be used (general or specific) and how the process will comply with Part 10 of the Protection of the Environment Operations (Waste) Regulation (as in force from time to time);
- a detailed encapsulation cell design that demonstrates that the contaminants can be adequately managed; and
- the EPA notes that the Applicant proposes to potentially reuse the bottom ash in the construction industry or cover material if suitable. The EPA reminds the Applicant that reuse of waste intended to be applied to land is subject to the Resource Recovery Order and Exemption framework. The Applicant would need to apply to the EPA for an approval separately to this planning process, and it is not guaranteed that an approval would be granted. The Applicant should take into consideration that, if an approval is not granted, the bottom ash would need to be disposed to a facility that can lawfully receive it.

Additional information about what is required in the Waste Management Assessment is set out in Attachment B.

Air and health

The EIS for the proposal must include an Air Quality Impact Assessment (AQIA) prepared in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales. The AQIA must;

- identify all potential discharges of fugitive and point source emissions of pollutants and odour for all stages of the proposal. All processes that could result in air emission must be identified and described.

Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided;

- describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional, and inter-regional as appropriate). The description must include but need not be limited to:
  a) Meteorology and climate
  b) Topography
  c) Surrounding land-use
  d) Identified sensitive receptors; and
  e) Ambient air quality
- identify comparable facilities within the airshed and consider the cumulative of air emissions from these facilities;
- detail emission control techniques/practices, including emission sampling and monitoring, that will be employed by the proposal, and benchmark these techniques/practices against best practice emission control and management;
- assess all risks to the environment, human health and amenity associated with emissions of air pollutants, including odour from all stages of the proposal;
- justify the level of assessment undertaken on the basis of risk factors, including but not limit to:
  a. Proposal location
  b. Characteristics of the receiving environment and
  c. Type and quantity of pollutants emitted
- include a consideration of 'worst case'; emission scenarios and impacts at proposed emission limits;

account for cumulative impacts with existing emissions sources as well as any currently approved developments linked to the receiving environment;

- include air dispersion modelling conducted in accordance with he *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW.* Consideration must be given to recent amendments to air pollutant standards contained in the *National Environment Protection (Ambient Air Quality) Measure;*
- demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the Protection of the Environment Operations (POEO) Act 1997 and the POEO (Clean Air) Regulation 2010.

Additional information about what is required in the Air Quality Assessment and Human Health Risk Assessment is set out in Attachment B.

Water

It has been noted by EPA that as part of the ARC project, Veolia propose to construct a purpose built engineered cell for the disposal of fly ash, in an area that is currently occupied by part of the Evaporation Dam (ED1). A water balance assessment report on ED1 by WSP Parson Brinckhoff, dated 1 June 2016

relied on the capacity of ED1 for the future storage of treated leachate and discussed other operational scenarios, such as water transferred from other onsite water storage areas and future mining operations.

The water assessment must include a water balance and describe the impacts of water storage capacity in relation to the existing and future operations with consideration given to the above.

Additional information about what is required in the Water Assessment is set out in Attachment B.

Greenhouse Gas

The EIS shall include:

- A full quantitative assessment of the potential scope 1, 2 and 3 greenhouse gas emission of the development
- An assessment of potential impacts of these emissions on the environment
- A detail description of the measure that would be implemented on site to ensure that the project is energy efficient

ATTACHMENT B: Further EIS requirements for the proposal

How to use these requirements

The EPA requirements have been structured in accordance with the DIPNR EIS Guidelines, as follows. It is suggested that the EIS follow the same structure:

A. Executive summary

B. The proposal

C. The location

D. Identification and prioritisation of issues

E. The environmental issues

F. List of approvals and licences

G. Compilation of mitigation measures

H. Justification for the proposal

A Executive summary

The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

B The proposal

1. Objectives of the proposal

- The objectives of the proposal should be clearly stated and refer to:
  a) The size and type of the operation, the nature of the processes and the products, by-products and wastes produced
  b) A life cycle approach to the production, use or disposal of products
  c) The anticipated level of performance in meeting required environmental standards and cleaner production principles
  d) The staging and timing of the proposal and any plans for future expansion
  e) The proposal's relationship to any other industry or facility.

2. Description of the proposal

General

- Outline the production process including:
  a) The environmental "mass balance" for the process – quantify in-flow and out-flow of materials, any points of discharge to the environment and their respective destinations (sewer, stormwater, atmosphere, recycling, landfill etc)
  b) Any life-cycle strategies for the products.
- Outline cleaner production actions, including:
  a) Measures to minimise waste (typically through addressing source reduction)
  b) Proposals for use or recycling of by-products
  c) Proposed disposal methods for solid and liquid waste
  d) Air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points
  e) Water management system including all potential sources of water pollution, proposals for re-use, treatment etc, emission levels of any wastewater discharged, discharge points, summary of options explored to avoid a discharge, reduce its frequency or reduce its impacts, and rationale for selection of option to discharge.
  f) Soil contamination treatment and prevention systems.
- Outline construction works including:
  a) Actions to address any existing soil contamination
  b) Any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site)
  c) Construction timetable and staging; hours of construction; proposed construction methods
  d) Environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.

- Include a site diagram showing the site layout and location of environmental controls.

Air

- Identify all sources or potential sources of air emissions from the development.
  Note: emissions can be classed as either:
  - *point (e.g. emissions from stack or vent) or*
  - *fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).*
- Provide details of the project that are essential for predicting and assessing air impacts including:
  a) The quantities and physio-chemical parameters (e.g. concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored
  b) An outline of procedures for handling, transport, production and storage
  c) The management of solid, liquid and gaseous waste streams with potential to generate emissions to air.

Noise and vibration

- Identify all noise sources or potential sources from the development (including both construction and operation phases). Detail all potentially noisy activities including ancillary activities such as transport of goods and raw materials.
- Specify the times of operation for all phases of the development and for all noise producing activities.
- For projects with a significant potential traffic noise impact provide details of road alignment (include gradients, road surface, topography, bridges, culverts etc), and land use along the proposed road and measurement locations – diagrams should be to a scale sufficient to delineate individual residential blocks.

