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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

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
  - (I) 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
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- Authoriser: Warwick Bennett, General Manager
- Attachments: 1. Update on Veolia Woodlawn Advanced Energy Recovery Centre Project <u>U</u>
  - 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
  - (I) 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.

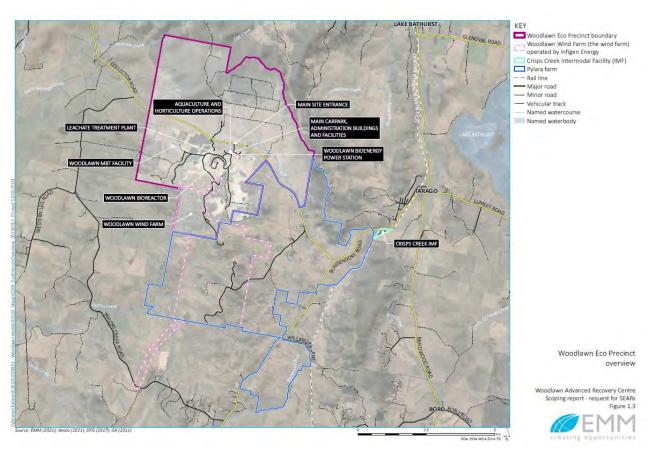


Figure 1 Woodlawn Overview Map p.7 Scoping Report

#### 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
  - o residual municipal solid waste;
  - o commercial and industrial waste (waste feedstock); and
  - o 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	<ul> <li>Any air quality assessment should include:</li> <li>All emissions from the site including those generated by the broader bio-reactor activities onsite.</li> <li>Measures designed to monitor emissions and procedures to manage non-compliant emissions.</li> <li>Odour control from current site</li> </ul>
		operations has been and remains an issue with the surrounding residents. The EIS should	

MATTER	CUMULATIVE IMPACTS?	LEVEL OF ASSESSMENT	COUNCIL COMMENTS
	IMPACTS?	ASSESSMENT	<ul> <li>demonstrate how this will be controlled and not exasperated.</li> <li>Plume mapping and dispersal modelling based on varying atmospheric conditions including worst case scenarios.</li> <li>What particle sizes will be emitted from the stack?</li> <li>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</li> </ul>
Human Health Risk	Yes – with existing eco precinct operations	Detailed	Bungendore. 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	Standard	While the site is highly disturbed the structure being proposed is permanent, large in scale and located on a ridgeline.
	operations		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 <sup>3</sup> 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.



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

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

17<sup>th</sup> 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
- 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.



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.



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<sup>1</sup>), 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.

<sup>&</sup>lt;sup>1</sup> 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."<sup>2</sup>
- 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".<sup>3</sup> 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

<sup>&</sup>lt;sup>2</sup> EPA, Questions and answers about odours in the Tarago area, 1 June 2021

<sup>&</sup>lt;sup>3</sup> 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).<sup>4</sup>

- 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.<sup>5</sup>
- "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."<sup>6</sup>
- 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<sup>7</sup> 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**.

<sup>&</sup>lt;sup>4</sup> 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. <sup>5</sup> European commission, Official Journal of the European Union, December 2019

<sup>&</sup>lt;sup>6</sup> 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

<sup>&</sup>lt;sup>7</sup> IEA, Net Zero by 2050 A Roadmap for the Global Energy Sector, May 2021



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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.*"<sup>8</sup> 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 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

<sup>&</sup>lt;sup>8</sup> 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.<sup>9</sup>

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

<sup>&</sup>lt;sup>9</sup> 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"."<sup>10</sup> 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.

<sup>&</sup>lt;sup>10</sup> 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..



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# **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.

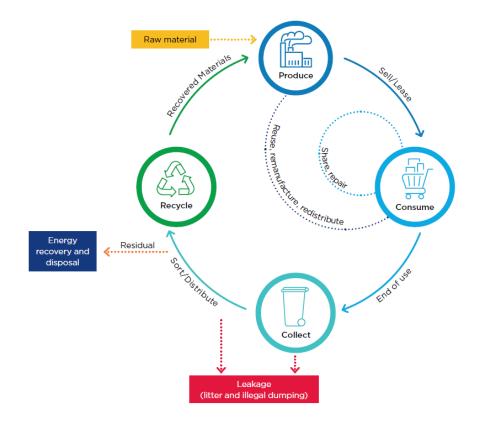
Veolia already has a licence to draw 600 MI of groundwater per year, is currently drawing around 250 MI per year, but will need to draw an additional 72 MI per year if the requested waste incinerator is approved. It is understood that Jerrara Power has similar water needs but the source for its water 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<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> 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)."<sup>12</sup>* 

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".<sup>13</sup> 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.<sup>14</sup>

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

<sup>&</sup>lt;sup>12</sup> 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

<sup>&</sup>lt;sup>13</sup> United Nations Environment Programme's Waste to Energy - Considerations for Informed Decision Making, 2019, p8

<sup>&</sup>lt;sup>14</sup> 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



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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 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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