Water

- Provide details of the project that are essential for predicting and assessing impacts to waters including:
  a) The quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to Water Quality Objectives in the ambient waters (as defined on http://www.environment.nsw.gov.au/eo/index.htm, using technical criteria derived from *the Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC 2000)
  b) The management of discharges with potential for water impacts
  c) Drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.
- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts e.g. effluent ponds) and showing potential areas of modification of contours, drainage etc.
- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Waste and chemicals

Provide details of the quantity and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises. Waste must be classified according to the EPA's *Waste Classification Guidelines 2014 (as amended from time to time)*

- Provide details of liquid waste and non-liquid waste management at the facility, including:
  a) The transportation, assessment and handling of waste arriving at or generated at the site
  b) Any stockpiling of wastes or recovered materials at the site
  c) Any waste processing related to the facility, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site
  d) The method for disposing of all wastes or recovered materials at the facility
  e) The emissions arising from the handling, storage, processing and reprocessing of waste at the facility
  f) The proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal with particular attention to:
  a) The quantity of spoil material likely to be generated
  b) Proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil
  c) The need to maximise reuse of spoil material in the construction industry
  d) Identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material
  e) Designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes
- Provide details of the type and quantity of any chemical substances, fuels and oils to be used or stored and describe arrangements for their safe use and storage
- Reference should be made to the guidelines: EPA's *Waste Classification Guidelines 2014 (as amended from time to time).*

ESD

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:
  a) An assessment of a range of options available for use of the resource, including the benefits of each option to future generations
  b) Proper valuation and pricing of environmental resources
  c) Identification of who will bear the environmental costs of the proposal.

3. Rehabilitation

- Outline considerations of site maintenance, and proposed plans for the final condition of the site (ensuring its suitability for future uses).

4. Consideration of alternatives and justification for the proposal

- Consider the environmental consequences of adopting alternatives, including alternative;
  a) sites and site layouts;
  b) access modes and routes;
  c) materials handling and production processes;
  d) waste and water management;
  e) impact mitigation measures; and
  f) energy sources.
- Selection of the preferred option should be justified in terms of;
  a) ability to satisfy the objectives of the proposal;
  b) relative environmental and other costs of each alternative;
  c) acceptability of environmental impacts and contribution to identified environmental objectives;
  d) acceptability of any environmental risks or uncertainties;
  e) reliability of proposed environmental impact mitigation measures; and
  f) efficient use (including maximising re-use) of land, raw materials, energy and other resources.

C The location

1. General

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
  a) Meteorological data (e.g. rainfall, temperature and evaporation, wind speed and direction)
  b) Topography (landform element, slope type, gradient and length)
  c) Surrounding land uses (potential synergies and conflicts)
  d) Geomorphology (rates of landform change and current erosion and deposition processes)
  e) Soil types and properties (including erodibility; engineering and structural properties; dispersibility; permeability; presence of acid sulfate soils and potential acid sulfate soils)
  f) Ecological information (water system habitat, vegetation, fauna)
  g) Availability of services and the accessibility of the site for passenger and freight transport.

2. Air

- Describe the topography and surrounding land uses. Provide details of the exact locations of dwellings, schools and hospitals. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.
- Describe surrounding buildings that may effect plume dispersion.
- Provide and analyse site representative data on following meteorological parameters:
  a) Temperature and humidity
  b) Rainfall, evaporation and cloud cover
  c) Wind speed and direction
  d) Atmospheric stability class
  e) Mixing height (the height that emissions will be ultimately mixed in the atmosphere)
  f) Katabatic air drainage
  g) Air re-circulation.

3. Noise and vibration

- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, and hospitals. Typically the location of any noise sensitive locations in relation to the site should be included on a map of the locality.
- Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

4. Water

- Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective. The Water Quality and River Flow Objectives on the website: http://www.environment.nsw.gov.au/ieo/index.htm should be used to identify the agreed environmental values and human uses for any affected waterways. This will help with the description of the local and regional area.

5. Soil Contamination Issues

- Provide details of site history – if earthworks are proposed, this needs to be considered with regard to possible soil contamination, for example if the site was previously a landfill site or if irrigation of effluent has occurred.

D Identification and prioritisation of issues / scoping of impact assessment

- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
  a) Relevant NSW government guidelines
  b) Industry guidelines
  c) EISs for similar projects
  d) Relevant research and reference material
  e) Relevant preliminary studies or reports for the proposal
  f) Consultation with stakeholders.
- Provide a summary of the outcomes of the process including:
  a) All issues identified including local, regional and global impacts (e.g. increased/ decreased greenhouse emissions)
  b) Key issues which will require a full analysis (including comprehensive baseline assessment)
  c) Issues not needing full analysis though they may be addressed in the mitigation strategy
  d) Justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

E The environmental issues

1. General

- The potential impacts identified in the scoping study need to be assessed to determine their significance, particularly in terms of achieving environmental outcomes, and minimising environmental pollution.
- Identify gaps in information and data relevant to significant impacts of the proposal and any actions proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures. This is in accordance with ESD requirements.

  Note: The level of detail should match the level of importance of the issue in decision making which is dependent on the environmental risk.

Describe baseline conditions

- Provide a description of existing environmental conditions for any potential impacts.
- Consideration and reference should be made to any baseline reports carried out historically under any approved developments linked to the receiving environment.

Assess impacts

- For any potential impacts relevant for the assessment of the proposal provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.
- Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts.
- The analysis should also make linkages between different areas of assessment where necessary to enable a full assessment of environmental impacts e.g. assessment of impacts on air quality will often need to draw on the analysis of traffic, health, social, soil and/or ecological systems impacts; etc.
- The assessment needs to consider impacts at all phases of the project cycle including: exploration (if relevant or significant), construction, routine operation, start-up operations, upset operations and decommission, if relevant.
- The level of assessment should be commensurate with the risk to the environment.

Describe management and mitigation measures

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Proponents are expected to implement a ‘reasonable level of performance’ to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A ‘reasonable level of performance’ involves adopting and implementing technology and

management practices to achieve certain pollutant emissions levels in economically viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.

- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:

  a) Operational procedures to manage environmental impacts

  b) Monitoring procedures

  c) Training programs

  d) Community consultation

  e) Complaint mechanisms including site contacts

  f) Strategies to use monitoring information to improve performance

  g) Strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

2. Air

Describe baseline conditions

- Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data.
- Consideration and reference should be made to any baseline reports carried out historically under any approved developments linked to the receiving environment.

Assess impacts

- Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.
- Estimate the resulting ground level concentrations of all pollutants. Where necessary (e.g. potentially significant impacts and complex terrain effects), use an appropriate dispersion model to estimate ambient pollutant concentrations. Discuss choice of model and parameters with the EPA.
- Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.
- For potentially odorous emissions provide the emission rates in terms of odour units (determined by techniques compatible with EPA procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.

  Note: With dust and odour, it may be possible to use data from existing similar activities to generate emission rates.

- Reference should be made to:

  a) Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC, 2016)*;*

b) *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (DEC, 2007)*;*

c) *Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006)*;*

d) *Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006); Load Calculation Protocol for use by holders of NSW Environment Protection Licences when calculating Assessable Pollutant Loads* (DECC, 2009).

Describe management and mitigation measures

- Outline specifications of pollution control equipment (including manufacturer's performance guarantees where available) and management protocols for both point and fugitive emissions. Where possible, this should include cleaner production processes.

1. Human Health Risk Assessment

A human health risk assessment must be undertaken in conjunction with the air quality and odour impact assessment.

- The human health risk assessment must be undertaken in accordance with *Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards* (enHealth) and must include:

  a) The inhalation of criteria pollutants and exposure from all pathways i.e., inhalation, ingestion and dermal to specific air toxics; and

  b) A demonstration of how the waste to energy facility would be operated in accordance with best practice measures to manage air emissions with consideration of the *Environment Protection Authority's NSW Energy from Waste Policy Statement*.

2. Noise and vibration

Describe baseline conditions

- Determine the existing background (LA90) and ambient (LAeq) noise levels, as relevant, in accordance with the *NSW Noise Policy for Industry*.
- Determine the existing road traffic noise levels in accordance with the *NSW Road Noise Policy*, where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:

  a) Details of equipment used for the measurements

  b) A brief description of where the equipment was positioned

  c) A statement justifying the choice of monitoring site(s), including the procedure used to choose the site(s), having regards to Fact Sheets A and B of the *NSW Noise Policy for Industry.*

  d) Details of the exact location of the monitoring site and a description of land uses in surrounding areas

  e) A description of the dominant and background noise sources at the site

  f) Day, evening and night assessment background levels for each day of the monitoring period

  g) The final Rating Background Level (RBL) value

  h) Graphs of the measured noise levels for each day should be provided

i) A record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring.

Assess impacts

- Determine the project noise trigger levels for the site. For each identified potentially affected receiver, this should include:
  a) Determination of the project intrusive noise level for each identified potentially affected receiver
  b) Selection and justification of the appropriate amenity category for each identified potentially affected receiver
  c) Determination of the project amenity noise level for each receiver
  d) Determination of the appropriate maximum noise level event assessment (sleep disturbance) trigger level.
- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Determine expected noise level and noise character likely to be generated from noise sources during:
  a) Site establishment
  b) Construction
  c) Operational phases
  d) Transport including traffic noise generated by the proposal
  e) Other services.

  Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).

  Determine the noise levels likely to be received at the reasonably most affected location(s) (these may vary for different activities at each phase of the development).
- The noise impact assessment report should include:
  a) A plan showing the assumed location of each noise source for each prediction scenario
  b) A list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
  c) Any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
  d) Methods used to predict noise impacts including identification of any noise models used.
  e) The weather conditions considered for the noise predictions
  f) The predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario
  g) For developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived

h) An assessment of the need to include modification factors as detailed in Fact Sheet C of the *NSW Noise Policy for Industry (2017)*.

- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional feasible and reasonable mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
  a) Where relevant noise/vibration levels cannot be met after application of all feasible and reasonable mitigation measures the residual level of noise impact needs to be quantified
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.

Describe management and mitigation measures

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:
  a) Use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage
  b) Control of traffic (eg: limiting times of access or speed limitations)
  c) Resurfacing of the road using a quiet surface
  d) Use of (additional) noise barriers or bunds
  e) Treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern
  f) More stringent limits for noise emission from vehicles (i.e. using specially designed ‘quite’ trucks and/or trucks to use air bag suspension
  g) Driver education
  h) Appropriate truck routes
  i) Limit usage of exhaust brakes
  j) Use of premium muffles on trucks
  k) Reducing speed limits for trucks
  l) Ongoing community liaison and monitoring of complaints
  m) Phasing in the increased road use.

5. Water

Describe baseline conditions

- Describe existing surface and groundwater quality – an assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).

  Note: Methods of sampling and analysis need to conform with an accepted standard (e.g. Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC 2004) *or be approved and analyses undertaken by accredited laboratories).*

- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: http://www.environment.nsw.gov.au/ieo/index.htm. The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC 2000 *Guidelines for Fresh and Marine Water Quality* (https://www.waterquality.gov.au/guidelines/anz-fresh-marine) NB: While specific guidelines for groundwater are not available, the ANCECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.
- State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. the Healthy Rivers Commission Inquiries or the NSW Salinity Strategy (DLWC, 2000)
- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from the EPA on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved?). Proponents are generally only expected to source available data and information. However, proponents of large or high risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a suitable level of impact assessment. Issues to include in the description of the receiving waters could include:

  a) lake or estuary flushing characteristics

  b) specific human uses (e.g. exact location of drinking water offtake)

  c) sensitive ecosystems or species conservation values

  d) a description of the condition of the local catchment e.g. erosion levels, soils, vegetation cover, etc

  e) an outline of baseline groundwater information, including, but not restricted to, depth to watertable, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment

  f) historic river flow data where available for the catchment.

Consideration and reference should be made to any baseline reports carried out historically under any approved developments linked to the receiving environment.

Assess impacts

- No proposal should breach clause 120 of the *Protection of the Environment Operations Act* 1997 (i.e. pollution of waters is prohibited unless undertaken in accordance with relevant regulations).
- Identify and estimate the quantity of all pollutants that may be introduced into the water cycle by source and discharge point including residual discharges after mitigation measures are implemented.
- Include a rationale, along with relevant calculations, supporting the prediction of the discharges.
- Describe the effects and significance of any pollutant loads on the receiving environment. This should include impacts of residual discharges through modelling, monitoring or both, depending on the scale of the proposal. Determine changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Describe water quality impacts resulting from changes to hydrologic flow regimes (such as nutrient enrichment or turbidity resulting from changes in frequency and magnitude of stream flow).
- Identify any potential impacts on quality or quantity of groundwater describing their source.
- Identify potential impacts associated with geomorphological activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Identify impacts associated with the disturbance of acid sulfate soils and potential acid sulfate soils.
- Containment of spills and leaks shall be in accordance with EPA's guidelines section 'Bunding and Spill Management' at https://www.epa.nsw.gov.au/licensing-and-regulation/licensing/environment-protection-licences/compliance-audit-program/chemical-storage-handling-and-spill-management and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge.
- The significance of the impacts listed above should be predicted. When doing this it is important to predict the ambient water quality and river flow outcomes associated with the proposal and to demonstrate whether these are acceptable in terms of achieving protection of the Water Quality and River Flow Objectives. In particular the following questions should be answered:
    a. will the proposal protect Water Quality and River Flow Objectives where they are currently achieved in the ambient waters; and
    b. will the proposal contribute towards the achievement of Water Quality and River Flow Objectives over time, where they are not currently achieved in the ambient waters.
- Consult with the EPA as soon as possible if a mixing zone is proposed (a mixing zone could exist where effluent is discharged into a receiving water body, where the quality of the water being discharged does not immediately meet water quality objectives. The mixing zone could result in dilution, assimilation and decay of the effluent to allow water quality objectives to be met further downstream, at the edge of the mixing zone). The EPA will advise the proponent under what conditions a mixing zone will and will not be acceptable, as well as the information and modelling requirements for assessment.

    Note:The assessment of water quality impacts needs to be undertaken in a total catchment management context to provide a wide perspective on development impacts, in particular cumulative impacts.

Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.

- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.
- Reference should be made to:
  a) *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004),
  b) *Guidelines for Fresh and Marine Water Quality* ANZECC 2000),
  c) *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

Describe management and mitigation measures

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.
- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.
- Outline pollution control measures relating to storage of materials, possibility of accidental spills (e.g. preparation of contingency plans), appropriate disposal methods, and generation of leachate.
- Describe hydrological impact mitigation measures including:
  a) site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition)
  b) minimising runoff
  c) minimising reductions or modifications to flow regimes
  d) avoiding modifications to groundwater.
- Describe groundwater impact mitigation measures including:
  a) site selection
  b) retention of native vegetation and revegetation
  c) artificial recharge
  d) providing surface storages with impervious linings
  e) monitoring program.
- Describe geomorphological impact mitigation measures including:
  a) site selection
  b) erosion and sediment controls
  c) minimising instream works

d) treating existing accelerated erosion and deposition

e) monitoring program.

- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004).

6. Soils and contamination

Describe baseline conditions

- Provide any details (in addition to those provided in the location description - Section C) that are needed to describe the existing situation in terms of soil types and properties and soil contamination.

Assess impacts

- Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:
  a) disturbing any existing contaminated soil
  b) contamination of soil by operation of the activity
  c) subsidence or instability
  d) soil erosion
  e) disturbing acid sulfate or potential acid sulfate soils.
- Reference should be made to:
  a) Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011)*;*
  b) Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015).
  c) Environmental Guidelines: Composting and Related Organics Processing Facilities (DECC, 2004)

Describe management and mitigation measures

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:
  a) erosion and sediment control measures
  b) proposals for site remediation – see *Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998)
  c) proposals for the management of these soils – see *Acid Sulfate Soil Manual* (Acid Sulfate Soil Advisory Committee 1998) and *Acid Sulfate Soils Assessment Guidelines* (Acid Sulfate Soil Advisory Committee 1998).

7. Waste and chemicals

Describe baseline conditions

- Describe any existing waste or chemicals operations related to the proposal.

Assess impacts

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- Reference should be made to: the EPA's *Waste Classification Guidelines 2014 (as in force from time to time)*
- If the proposal is an energy from waste facility it must:

  a) demonstrate that the proposed operation will comply with the NSW EPA's Energy from Waste Policy Statement;

  b) describe of the classes and quantities of waste that would be thermally treated at the facility;

  c) demonstrate that waste used as a feedstock in the waste to energy plant would be the residual from a resource recovery process that maximises the recovery of material;

  d) detail procedures that would be implemented to control the inputs to the waste to energy plant, including contingency measures that would be implemented if inappropriate materials are identified;

  e) detail the location and size of stockpiles of unprocessed and processed recycled waste at the site;

  f) demonstrate any waste material (e.g. biochar, ash) produced from the waste to energy facility for land application is fit-for-purpose and poses minimal risk of harm to the environment in order to meet the requirements for consideration of a resource recovery order and /or exemption by the EPA;

  g) detail procedures for the management of other solid, liquid and gaseous waste streams;

  h) describe how waste would be treated, stored, used, disposed and handled on site, and transported to and from the site, and the potential impacts associated with these issues, including current and future offsite waste disposal methods; and

  i) identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste and Sustainable Material Strategy 2021 and the NSW Plastics Action Plan.

Describe management and mitigation measures

- Outline measures to minimise the consumption of natural resources.
- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional or industry waste plans.

8. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.
- Assess the impact of the proposal against the long term air, noise and water quality objectives for the area or region.
- Identify infrastructure requirements flowing from the proposal (e.g. water and sewerage services, transport infrastructure upgrades).
- Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (e.g. travel demand management strategies).

F. List of approvals and licences

- Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water).

G. Compilation of mitigation measures

- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).
- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

H. Justification for the Proposal

- Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

ATTACHMENT B: GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/140
Environmentally Hazardous Chemicals Act 1985	http://www.legislation.nsw.gov.au/#/view/act/1985/14
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/#/view/act/1979/203
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/156
Water Management Act 2000	http://www.legislation.nsw.gov.au/#/view/act/2000/92
Licensing	
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2016)	http://www.epa.nsw.gov.au/air/appmethods.htm
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/#/view/regulation/2010/428
NSW EPA Energy from Waste Policy Statement, as updated June 2021	https://www.epa.nsw.gov.au/publications/waste/21p2938-energy-from-waste-policy-statement
National Environment Protection (Ambient Air Quality) Measure, as amended in May 2021	
Noise and Vibration	
NSW Noise Policy for Industry	http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)
Interim Construction Noise Guideline (DECC, 2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/your-environment/noise/transport-noise

NSW Rail Infrastructure Noise Guideline (EPA, 2013)	http://www.epa.nsw.gov.au/your-environment/noise/transport-noise
Human Health Risk Assessment	
Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)	http://www.eh.org.au/documents/item/916
Waste, Chemicals and Hazardous Materials and Radiation	
Waste	
Environmental Guidelines: Solid Waste Landfills (EPA, 2016)	http://www.epa.nsw.gov.au/waste/landfill-sites.htm
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
EPA's Waste Classification Guidelines 2014	http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm
Resource recovery orders and exemptions	http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm
European Unions Waste Incineration Directive 2000	http://ec.europa.eu/environment/archives/air/stationary/wid/legislation.htm
EPA's Energy from Waste Policy Statement	http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.htm
NSW Waste and Sustainable Material Strategy 2021 and the NSW Plastics Action Plan	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/20-year-waste-strategy-for-nsw
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.epa.nsw.gov.au/pesticides/CCOs.htm
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
Water and Soils	
Acid sulphate soils	
Coastal acid sulfate soils guidance material	http://www.environment.nsw.gov.au/acidsulfatesoil/ and http://www.epa.nsw.gov.au/mao/acidsulfatesoils.htm
Acid Sulfate Soils Planning Maps	http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm
Contaminated Sites Assessment and Remediation	

Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.epa.nsw.gov.au/clm/planning.htm
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	http://www.epa.nsw.gov.au/resources/clm/auditorglines06121.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampgdlne.pdf
National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	http://www.scew.gov.au/nepms/assessment-site-contamination
Soils – general	
Managing land and soil	http://www.environment.nsw.gov.au/soils/landandsoil.htm
Managing urban stormwater for the protection of soils	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide risk management guidelines	http://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2000-Concepts.pdf
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html
Applying Goals for Ambient Water Quality Guidance for Operations Officers - Mixing Zones	Contact the EPA on 131555
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Health
Murrumbidgee
Local Health District

Industry Assessments
Attention Sally Munk
Department of Planning, Industry and Environment
4 Parramatta Square
12 Darcy Street,
Parramatta NSW 2150

Dear Sally,

Major Projects – New Request for Advice - Woodlawn Advanced Energy Recovery Centre State Significant Development (SSD) application (SSD-21184278)
Feedback from Murrumbidgee and Southern NSW Local Health District Public Health Unit

Thank you for the opportunity to provide input to the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Woodlawn Advanced Energy Recovery Centre State Significant Development (SSD) application (SSD-21184278).

The Public Health Unit has reviewed the Scoping Report provided which provides an adequate description of the scope of the information required to assess the impacts of the proposed development. In particular the following information would assist the Public Health Unit when reviewing the Environmental Impact Statement with a focus on assessment of the health impacts from the proposed development.

Technical Detail

- Detailed description of the plant design and treatment technology with a comparison to the European reference facilities used in air quality modelling.
- Description of how the plant will fit with current best available technologies for stack emissions and controls.

Air quality and odour

- The inclusion of a clear and detailed comparison between the proposed waste feedstock for this facility and the chosen European reference facilities.
- Clear information on the expected air quality and odour emissions from the proposed development based on the European reference facility and compliance with the relevant NSW/Australian and European emission controls. This should include an assessment of the proposed development and cumulative impact from the developments within the existing eco precinct.
- Description of local meteorological and topographical conditions used in air dispersion modelling in the calculation of the local ground level impacts on the surrounding community and facilities. This should include an assessment of the proposed development and cumulative impact from the developments within the existing eco precinct.

Murrumbidgee Local Health District
ABN 71 172 428 618
P.O. Box 3095, Albury NSW 2640
Tel 02 6080 8900 Fax 02 6080 8999
Website www.mlhd.health.nsw.gov.au

Waste Classification/management

- Include a detailed description of the process of waste classification and onsite management of waste feedstock (including out of spec waste) entering the plant to ensure that the actual feedstock consistently meets the predicted feedstock on which the air quality modelling and the health risk assessment have been based.
- Include a detailed description of the management of bottom ash and fly ash, including both solid and liquid components. This shall address both on – site storage and application, and any off – site transport and disposal requirements where the material cannot be handled on - site.

Human Health Risk Assessment

- Conduct in accordance with Environmental Health Risk Assessment Guidelines for Assessing Health Risks from Environmental Hazards and Australian Exposure Factor Guidelines (enHealth).
- Include appropriate justified and realistic modelled scenarios on sensitive receivers including local residential areas, school and child care centres, recreational users of Lake George and Lake Bathurst (and any other identified sensitive receivers).
- Impacts on ground water, water sources, drinking water catchments and rain water tanks (where there is no connection available to a reticulated, etc.
- Cumulative impacts from other industry or facilities around, including those within the Woodlawn Exo Precinct, and the Woodlawn Zinc-Copper Project, Herron Resources Limited.

Noise

The proponent should assess the human health risks associated with the project's noise impacts during construction and operation.
Consideration should be given to impacts to sensitive receptors including residential receptors, child care centres, schools, aged care facilities and medical facilities. The duration of exposure and the characteristics of noise should be assessed. Impacts to sleep disturbance should be considered.
Consideration should be given to whether noise levels exceed the health-based limits specified in the enHealth (2017) report The Health Effects of Environmental Noise.

Should you wish to discuss this matter further, please contact Tabitha Holliday, Environmental Health Officer on 0407 060 237 or Tabitha.Holliday@health.nsw.gov.au.

Murrumbidgee Local Health District
ABN 71 172 428 618

P.O. Box 3095, Albury NSW 2640
Tel 02 6080 8900 Fax 02 6080 8999
Website www.mlhd.health.nsw.gov.au

Our ref: STH07/01072/11
Contact: Rachel Carocci 4221 2548
Your ref: SSD-21184278

15 June 2021

Sally Munk
Department of Planning, Industry & Environment
BY EMAIL: Sally.Munk@planning.nsw.gov.au

MAJOR PROJECTS SSD-21184278 – REQUEST FOR ADVICE - WOODLAWN ADVANCED ENERGY RECOVERY CENTRE

Dear Sally

Transport for NSW (TfNSW, formerly Roads and Maritime Services) refers to your correspondence dated 3 June 2021 requesting advice on the Planning Secretary's Environmental Assessment Requirements for proposed Woodlawn Advanced Energy Recovery Centre.

TfNSW interest is the impact of the proposal on the state road network. The relevant state classified roads in this location are Braidwood Road and the Federal Highway.

TfNSW requires the following issues to be addressed as part of the Environmental Impact Statement (EIS):

- A traffic impact study (TIS) is required. As a guide Table 2.1 of the RTA Guide to Traffic Generating Developments outlines the key issues that may be considered in preparing a TIS;
- The TIS needs to include the type of vehicles accessing the site, the likely daily and peak hour movements in and out of the site (including staff movements), the likely distribution of these movements (i.e. which direction they are coming from/going to) and the expected duration of the construction/operation (and associated traffic movements);
- The TIS also needs to outline predicted haulage routes, including over size over mass vehicles, and consider any impacts to the state road network (i.e. where the haulage route meets the state road);
- An assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model. This is to include the identification and consideration of approved and proposed developments/planning proposals/road upgrades in the vicinity;
- Detailed plans of the site access and proposed layout to demonstrate vehicles loading, unloading or servicing can be accommodated on the site to avoid queuing on the road network, and to depict the internal road and pedestrian network and parking on site is in accordance with the relevant Australian Standards and Council's DCP;
- Provide a swept path analysis in accordance with Austroads turning templates to demonstrate that the largest vehicle likely to utilise the access can enter and exit the driveway in a forward direction and manoeuvring throughout the site; and
- Where the development has an impact on the performance of an intersection on the state road network an appropriate junction upgrade needs to be provided.

If you have any questions please contact Rachel Carocci on 4221 2548.

Please ensure that any further email correspondence is sent to development.southern@rms.nsw.gov.au

Yours faithfully

Rachel Carocci
Development Assessment Officer
Community and Place I South Region

PO Box 398, Parramatta NSW 2124
Level 14, 169 Macquarie Street
Parramatta NSW 2150
www.waternsw.com.au
ABN 21 147 934 787

20 June 2021

Contact: *James Caddey*
Telephone: 4824 3401
Our ref: *D2021/70105*

Principal Planning Officer
Industry Assessments
Department of Planning, Industry & Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Subject: Woodlawn Advanced Energy Recovery Centre (SSD-21184278).

Dear Sir/madam

WaterNSW appreciates the opportunity to provide input into the Secretary's Environmental Assessment Requirements (SEARs) for the Woodlawn Advanced Energy Recovery Centre (SSD-21184278).

WaterNSW has reviewed the Scoping Report prepared by EMM (dated 13 May 2021) and has the following comments and recommendations for inclusion in the Environmental Impact Statement (EIS).

As the development is located within the Sydney Drinking Water Catchment, clauses 9(1), 9(2) and 10(1) of the *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011* (the SEPP) apply. The EIS must specifically address each of these clauses and, in particular, provide a clear description and justification as to how the development would achieve a neutral or beneficial effect on water quality.

Recommendation for the EIS.

General

- Details of the project shall also include detailed plans of the Advanced Energy Recovery Centre (ARC), showing internal access roads, locations of all buildings (including temporary buildings such as construction compound) and any earthworks.
- Demonstration of compliance with Clauses 9 and 10 of the *State Environmental Planning Policy (Drinking Water Catchment) 2011* that the development will have a Neutral or Beneficial Effect on water quality (NorBE).

Waste Input, Output and Characterisation

- Quantity, composition, waste classification, storage and disposal of the Incinerator Bottom Ash, Air Pollution Control residues, including leaching potential and filtrate from the mineralisation plant.

Water Usage and Stormwater Management

- Project water balance and water management plan shall address all measures associated with increased water usage, increased impervious area and stormwater management.
- How the proposal will interact with the existing water management system for the Eco Precinct.
- A conceptual soil and water management plan shall address all erosion and sediment controls associated with the construction phase.

Impact Assessment

- Investigate suitability of placement of Air Pollution Control residues at the site or any other disposal area.
- Assess risks and impacts associated with disposal of Air Pollution Control residues, including leaching potential and potential impacts on groundwater, Crisps Creek and the Mulwaree River sub-catchment.
- The capacity of the existing site sewage treatment plant (STP) to manage the increased wastewater load during construction and the operational phase. If it is found that the existing STP does not have adequate capacity, then investigate other measures to manage the increased wastewater load.

It is requested that WaterNSW be listed a stakeholder in any further consultation on the project and looks forward to reviewing the forthcoming EIS.

If you have any questions, please contact Jim Caddey via email at environmental.assessments@waternsw.com.au.

Yours sincerely

FIONA SMITH
Executive Manager Water & Catchment Protection

OUT21/7431

Sally Munk
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

sally.munk@planning.nsw.gov.au

Dear Ms Munk

Woodlawn Advanced Energy Recovery Centre (SSD-21184278)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 3 June 2021 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR.

The SEARS should include:

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water).

Any further referrals to DPIE Water and NRAR can be sent by email to landuse.enquiries@dpie.nsw.gov.au. or to the following coordinating officer within DPIE Water:

Alistair Drew, Project Officer
E: Alistair.drew@dpie.nsw.gov.au
M: 0417 626 567

Yours sincerely

Alistair Drew
Project Officer, Assessments
Water – Knowledge Office
08 June 2021

Planning, Industry & Environment

Sally Munk
Principal Planning Officer
Energy Resource Assessment

4 Parramatta Square

PARRAMATTA NSW 2150

sally.munk@planning.nsw.gov.au

Our ref: DOC21/ 454022-3

Your ref: SSD-21184278

Dear Ms Munk,

Major Projects – New Request for Advice – Woodlawn Advanced Energy Recovery Centre (SSD-21184278)

I refer to your request for Secretary's Environmental Assessment Requirements (SEARs) for the proposed Woodlawn Advanced Energy Recovery Centre (Woodlawn ARC) and provide the following advice:

- Attachment 1 lists the requirements that need to be addressed in the Environmental Impact Statement (EIS) for the project
- Attachment 2 lists the guidance material that will assist the preparation of the EIS.

If you have any questions about this advice, please do not hesitate to contact Mallory Barnes, Senior Regional Biodiversity Conservation Officer via email mallory.barnes@environment.nsw.gov.au or 02 6229 7192.

Yours sincerely

18/6/2021

MICHAEL SAXON
Director South East
Biodiversity and Conservation Division

Enclosure: Attachment 1 – Secretary's Environmental Assessment Requirements for the proposed Woodlawn ARC (SSD-21184278). Attachment 2 – Guidance material

Attachment 1

BCD Environmental Assessment Requirements for the proposed Woodlawn ARC (SSD-21184278)

Biodiversity
1. Biodiversity impacts related to the proposed the Woodlawn ARC are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method. 2. Potential direct impacts from Woodlawn ARC that should be considered in the BDAR, might include, but are not limited to – • Clearing associated with stockpiling of residual incombustible material. The EIS must forecast the maximum area required to stockpile residual incombustible material based on anticipated maximum annual outputs of bottom ash (IBA), fine particulates (APCr) and ferrous materials. This area must be included in the disturbance footprint. • Disturbance areas from site preparation works including construction of access roads, compounds, laydown areas and other permanent or temporary infrastructure. 3. Potential prescribed and indirect impacts arising from Woodlawn ARC that should be considered in the BDAR, might include, but are not limited to; • Removal of non-native vegetation that provides habitat for threatened species, such as Golden Sun Moth, • Vehicle strikes on threatened fauna from increased vehicle movements • The effect on water quality, water bodies and hydrological processes that sustain threatened entities, such as the lake George Catchment Area, • Transport of weeds to adjacent vegetation from earthworks, • Reduced viability of adjacent habitat from edge effects or deposition of waste material, including dust or fugitive waste feedstock. 4. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method. The BDAR should demonstrate efforts to isolate impacts to non-native vegetation that does not harbour threatened species. 5. The BDAR must include details of the measures proposed to address the offset obligation as follows; • The total number and classes of biodiversity credits required to be retired for the development/project; • The number and classes of like-for-like biodiversity credits proposed to be retired;

- The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;
- Any proposal to fund a biodiversity conservation action;
- Any proposal to conduct ecological rehabilitation (if a mining project);
- Any proposal to make a payment to the Biodiversity Conservation Fund.
- The potential location of lots containing suitable credits, ideally locally sourced within the larger land holding of 1800 hectares.
- The potential use of biodiversity credits to mitigate or offset indirect or prescribed impacts

If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.

6. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2020 under s6.10 of the *Biodiversity Conservation Act 2016*.
7. The BDAR must undertake an assessment for Serious and Irreversible Impacts (SAII) for all SAII entities subject to direct, indirect or prescribed impact.
8. The BDAR must address impacts for species listed only in the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act), pursuant to the bilateral agreement between the Commonwealth and NSW Governments, such as *Leucochrysum albicans var. tricolor* (Hoary Sunray).
9. The BDAR must clearly identify any residual indirect and prescribed impacts and propose;
    - Effective mitigation measures to address the residual indirect and prescribed impacts,
    - A description of the method/technique used,
    - A timeframe for implementation of the mitigation measure,
    - The person or organisation responsible for mitigation measure,
    - The monitoring and evaluation strategy for the mitigation measure (data, frequency, timing and reporting),
    - The performance criteria linked to the monitoring and evaluation of the mitigation measure,
    - The trigger threshold for implementing adaptive management.
10. An assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities, scheduled under the *Fisheries Management Act 1994*, and a description of the measures to minimise and rehabilitate impact.

11. The EIS must map the following features relevant to water and soils including:
    a. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
    b. Wetlands as described in s4.2 of the Biodiversity Assessment Method.

c. Groundwater. d. Groundwater dependent ecosystems. e. Proposed intake and discharge locations.
12. The EIS must describe background conditions for any water resource likely to be affected by the Woodlawn ARC, including: a. Existing surface and groundwater. b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters. d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.
13. The EIS must assess the impacts of the Woodlawn ARC on water quality, including: a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the solar farm protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction. b. Identification of proposed monitoring of water quality or required changes to existing monitoring programs.
14. The EIS must assess the impact of the proposed Woodlawn ARC on hydrology, including: a. Water balance including quantity, quality and source. b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas. c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches). e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water. f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options. g. Identification of proposed monitoring of hydrological attributes.

Flooding
15. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including: a. Flood prone land. b. Flood planning area, the area below the flood planning level. c. Hydraulic categorisation (floodways and flood storage areas).
16. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.
17. The EIS must model the effect of the proposed Woodlawn ARC (including fill) on the flood behaviour under the following scenarios: a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
18. Modelling in the EIS must consider and document: a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood. b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories. c. Relevant provisions of the NSW Floodplain Development Manual 2005.
19. The EIS must assess the impacts on the proposed Woodlawn ARC on flood behaviour, including: a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure. b. Consistency with Council floodplain risk management plans. c. Compatibility with the flood hazard of the land. d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land. e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses. g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council. h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.

i. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.

j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment 2: Guidance Material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
Coastal Management Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/20/ful
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (DPIE, 2020)	https://www.legislation.nsw.gov.au/view/pdf/asmade/sl-2020-621
Biodiversity Development Assessment Report	https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2020	https://www.legislation.nsw.gov.au/regulations/2017-471.pdf
Biodiversity conservation actions	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf
Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf
OEH Threatened Species Website	www.environment.nsw.gov.au/threatenedspecies/

Title	Web address
NSW BioNet (Atlas of NSW Wildlife)	www.bionet.nsw.gov.au/
NSW guide to surveying threatened plants and their habitats (DPIE 2020)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/surveying-threatened-plants-and-habitats-nsw-survey-guide-biodiversity-assessment-method-200146.pdf
OEH threatened species survey and assessment guideline information	www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlns.htm
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm
OEH Data Portal (access to online spatial data)	http://data.environment.nsw.gov.au/
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land managed by the Office of Environment and Heritage (OEH 2013)	http://www.environment.nsw.gov.au/resources/protectedareas/development-land-adjoining-130122.pdf
Water and Soils	
Flooding and Coastal Erosion	
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Our reference: DOC21/454022

Sally Munk
Principal Planning Officer
Energy Resource Assessment
Department of Planning, Industry & Environment

email: sally.munk@planning.nsw.gov.au

Advice uploaded via the Major Project Portal

Dear Sally

HERITAGE NSW – ABORIGINAL CULTURAL HERITAGE REGULATION
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARS)

Project: Woodlawn Advanced Energy Recovery Centre
SSD/SSI application no: SSD-21184278

Thank you for requesting our input on the draft Planning Secretary's Environmental Assessment Requirements (SEARs) for the above state significant project.

Heritage NSW has reviewed the supporting documentation and provides SEARs for the proposed development in relation to Aboriginal cultural heritage matters in **Attachment A**.

We note the Scoping Report (6.7.3 Assessment Approach) already identifies the assessment approach for Aboriginal cultural heritage will include preparation of an Aboriginal cultural heritage assessment report as part of the Environmental Impact Statement.

If you have any questions regarding these SEARs please contact me on (02) 6229 7089 or via email at jackie.taylor@environment.nsw.gov.au.

Yours sincerely

Jackie Taylor
Senior Team Leader, Aboriginal Cultural Heritage Regulation - South
Heritage NSW
17 June 2021

Enclosure – Attachment A: Recommended Aboriginal Cultural Heritage SEARs for SSD-21184278

ATTACHMENT A: HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: Woodlawn Advanced Energy Recovery Centre
SSD/I #: SSD-21184278

1. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigation of Aboriginal objects in NSW (DECCW 2010), and be guided by the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011) and consultation with Heritage NSW.
2. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
3. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to Heritage NSW.
4. The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the ACHAR.
5. The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.
6. The ACHAR must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

NOTE: The process described in the *Due Diligence Code of Practice for the protection of Aboriginal objects in NSW* (DECCW 2010) is not sufficient to assess the impacts on Aboriginal cultural heritage of Major Projects.

Heritage NSW

Our ref: HMS ID 80

Sally Munk
Planner
Department of Planning Industry & Environment
GPO BOX 404, PARRAMATTA NSW 2124

By email: sally.munk@planning.nsw.gov.au

Dear Ms Munk

Request for Secretary's Environmental Assessment Requirements (SEARS) for Woodlawn Advanced Energy Recovery Centre (SSD 21184278)

Thank you for your referral dated 3 June 2021 inviting SEARS input from the Heritage Council of NSW on the above State Significant Development proposal.

The subject site is not listed on the State Heritage Register (SHR), nor is it in the immediate vicinity of any SHR items. Further, the site does not contain any known historical archaeological relics. Therefore, no heritage comments are required. The Department does not need to refer subsequent stages of this proposal to the Heritage Council of NSW.

If you have any questions regarding the above advice, please contact Gary Hinder, A/Senior Customer Strategies Officer, at Gary.Hinder@environment.nsw.gov.au or on 9873 8547.

Yours sincerely

Anna London
A/Senior Team Leader Customer Strategies
Heritage NSW
Department of Premier and Cabinet
As Delegate of the Heritage Council of NSW
16 June 2021

NSW RURAL FIRE SERVICE

Department of Planning and Environment (Sydney Offices)
GPO Box 39
Sydney NSW 2001

Your reference: SSD-21184278
Our reference: DA20210603002251-SEARS-1

ATTENTION: Sally Munk

Date: Monday 7 June 2021

Dear Sir/Madam,

Development Application
State Significant – SEARS – Waste or resource management facility
Woodland Advanced Recovery Centre 609 COLLECTOR RD TARAGO NSW 2580, (none)

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 21/05/2021.

In recognition of the potential for the development to increase the level of bush fire risk within the landscape and be impacted upon during a bush fire event, the following matters should be addressed in the Environmental Impact Statement:

- the aim and objectives of *Planning for Bush Fire Protection 2019*;
- identification of potential ignition sources during construction and operation of the development;
- storage of fuels and other hazardous materials;
- proposed bush fire protection measures for the development, including vegetation management and fire suppression capabilities;
- operational access for fire fighting appliance to the site; and
- emergency and evacuation planning.

For any queries regarding this correspondence, please contact Bradley Bourke on 1300 NSW RFS.

Yours sincerely,

Anna Jones
Supervisor Development Assessment & Plan
Built & Natural Environment

Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555
F (02) 8741 5550
www.rfs.nsw.gov.au

Sally Munk

From: Fire Safety <FireSafety@fire.nsw.gov.au>
Sent: Tuesday, 29 June 2021 2:30 PM
To: Sally Munk
Subject: RE: Woodlawn Advanced Energy Recovery Centre - Request for SEARs (SSD-21184278)

Thank you for your submission for the above development to Fire & Rescue NSW (FRNSW) for review and agency input.

It is understood that Veolia Environmental Services (Australia) Pty Ltd (the Applicant) is proposing to develop and operate the Woodlawn Advanced Energy Recovery Centre (ARC) (the project), an energy recovery facility (ERF), as the next phase of the Eco Precinct with capability to process and divert up to 380,000 tonnes per annum designed to recover energy from waste that will otherwise be disposed to landfill.

FRNSW submit the following comments and recommendations for consideration in developing the SEARs.

- It is understood that a *State Environmental Planning Policy 33 – Hazardous and Offensive Development* (SEPP 33) assessment will be undertaken and included within the Environmental Impact Statement (EIS).
- It is understood that general fire controls and measures applicable to the facility will be included within the EIS.
- It is understood that consideration will be given to FRNSW's fire safety guideline *Fire safety in waste facilities* in preparation of the EIS.

FRNSW are satisfied that the above items identified within the scoping report adequately address the fire safety considerations required to be addressed in the preparation of the EIS.

If you have any queries regarding the above please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS21/2049. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Regards,

ADMINISTATION & PROJECT OFFICER
FIRE SAFETY AND PROJECT SERVICES UNIT
Community Safety Directorate | Fire and Rescue NSW

T: 02 9742 7434
E: firesafety@fire.nsw.gov.au
A: 1 Amarina Avenue, Greenacre NSW 2190 | Locked Mail Bag 12, Greenacre, NSW 2190
www.fire.nsw.gov.au